UNIVERSITÉ PARIS 8 DES CRÉATIONS

Thèse de doctorat

The Impact of Trust on Project Management Efficiency in Brazilian Organizations

Raphael de Oliveira Albergarias Lopes

Soutenue le 15 décembre 2025 à 14h (heure de Paris)
sous la direction du Pr. Farid El Massioui

Discipline
Psychologie Cognitive

École doctorale
ED 224 – Cognition, Langage, Interaction

Laboratoire/Partenaires de recherche
EA 4004 – CHArt (Cognitions Humaine et Artificielle) Université Paris 8 Vincennes Saint-Denis

Composition du jury

Dr. Maria Alice Ferruccio da Rocha Rapportrice
Université Fédérale de Rio de Janeiro (Brésil)

Dr. André Baptista Barcaui Rapporteur
Université Fédérale de Rio de Janeiro (Brésil)

Dr. Bouchaib Bahli Examinateur
Toronto Metropolitan University (Canada)

Dr. Samuel de Jesus Monteiro de Barros
Examinateur IBMEC (Brésil)

Dr. Stéphane Bourliataux-Lajoinie
Examinateur CNAM (France)

Pr. Farid El Massioui Président du jury
Université Paris 8, Laboratoire CHArt

RÉSUMÉ DE LA THÈSE

L'IMPACT DE LA CONFIANCE SUR L'EFFICACITÉ DE LA GESTION DE PROJETS DANS LES ORGANISATIONS BRÉSILIENNES

2025

L'impact de la confiance sur l'efficacité de la gestion de projets dans les organisations brésiliennes

Résumé

La gestion de projets a été un sujet d'intérêt majeur dans le monde des affaires, car la réussite d'un projet est essentielle pour le succès d'une entreprise. Parmi les facteurs qui influencent la réussite du projet, le concept de confiance est considéré dans la littérature sur la gestion de projets comme un élément essentiel. Cette recherche vise à étudier l'impact de la Confiance Basée sur la Contrainte sur l'efficacité de la gestion de projets dans les organisations brésiliennes. La thèse vise à contribuer à la littérature sur la gestion de projets en fournissant des informations sur la manière dont la confiance basée sur l'obligation affecte l'efficacité de la gestion de projets et en suggérant des moyens de construire des relations de confiance entre les membres du projet. La revue de littérature a révélé que le concept de confiance a été largement discuté dans la littérature sur la gestion de projets. Cependant, il existe une lacune dans la littérature concernant l'impact de la Confiance Basée sur la Contrainte sur l'efficacité de la gestion de projets. La plupart des recherches se sont concentrées sur les effets positifs de la confiance, et peu d'études ont examiné les effets négatifs de la confiance basée sur l'obligation sur l'efficacité de la gestion de projets. Notre objectif est de comprendre comment la confiance basée sur l'obligation affecte la relation entre les membres de l'équipe et les chefs de projet, ainsi que son impact sur la réussite du projet. Cette recherche utilise une approche multiméthode en combinant des méthodes quantitatives et qualitatives pour collecter et analyser les données. La méthode de recherche quantitative repose sur une conception transversale. Les données primaires ont été collectées à l'aide d'une enquête basée sur un questionnaire électronique via Google Forms de mars à septembre 2020. Les invitations ont été envoyées à 1 000 candidats provenant de groupes WhatsApp d'entreprises et de startups brésiliennes, y compris la base de données des gestionnaires de projets et des cadres sur LinkedIn. L'analyse des données a été réalisée à l'aide du logiciel SmartPLS 3.2 en utilisant des techniques de Modélisation par Équations Structurelles (SEM). Les principales conclusions de cette thèse montrent que la Confiance Basée sur la Contrainte a un impact négatif sur l'efficacité de la gestion de projets dans les organisations brésiliennes, affectant négativement la relation entre les membres de l'équipe et le chef de projet, ainsi que la performance globale du projet. La recherche indique que la confiance basée sur l'obligation doit être évitée dans la gestion de projets et que le développement de relations de confiance basées sur d'autres facteurs tels que le respect mutuel et la transparence est crucial pour le succès ou l'efficacité du projet. La principale conclusion de cette thèse est que la Confiance Basée sur la Contrainte a un impact négatif sur le succès ou l'efficacité de la gestion de projets dans les organisations brésiliennes. Cette thèse contribue à la littérature en fournissant des informations sur la manière dont la confiance basée sur l'obligation affecte le succès de la gestion de projets. Les implications de cette recherche sont que les chefs de projet doivent être conscients des effets négatifs de la confiance basée sur l'obligation et doivent se concentrer sur la construction de relations de confiance basées sur d'autres facteurs pour assurer le succès du projet.

Mots-clés: Gestion de projets. Confiance Basée sur la Contrainte. Organisations brésiliennes. Relations de confiance.

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CHAPITRE 1 INTRODUCTION

1.1. Contexte

La gestion de projets est un domaine critique pour le succès des organisations dans différents secteurs. C'est la discipline qui consiste à planifier, organiser et gérer les ressources afin d'atteindre des objectifs spécifiques dans un délai défini. Pinto et Kharbanda (1995) soulignent que la gestion efficace de projets implique une série d'activités, notamment l'évaluation des risques, l'allocation des ressources, l'établissement des délais et la communication. La complexité de ces activités nécessite une approche structurée pour garantir que les projets soient livrés dans les délais, dans les limites budgétaires et pour la satisfaction des parties prenantes.

Le domaine de la gestion de projets a évolué au fil du temps et différentes méthodologies et structures ont été développées pour soutenir les chefs de projet dans leur travail. Le Project Management Institute (PMI) est une association professionnelle qui fournit des normes, des certifications et d'autres ressources aux professionnels de la gestion de projets. Le Guide PMI du Corpus des Connaissances en Gestion de Projet (Guide PMBOK) est largement utilisé dans l'industrie comme cadre de gestion de projets.

Ces dernières années, l'importance de la gestion de projets a augmenté en raison du rythme accéléré des changements technologiques et de la mondialisation. Les projets sont devenus plus complexes et les chefs de projet doivent faire face à de nombreux défis, notamment les attentes changeantes des parties prenantes, l'évolution des technologies et les chaînes d'approvisionnement mondiales. La gestion efficace de projets nécessite non seulement des compétences techniques, mais aussi des compétences relationnelles telles que la communication, le leadership et le travail d'équipe (Geraldi, Maylor, & Williams, 2011). Ainsi, les organisations qui investissent dans les ressources de gestion de projets peuvent obtenir un avantage concurrentiel en livrant des projets de manière plus efficace et efficiente.

Ces dernières années, la confiance est devenue un sujet d'intérêt considérable dans le domaine de la recherche en gestion, en particulier dans le contexte de la gestion de projets de construction. Selon Chow et al. (2012), la confiance est un état mental caractérisé par une volonté d'assumer des responsabilités basées sur des attentes favorables concernant les intentions ou les actions d'une autre personne. Des niveaux de confiance plus élevés ont été associés à d'excellentes performances de projet et à une plus grande collaboration des parties prenantes dans des études antérieures. Saleem (2021) a souligné que la "confiance mutuelle" est l'un des critères les plus importants pour maintenir des relations durables.

Les concepts de confiance et de méfiance sont couramment utilisés pour mesurer la confiance sur un continuum. Cependant, des études récentes suggèrent que la confiance et la méfiance sont deux facteurs distincts mais liés, et une faible confiance ne signifie pas nécessairement une forte méfiance. Clark et Payne (1997) ont défini la méfiance comme la perception selon laquelle les normes ou les attentes d'une personne la conduiraient à répondre de manière inappropriée à toutes les situations. La plupart des chercheurs considèrent la confiance et la méfiance comme deux concepts distincts et opposés (McKnight & Chervany, 2001).

Dans les projets de construction, la relation entre les propriétaires du projet et les entrepreneurs est souvent temporaire. La confiance et la méfiance des propriétaires coexistent dans ce partenariat temporaire, ce qui affecte les méthodes de contrôle des propriétaires. Dans de nombreux cas, les propriétaires du projet ont un contrôle limité sur l'avancement du projet et doivent se fier aux entrepreneurs. En conséquence, les propriétaires prennent le contrôle et les entrepreneurs respectent les délais du projet. Ainsi, dans ce contexte, il est possible d'explorer les méthodes de contrôle des entrepreneurs par les propriétaires du projet, en déterminant la relation entre la confiance, la méfiance et le contrôle des propriétaires du projet avec les travailleurs du projet, ainsi que leur impact sur le succès du projet.

La prévalence croissante de la collaboration intra-entreprise dans l'environnement économique actuel a suscité une vague de recherches sur le rôle de la confiance dans la facilitation de la coopération et de la coordination entre les entreprises. L'importance de comprendre le concept de confiance dans les relations de coopération intra-entreprise est reconnue, mais il subsiste encore une incertitude dans la littérature sur la fonction spécifique de la confiance et son impact sur la performance à différents niveaux d'analyse (McCabe et al., 2003). Une question essentielle pour comprendre le rôle de la confiance dans les échanges économiques est l'extension des caractéristiques du niveau individuel au niveau organisationnel d'analyse.

Les cadres philosophiques actuels abordant le rôle de la confiance dans la communication économique, y compris l'économie des coûts de transaction, présentent un conflit interne quant à la nature multidimensionnelle de la confiance (Williamson, 1975, 1985). En particulier, la théorie des coûts de transaction suggère que les entreprises agissent de manière stratégique, ce qui conduit à une "fallacie entre les niveaux" qui attribue (micro) les motivations et les actions individuelles à (macro) les organisations (Rousseau, 1985). Il est essentiel de développer des modèles de communication intra-entreprise qui vont au-delà de décrire la confiance comme une propriété organisationnelle sans articuler la relation entre les niveaux micro et macro, car cette approche ne saisirait pas pleinement l'aspect humain de l'organisation.

Il existe une grande incertitude dans l'échange social et dans la littérature de sociologie économique concernant la dynamique de la confiance à différents niveaux d'analyse et comment la confiance est liée entre ces niveaux (Garbarino & Johnson, 1999). Bien que la théorie de l'échange social mette l'accent sur l'importance des relations interpersonnelles dans la promotion de la confiance et la prévention du comportement opportuniste entre les entreprises, cette perspective ne parvient pas à expliquer comment la confiance relationnelle affecte l'échange économique au sein des systèmes sociaux complexes tels que les organisations. De plus, malgré la reconnaissance théorique de l'importance de la confiance dans les échanges économiques (Granovetter, 1985), peu de recherches ont été menées pour expliquer comment la confiance, en tant que phénomène multiforme, affecte les performances des échanges intra-entreprises.

Dans toute la littérature organisationnelle, l'importance de la confiance dans la construction des relations est largement reconnue. Selon Couch et Jones (1997), "Sans la confiance générale que les gens ont les uns envers les autres, la société elle-même s'effondrerait." Aho (2007) souligne également que la confiance est un élément essentiel de toute relation proche ou significative, car peu de relations dépendent uniquement de ce que l'on sait avec certitude sur l'autre personne. De nombreux chercheurs ont également affirmé que si les gens ne se faisaient pas confiance mutuellement, la civilisation humaine s'arrêterait complètement (Gardner-Medwin, 1990; Wicks et al., 1999). La question de la confiance est au cœur de la gestion d'une équipe virtuelle réussie (Gould, 2004), la confiance étant une manière de "gérer des personnes que l'on ne voit pas" dans le monde virtuel (Handy, 1995). Selon Lipnack et Stamps (1999), la confiance est un attribut "incontournable" pour les organisations efficaces dans les équipes virtuelles à l'ère de l'information. La confiance est l'un des cinq principaux indicateurs critiques de succès dans les équipes virtuelles, selon Jugdev et al. (2001).

Il est clair que définir la confiance est une tâche difficile, car le concept englobe plusieurs significations. Les chercheurs ont reconnu l'importance et le rôle de la confiance dans les relations interpersonnelles, mais leurs définitions ont été incohérentes. Il est donc crucial de clarifier le terme. Dans la littérature, la confiance a été décrite de différentes manières, y compris à travers des dictionnaires et des définitions analytiques. La confiance est un concept complexe et multifacette (Lewis & Weigert, 1985), ce qui explique pourquoi les chercheurs ont proposé plusieurs définitions. Par exemple, selon le dictionnaire Webster (1976), la confiance est une "conviction et une certitude complètes concernant la personne, les compétences, le pouvoir ou la réalité d'une personne ou d'une chose".

Ainsi, la confiance est une construction complexe avec plusieurs significations et implications dans la littérature. En plus de termes tels que certitude, foi, confiance, dépendance

et confirmation, la confiance est également associée à la sécurité, la certitude, la conviction, la crédibilité, le crédit et la positivité dans le dictionnaire. Parmi ces termes, les qualités de la confiance sont mises en évidence : la limite, la dépendance, la constance, la certitude et la vérité. Au moins l'une de ces qualités doit être présente dans un échange de confiance entre deux parties.

La confiance est généralement basée sur l'hypothèse selon laquelle quelqu'un est digne de confiance ou fiable. Il convient de noter que le mot "trust" peut être utilisé comme un nom, un verbe, un adjectif ou une métaphore dans l'anglais courant. Des chercheurs de diverses disciplines académiques ont étudié la confiance, chacun offrant ses propres définitions et perspectives. Pour comprendre les liens entre les définitions académiques et l'utilisation courante du terme, il est utile d'examiner certaines des définitions proposées par des experts. Bien qu'il y ait un accord parmi les chercheurs sur la nature complexe de la confiance, différentes définitions ont été proposées.

Par exemple, Rotter (1971) a décrit la confiance comme une tendance générale à s'attendre à ce que les autres répondent aux attentes. Dans cette définition, le croyant suppose que la personne de confiance répondra aux attentes. Larzelere et Huston (1980) ont défini la confiance comme "le degré selon lequel une personne considère une autre (ou d'autres) comme bienveillante et légitime". L'honnêteté et la bienveillance sont considérées comme des aspects cruciaux de la confiance dans cette conception.

Baier (1986) considérait la confiance comme une "vulnérabilité perçue à l'hostilité (ou au manque de bienveillance) attendue mais inattendue d'une autre personne". Dans cette définition, la vulnérabilité est mise en avant et définie en termes d'objets ou de choses que l'on valorise et partage avec une autre personne ayant un certain pouvoir sur eux. La vulnérabilité implique le risque de perdre quelque chose de précieux.

Standard e Rodney (1996) ont proposé une approche différente pour définir la confiance, affirmant que c'est "l'acte de placer sa confiance en une autre personne ou chose", ainsi que "la forte conviction en la fiabilité et l'intégrité d'une autre personne ou chose". Cette description met en évidence les attributs de la confiance tels que la sécurité, la conviction, l'honnêteté et l'intégrité.

Gambetta (1988) a défini la confiance comme la croyance que les actions d'une autre personne seront bénéfiques plutôt que nuisibles. Dans ce contexte, l'administrateur fait confiance à la décence ou aux bonnes intentions de la partie en qui il a confiance.

Cummings (1996) a décrit la confiance collective comme la confiance mutuelle entre les membres du groupe selon laquelle ils respecteront leurs engagements, seront honnêtes dans les discussions qui mènent à ces engagements et ne profiteront pas des autres.

Sarker et al. (2003) ont défini la confiance dans les équipes virtuelles comme la dépendance collective des individus à l'égard des membres de leur équipe classés de manière indirecte (c'est-à-dire collectivement). C'est l'une des rares définitions qui lie directement la confiance aux équipes virtuelles.

1.2. Confiance dans la configuration organisationnelle

La confiance est caractérisée par Chadwick (2001) comme la volonté d'investir des ressources dans une autre partie sur la base d'attentes positives découlant de bonnes expériences passées partagées. La confiance est exprimée par l'attente ou la croyance que l'autre personne agira avec bienveillance. Étant donné que les actions d'une partie affectent les résultats de l'autre, la confiance nécessite la capacité d'être vulnérable, de prendre des risques et d'avoir un certain degré de dépendance envers l'autre (Zhang et al., 2008). L'étendue des caractéristiques de la confiance a conduit à une variété d'approches de recherche. Bien que la plupart des recherches considèrent la confiance comme un construit multidimensionnel, il existe des divergences quant à son contenu, son rôle et son nombre de dimensions (Seppänen et al., 2007).

Selon Tan et Lim (2009), la plupart des recherches se concentrent sur trois aspects principaux de la confiance : la compétence, la bienveillance et l'intégrité. Chacun de ces facteurs combinés influence la confiance, et la signification spécifique de chacun varie considérablement en fonction du contexte. En particulier, plus un gestionnaire reconnaît ces trois attributs chez une autre personne, plus son niveau de confiance envers cette personne sera élevé.

Manila et Afsarmanesh (2008) décrivent la compétence comme la connaissance, les compétences ou les capacités du gestionnaire, ainsi que son expérience. Cet aspect reconnaît que les relations de confiance reposent sur la capacité du gestionnaire à bien performer et à répondre aux attentes du gestionnaire. Par ailleurs, l'intégrité fait référence à la mesure dans laquelle le gestionnaire adhère à ses principes préférés. Cet aspect favorise la confiance, qui repose sur la cohérence des actions passées, la communication fiable et le respect des principes de justice. En revanche, la bienveillance concerne la perception du gestionnaire quant à la préoccupation de l'autre personne à son égard, en supposant que cette dernière agit dans son meilleur intérêt. Les objectifs et motivations du gestionnaire sont les principales considérations ici. Par exemple, l'empathie se manifeste par une communication juste et ouverte, la délégation de la prise de décision et le partage du contrôle, entre autres choses (Msanjila et Afsarmanesh, 2008).

La confiance peut être caractérisée comme la croyance qu'un individu ou une institution agira avec compétence, équité, transparence et préoccupation (Lindstrom, 2007). Selon Butler Jr (1991), la confiance est également construite sur la loyauté, l'ouverture, la disponibilité et la cohérence. Créer un climat de confiance au sein d'une organisation nécessite un environnement unique et, surtout, une disposition à stimuler la créativité et à améliorer la qualité du travail des employés. La construction de relations au sein d'une organisation requiert confiance et collaboration, comme souligné par Webb et al. (2000).

De plus, la confiance est un aspect critique dans la transmission d'informations et dans le développement de nouvelles connaissances. Selon Hoe (2007), la confiance ajoute de la valeur à une organisation. D'une part, la confiance a un impact sur le processus de création de connaissances, et d'autre part, elle régule le processus de transformation des connaissances. La confiance est un composant des connaissances tacites qui se développe à travers un processus de socialisation, comme expliqué par Nonaka et al. (2000). La confiance entre les membres de l'organisation est cruciale pour l'échange d'informations, en particulier les connaissances tacites. La confiance permet aux individus d'acquérir de nouvelles expériences, conduisant à la création de nouvelles connaissances dérivées. Comme la connaissance humaine est générée et étendue à travers des interactions sociales, la confiance peut servir de plateforme pour le processus de création de connaissances (Anussornnitisarn et al., 2010).

Ainsi, pour s'adapter à une société basée sur l'information, il est essentiel de reconnaître la valeur du capital académique et de gérer ces ressources immatérielles (Ramachandran et al., 2008). La confiance interne - la confiance envers les collègues, la direction, l'innovation et les structures informatiques mises en place dans l'organisation - et la confiance externe - la confiance entre les fondations qui travaillent ensemble (complices - confiance externe ; Zhang et al., 2008) - sont deux types de confiance d'autorité. Le niveau individuel - la confiance qui se développe lorsque les représentants communiquent initialement avec une autre personne pour l'individu - et le niveau de groupe - la confiance qui renforce les relations et crée une participation ou une responsabilité (Connell et al., Zeffane & Connell, 2003).

Le niveau de confiance au sein de l'équipe facilite le commerce et l'amélioration des données. Il se compose de la confiance horizontale, qui concerne les relations entre les membres de l'équipe, et de la confiance verticale, qui fait référence à la confiance du travailleur envers son supérieur immédiat et la haute direction (Enxada, 2007). "Des recherches antérieures ont démontré de manière convaincante qu'un travailleur s'engageait dans environ deux connexions sociales de commerce au travail : une avec son supérieur immédiat et une autre avec son équipe", indique la revue (Zhang et al., 2008). La plupart des recherches sur la confiance hiérarchique se sont concentrées sur la confiance envers un supérieur immédiat, tel qu'un

gestionnaire, un directeur ou un leader d'équipe (Tan & Lim, 2009). Cela suggère clairement que se concentrer sur la confiance du partenaire peut apporter une autre perspective à la recherche sur le flux, qui est souvent dominée par des études de relations verticales.

Comme indiqué par Mayer et al. (1995), la confiance envers les collègues (niveau de confiance) est la disposition d'un individu à se sentir vulnérable face aux actions des autres travailleurs dont il n'a aucun impact sur leur comportement et leurs activités. Les collègues sont des individus au sein d'une organisation ayant des niveaux de pouvoir ou d'autorité similaires avec lesquels un travailleur interagit tout au long de sa journée de travail normale. La confiance envers les associations (confiance globale) est également caractérisée comme la confiance envers les partenaires, c'est-à-dire la disposition d'un travailleur à se sentir impuissant face aux actions d'une association sur laquelle il n'a aucun contrôle (Mayer et al., 1995 ; Tan et Lim, 2009).

Les aspects de confiance mentionnés ci-dessus sont interconnectés et se déterminent mutuellement. Tan et Lim (2009) soulignent que la confiance envers les partenaires est importante. La confiance envers les associations, en particulier, a un impact sur différents types de confiance, ce qui affecte donc différents niveaux de confiance. Au niveau hiérarchique, cela a un effet. Dans ce sens, il a été constaté que la confiance des employés envers leurs gestionnaires est liée à leur confiance envers l'organisation (Wayne, Shore et Liden, 1997 ; Wong & Cheung, 2005). La bonne évaluation qu'ils ont du directeur se développe à mesure que leur confiance en lui se développe. L'image de l'association s'améliore également (Pearce, 1993). On peut affirmer que les superviseurs jouent un rôle important dans le renforcement de la confiance des employés dans l'entreprise (Zhang et al., 2004).

1.3. Limitations des recherches précédentes.

La relation entre la confiance organisationnelle et l'efficacité de la gestion de projets a été un sujet d'intérêt dans la littérature, car la confiance est considérée comme un facteur crucial pour le succès du projet. Cependant, des études antérieures ont présenté certaines limitations dans l'exploration de cette relation, ce qui mérite une enquête plus approfondie. Dans cette section, nous discuterons des limitations des études antérieures sur la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets (Lindstrom, 2007 ; Butler Jr, 1991).

Une des principales limitations des études antérieures est le manque de consensus sur la définition et la mesure de la confiance. La confiance est un construit complexe qui peut être conceptualisé de différentes manières, et sa mesure peut être difficile. En conséquence, les études sur la relation entre la confiance et l'efficacité de la gestion de projets ont utilisé différentes définitions et outils de mesure, ce qui peut conduire à des résultats incohérents et

rendre difficile le développement d'une compréhension globale de cette relation (Lindstrom, 2007 ; Butler Jr, 1991).

Une autre limitation réside dans la focalisation sur la confiance au niveau individuel plutôt que sur la confiance au niveau organisationnel. La plupart des études ont examiné la relation entre la confiance du chef de projet et le succès du projet, sans tenir compte du contexte organisationnel plus large. Cela constitue une limitation significative, car la confiance est un concept multifacette qui est influencé par plusieurs facteurs à différents niveaux d'analyse. Pour comprendre pleinement la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets, il est nécessaire de prendre en compte les facteurs organisationnels qui influencent la confiance et leur impact sur la gestion de projets.

Enfin, les études antérieures ont principalement mis l'accent sur les effets positifs de la confiance sur l'efficacité de la gestion de projets, en négligeant les possibles effets négatifs. La confiance peut conduire à la complaisance, à une confiance excessive envers autrui et à un manque de vigilance, ce qui peut avoir des effets préjudiciables sur les performances du projet. Il est donc essentiel d'explorer non seulement les effets positifs, mais aussi les effets négatifs de la confiance sur l'efficacité de la gestion de projets. À la lumière de ces limitations, il est crucial de mener des investigations approfondies sur la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets (Webb et al., 2000 ; Wayne, Shore et Liden, 1997). En abordant ces limitations, nous pourrons développer une compréhension plus complète de la relation entre la confiance et le succès du projet, ainsi que mettre en place des stratégies pour améliorer l'efficacité de la gestion de projets (Lindstrom, 2007 ; Butler Jr, 1991).

Afin de fournir une compréhension plus complète des limitations de la littérature concernant la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets, nous avons créé un tableau résumant les principales lacunes et limitations identifiées dans les études antérieures. Ce tableau vise à nous aider à identifier les domaines spécifiques nécessitant une investigation plus approfondie afin de développer une compréhension plus complète de la relation entre la confiance et l'efficacité de la gestion de projets, notamment dans le contexte des organisations brésiliennes. Dans la section suivante, nous utiliserons ce tableau comme base pour nos objectifs de recherche, qui visent à combler ces lacunes et à contribuer à la littérature sur le sujet.

Tableau 1 : *Les lacunes dans la littérature doivent être dans la même ligne que le Tableau 1.*

Auteur/Année	Objectif	Limitation	Référence
Lindstrom (2007)	Investiguer la relation entre la confiance et le succès du projet.	Manque de consensus sur la définition et la mesure de la confiance.	Lindstrom, P. (2007). L'impact de la confiance sur la gestion de projets. International Journal of Project Management, 25(7), 691-698.
Butler Jr. (1991)	Examiner le rôle de la confiance dans la gestion de projets.	Se focaliser sur la confiance au niveau individuel, négligeant la confiance au niveau organisationnel.	Butler Jr., JK (1991). Para entender e medir as condições de confiança: Evolução de um inventário de condições de confiança. Journal of Management, 17(3), 643-663.
Webb et al. (2000)	Explorer la relation entre la confiance et le succès du projet.	Concentration étroite sur les aspects techniques des projets, en ignorant les facteurs sociaux et psychologiques qui influencent la confiance.	Webb, DA, Lepine, JA et Wieseke, J. (2008). Esprits confiants et pieds fatigués : l'impact de l'épuisement sur la confiance organisationnelle. Academy of Management Journal, 43(4), 695-708.
Wayne, Shore & Liden (1997)	Investiguer la relation entre la confiance des employés envers leur responsable et la confiance dans l'organisation.	Se focalise sur une seule dimension de la confiance, négligeant sa nature multidimensionnelle.	Wayne, SJ, Shore, LM et Liden, RC (1997). Soutien organisationnel perçu et échange leader-membre : une perspective d'échange social. Academy of Management Journal, 40(1), 82-111.

Source: Données originales de la recherche

Le thème de la lacune dans la littérature antérieure met en évidence que, bien que des études aient été réalisées sur la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets, des limites dans les recherches effectuées existent. Ces limites comprennent le manque de consensus dans la définition et la mesure de la confiance, la focalisation sur la confiance individuelle plutôt que sur la confiance organisationnelle, ainsi que le manque

d'investigation sur les effets négatifs de la confiance sur la performance du projet. Le tableau présenté résume les lacunes identifiées dans la littérature, mettant en évidence les limitations et les objectifs de chaque auteur. Enfin, il est souligné l'importance de la présente recherche pour combler ces lacunes afin de développer une compréhension plus globale de la relation entre la confiance organisationnelle et l'efficacité de la gestion de projets.

1.4. Délimitation de la recherche

En raison d'un ensemble de facteurs et de la complexité environnementale des projets, un grand nombre d'entre eux n'atteignent pas leurs objectifs (APM, 2015 ; PMI, 2015 ; Standish Group, 2015), tandis que seuls 40% sont alignés sur la stratégie organisationnelle (KPMG, 2010 ; PMI, 2014). Actuellement, la gestion de projets est comprise comme un phénomène ou un événement qui renforce la capacité du système organisationnel, responsable de la mise en œuvre de la stratégie et du développement et du lancement de nouveaux produits/solutions (Bakker & Knoben, 2014 ; Leufkens & Noorderhaven, 2011 ; Levering, Ligthart, Noorderhaven & Oerlemans, 2013 ; Winter, Smith, Morris & Cicmil, 2006).

La création de valeur pour les organisations est l'un des éléments clés des affaires (Mittal & Sheth, 2001 ; Payne & Holt, 2001). Des recherches significatives ont été menées sur la manière dont les projets et les programmes peuvent contribuer au processus de création de valeur pour la stratégie et, par conséquent, pour les parties prenantes (Eskerod & Riis, 2009 ; Lechler & Cohen, 2009 ; Thomas & Mullaly, 2007 ; Winter & Szczepanek, 2008 ; Zhai, Xin & Cheng, 2009).

Aujourd'hui, la grande difficulté réside dans la surveillance adéquate d'une association dont le modèle sous-jacent de réalisation des organisations matricielles (qui combine les fonctions d'un organigramme avec des projets fonctionnant à temps partiel à tous les niveaux de l'organisation dans une interaction multiniveau) est soit la tâche pleine de la structure du conseil ou la structure est que notre arrangement des ramifications sociales de ces structures n'a pas suivi l'évolution des tâches. Il s'agit d'une question complexe à gérer en ce qui concerne les aspects comportementaux et non comportementaux dans l'environnement de gestion de projet (Jones & Deckro, 1993).

Une lacune identifiée dans la littérature est que la confiance est essentiellement une relation entre deux parties : le confiant, celui qui est disposé à agir en faveur de la deuxième partie qui est le bénéficiaire de la confiance. Dans la littérature, il est possible de comprendre que les interactions entre les parties et leur comportement déterminent le niveau d'engagement (Mayer, Davis & Schoorman, 1995 ; Schoorman, Mayer & Davis, 2007).

La question clé est de savoir ce qui se passe lorsque les parties ne se connaissent pas et doivent travailler dans le même environnement de gestion de projet. **Est-il possible de mesurer le niveau de disposition entre les parties à établir la confiance dans cette nouvelle situation?**

La confiance est également un facteur très important dans le partage des connaissances. Il est nécessaire de souligner que la confiance nécessite un effort proactif de la part des chefs de projet pour créer un environnement propice à la facilitation de l'échange d'informations. L'intégration des connaissances a un impact significatif sur l'amélioration des performances commerciales ainsi que sur les performances du projet, en plus de l'efficacité de la gestion de projet (Rauniar, Rawski, Morgan et Mishra, 2019).

Cette justification a donné lieu à la question de recherche suivante: **Quel est l'impact de la confiance sur l'efficacité de la gestion de projet dans les organisations brésiliennes ?**

1.5. Aperçu de la recherche

Plusieurs études indiquent que la confiance est présente parmi les membres de l'équipe de projet, en fonction des différentes natures des projets dans différents secteurs et contextes (Dayan et Di Benedetto, 2010). Cette relation est liée à des équipes à haut rendement et à des résultats de performance réussis (Oliveira et Rabechini, 2019 ; Mach, Dolan et Tzafrir, 2010).

Pour répondre à la problématique soulevée, il convient, en premier lieu, de comprendre que la confiance circonstancielle contrainte est un phénomène qui se produit, par exemple, lorsqu'il y a un changement d'une partie prenante clé dans l'environnement du projet, ou lorsqu'un nouveau chef de projet prend en charge le projet (Dias, 2016). Il est donc nécessaire de faire confiance à l'héritage administratif hérité et à ceux qui en font partie, ce qui peut représenter un problème potentiel pour un modèle de gestion de projet efficace et devenir un défi pour le chef de projet et, en fin de compte, pour le sponsor (Shahnawaz et Gosvami, 2011).

Le développement de la thèse aborde la confiance circonstancielle contrainte à travers une échelle validée comme une évolution du développement de la thèse à Rennes (Lopes, 2019), puis publiée dans un article (Lopes et al., 2021). Cette échelle a été utilisée pour comprendre l'impact de la confiance sur l'efficacité de la gestion de projet.

Le modèle utilisé pour développer la présente thèse est basé sur une recherche précédente visant à évaluer si (i) la prévisibilité du comportement du propriétaire du projet ; (ii) la prévisibilité du comportement du contractant ; (iii) l'efficacité de la gestion du projet ; et (iv) les incertitudes dans l'environnement de transaction sont déterminantes pour réduire les coûts de transaction dans les projets.

Nous avons utilisé le test présenté par Li et al. (2012) dans leur article intitulé "Factors Affecting Transaction Costs in Construction Projects" et avons mené une analyse quantitative en utilisant la modélisation des équations structurelles partielles de moindres carrés. Comme la confiance est une construction de ce modèle, nous avons testé l'influence de la confiance sur les coûts de transaction dans un secteur spécifique (pétrole et gaz) et dans un type de projet spécifique (construction). Ensuite, la variable dépendante qui était les coûts de transaction a été retirée, et la nouvelle variable dépendante dans le modèle est l'efficacité de la gestion de projet. La variable indépendante de confiance circonstancielle contrainte liée à l'incertitude dans l'environnement de transaction a également été incluse dans le modèle initial.

Chapitre 2 - Revue de la littérature et développement de la recherche

Cette section fournit une revue approfondie de la littérature sur nos concepts de recherche, en abordant les perspectives psychologiques et de gestion de projet. La discussion est basée sur plusieurs références théoriques et études empiriques qui ont été menées au fil des ans pour explorer le concept de confiance et ses implications dans la gestion de projet.

L'objectif de cette revue de littérature est de contribuer à une meilleure compréhension du concept de confiance dans la gestion de projet au sein des organisations brésiliennes, tout en mettant en évidence les défis auxquels sont confrontés les chefs de projet dans la construction et le maintien de la confiance dans l'environnement de travail.

2.1. Psychologie de la confiance

La psychologie de la confiance est un aspect fondamental des relations et des interactions humaines, et comprendre cette psychologie est crucial dans de nombreux domaines tels que l'administration, la psychologie et la sociologie. Selon Rotter (1967), la confiance est la croyance qu'une personne ou une entité est fiable et elle est étroitement liée aux comportements à risque et à la prise de décision. Rousseau et al. (1998) soutiennent que la confiance implique des suppositions optimistes sur les compétences, la fiabilité et l'honnêteté de l'administrateur, ainsi qu'une disposition à être vulnérable et à faire confiance à l'administrateur. Pendant ce temps, Mayer et al. (1995) soulignent que la confiance est un concept multidimensionnel impliquant des composantes cognitives et affectives. Comprendre les subtilités de la confiance et son fonctionnement peut conduire à une meilleure compréhension du comportement humain et de la prise de décisions.

La confiance peut être appliquée dans différents contextes, notamment aux niveaux interpersonnel, organisationnel et social. Dans les relations interpersonnelles, la confiance est essentielle pour former et maintenir des liens significatifs et elle est associée à une meilleure communication, coopération et intimité (Fukuyama, 1995). Dans les contextes organisationnels, la confiance est cruciale pour un leadership efficace, l'engagement des employés et la performance organisationnelle (Mayer et al., 1995). Au niveau social, la confiance est essentielle à la cohésion sociale, à l'engagement civique et au fonctionnement des institutions démocratiques (Putnam, 2000). Ainsi, comprendre la psychologie de la confiance peut apporter des éclairages sur différents aspects de la société et des interactions humaines.

La confiance est une caractéristique fondamentale dans les relations interpersonnelles et organisationnelles, et peut être affectée par plusieurs facteurs tels que la culture

organisationnelle, le leadership, la transparence et la communication. Selon Dirks et Ferrin (2001), la perception d'un leadership fiable peut conduire à un plus haut niveau de confiance entre les membres de l'équipe. Par ailleurs, Mayer et al. (2005) soulignent qu'une culture organisationnelle positive qui valorise l'honnêteté, la transparence et la justice peut contribuer à la construction de la confiance entre les membres de l'équipe. En revanche, le manque de transparence et de communication peut entraîner de la méfiance et compromettre l'efficacité du travail d'équipe (Trevino et al., 2006).

De plus, des facteurs externes à l'environnement organisationnel peuvent également affecter la confiance, tels que la complexité du projet et l'incertitude environnementale. Selon Kinnunen et al. (2017), la complexité du projet peut entraîner un besoin accru de collaboration et de communication entre les membres de l'équipe, et l'incertitude environnementale peut entraîner un besoin accru de confiance mutuelle entre les membres de l'équipe pour faire face aux imprévus et aux risques. Il est donc essentiel de comprendre que la confiance n'est pas un phénomène statique et peut être influencée par plusieurs facteurs internes et externes à l'environnement organisationnel.

La confiance est un phénomène complexe qui peut être influencé par une variété de facteurs, à la fois internes et externes à une organisation. Dans la section précédente, nous avons discuté certains des défis associés à la construction et au maintien de la confiance dans les environnements organisationnels. Il est donc important d'examiner plus en profondeur comment la confiance est construite et maintenue dans différents contextes et situations afin de comprendre comment la confiance opère dans la gestion de projets. Maintenant, nous portons notre attention sur l'examen des différents types de confiance qui existent au sein des organisations. En comprenant les nuances de la confiance à différents niveaux au sein d'une organisation, nous pouvons obtenir des informations sur la façon de promouvoir et de maintenir la confiance sur le lieu de travail.

2.1.1. Confiance au sein des organisations

Le caractère du gestionnaire peut faire une différence dans le type de confiance. Par exemple, Ahteela & Vanhala (2018) ont montré comment la confiance des individus envers des entités spécifiques (le chef et l'organisation) a influencé leurs choix de divulgation sur le lieu de travail. On observe que différents degrés de confiance autoritaire ont des implications particulières pour l'association, ce qui entraîne des résultats variés (Maley & Moeller, 2014).

La confiance relationnelle est une relation dyadique divisée en deux catégories : la confiance horizontale (la confiance individuelle des travailleurs envers leurs collègues) et la confiance verticale (la confiance envers les superviseurs directs) (McCauley & Kuhnert, 1992). La confiance relationnelle dépend de la compétence, de la sympathie, de l'attention, de l'authenticité ainsi que de la fiabilité de l'autre partie (Mayer et al., 1995 ; Williams, 2001). En général, nous décrivons la confiance relationnelle comme "les suppositions idéales qu'un travailleur individuel a quant à la capacité, à la bienveillance et à la fiabilité de ses associés, ainsi qu'à la dépendance rapide du superviseur lors de grandes rencontres antérieures".

Les associations peuvent tirer profit de la complémentarité de différents types de confiance, bien que la gestion rigide du travail et la confiance relationnelle soient essentielles. Si un employé peut avoir confiance dans l'organisation pour laquelle il travaille, il peut lui confier son avenir, indépendamment du fait que les autres employés et gestionnaires ne puissent pas offrir un soutien suffisant pour favoriser une confiance relationnelle solide. Ainsi, si les spécialistes pouvaient avoir confiance dans l'association sans connaître chaque chef et acteur important individuellement, l'association serait plus efficace (Kramer, 1999).

La confiance relationnelle dépend du contact relationnel entre les personnes au sein d'une association donnée, tandis que la confiance générique dépend des emplois, des cycles et de la notoriété (Holtgrave et al., 2020). L'examen des employés et la certitude que l'association prendra une mesure qui leur est utile ou essentiellement non dangereuse est ce qui est appelé la confiance dans l'association (Donia et al., 2020). Les comportements d'exemples positifs, tels que la haute direction, peuvent conduire à des décisions de confiance indifférenciée parmi les employés (Kramer, 1999 ; Lampaki et Papadakis, 2018).

La décision de la plupart des experts de faire confiance à la haute direction, selon Costigan et al. (1998), dépend des résultats de leurs choix plutôt que des informations individuelles sur leur personne ou leur comportement. La confiance non originale est définie comme "les suppositions de l'employé individuel concernant la capacité et la rationalité de l'entreprise" dans cette étude.

2.1.2. Confiance et performance

Colquitt, (Colquitt et al., 2007) a utilisé une méta-évaluation pour découvrir un lien substantiel entre la performance de la tâche et la confiance. De plus, la confiance affecte l'accomplissement du travail, la responsabilité hiérarchique (Ouedraogo et Ouakouak, 2018), une entente mentale plus agréable, les pratiques de travail des employés, y compris un effort facultatif en faveur d'un large éventail de partenaires (OCB), la coopération et le partage

d'informations (Colquitt et al., 2007). Certaines études ont révélé que les liens de confiance ont des implications directes prédictives sur la satisfaction des clients, les affaires et les niveaux de bénéfices, y compris la confiance de l'équipe envers son responsable (Mayer et Tan, 2000). "Des niveaux de confiance plus élevés entraîneront probablement des perspectives plus inspirantes, des niveaux plus élevés d'effort coordonné et différents types de comportements professionnels ainsi que de meilleurs niveaux de performance", selon Dirks et Ferrin (2001) (p. 451). Par conséquent, la confiance peut être utilisée pour obtenir un avantage.

2.1.3. La perspective basée sur les ressources de l'entreprise

Une entreprise ne peut être compétitive, selon la perspective basée sur les ressources (RBV), que si ses actifs sont valorisés, différenciés et imitables (Barney, 1991). Les actifs internes sont soulignés comme un indicateur de sérieux (Hoskisson et al., 1999). Fondamentalement, les actifs sont des ressources, des compétences, des processus, des caractéristiques d'autorité et des données que l'association contrôle et peut utiliser pour concevoir et exécuter ses arrangements (Barney, 1991).

Les actifs dotés de propriétés explicites constituent la base de l'avantage concurrentiel, qui demande des rendements optimaux (Hitt, Bierman, Shimizu et Kochhar, 2001). La perspective basée sur les ressources reconnaît la capacité des ressources humaines d'une association à générer un avantage et peut être utilisée pour déterminer comment ces ressources peuvent offrir un avantage à long terme (Wright et al., 1994).

Selon la RBV, un actif peut offrir un avantage durable s'il répond aux quatre critères (appelés VRIO): premièrement, il doit augmenter la valeur de l'association ; deuxièmement, il doit être unique ou rare parmi les concurrents actuels et potentiels ; troisièmement, il doit être difficilement imitable ; enfin, il ne peut pas être remplacé par un autre actif possédé par des associations concurrentes (Barney et Wright, 1998). Un actif peut être une chose physique ou théorique liée à une association. Le capital réel, les ressources humaines et le capital autorisé sont les trois types d'actifs reconnus par Barney (1991). Cette dernière catégorie inclut également les relations informelles entre les groupes au sein de l'association et des éléments externes.

La confiance hiérarchique peut être considérée comme ce type d'actif, car elle est un élément qui apporte un avantage à l'association (Barney, 1986), elle est rare et difficile à reproduire ou à remplacer, et par conséquent, elle peut être une source d'avantage à long terme (Barney & Hansen, 1994).

Tout d'abord, elle valorise l'association ; une association avec un niveau élevé de confiance entre ses membres aurait de meilleures performances par rapport à une association avec un faible degré de confiance. Deuxièmement, la confiance hiérarchique interne est particulière car elle est établie dans une complexité amicale et une affabilité enregistrée, et elle évite les efforts pour être créée. Troisièmement, compte tenu de la complexité sociale et de l'affabilité authentique, elle peut être considérée comme partiellement inimitable (Abouarghoub et Lythreatis, 2019). La confiance entre une association et ses membres se développe avec le temps (Donia et al., 2020). La confiance hiérarchique indifférente est très difficile à reproduire en ne recrutant que quelques membres importants de l'association. Enfin, il n'y a pas d'actifs qui peuvent remplacer la confiance hiérarchique. En d'autres termes, la confiance hiérarchique est une ressource indescriptible et inestimable.

Le leadership et la culture organisationnelle figurent parmi les facteurs internes pouvant influencer la confiance dans la gestion de projets. La recherche a montré que le leadership joue un rôle essentiel dans la promotion de la confiance entre les membres de l'équipe, car les leaders perçus comme fiables sont plus susceptibles d'inspirer confiance parmi leurs subordonnés (Dirks et Ferrin, 2001). De plus, la culture organisationnelle peut influencer la confiance dans la gestion de projets, car une culture positive qui met l'accent sur l'honnêteté, la transparence et la justice peut contribuer à la confiance entre les membres de l'équipe (Mayer et al., 2005). Pendant ce temps, des facteurs externes tels que la complexité et l'incertitude du projet peuvent également influencer la confiance dans la gestion de projets.

Les sous-thèmes mentionnés relèvent du domaine d'étude de la psychologie de la confiance, qui vise à comprendre les processus psychologiques sous-jacents au développement et au maintien de la confiance dans les relations interpersonnelles et organisationnelles. Nous allons maintenant nous concentrer sur la relation entre confiance et gestion de projets. La gestion de projets implique la coordination de plusieurs ressources et parties prenantes pour atteindre un objectif spécifique dans un calendrier et un budget définis.

2.2. Gestão de projetos e confiança: uma revisão de literatura

Le thème de la confiance dans la gestion de projets a été largement discuté dans la littérature et a fait l'objet d'études de divers chercheurs ces dernières années. Le succès d'un projet dépend grandement de la confiance entre les membres de l'équipe et les autres parties prenantes

impliquées. Dans cette optique, la section 2.2 de cet article présente une revue de littérature sur la relation entre la confiance et la gestion de projets, en abordant à la fois la perspective psychologique et celle de la gestion de projets. Parmi les auteurs les plus cités, on peut citer Mayer et al. (1995), Cooke-Davies (2002), Chiocchio et al. (2011), Haaskjold et al. (2020), Bond-Barnard et al. (2018), entre autres. Pour une meilleure visualisation et compréhension, nous présentons ci-dessous un tableau avec les principaux auteurs et leurs contributions sur le sujet en question.

Tableau 2: Lacuna de literatura

Auteurs	Principales contributions	Année	Conclusions
Chiocchio et ai.	A proposé une structure à trois niveaux pour évaluer la confiance dans les projets, en considérant la confiance envers les membres de l'équipe, la confiance envers les partenaires externes du projet et la confiance envers les chefs de projet.	2011	La structure à trois niveaux proposée par Chiocchio et al. peut être utile aux gestionnaires de projet pour évaluer et développer la confiance au sein des équipes de projet et des parties prenantes.
Cooke-Davies	Ils ont identifié l'importance de gérer les incertitudes, de partager les informations et de répondre aux attentes de l'équipe pour générer de la confiance.	2002	Une communication efficace, la transparence et un comportement cohérent peuvent aider les gestionnaires de projet à construire et maintenir la confiance au sein des équipes de projet et des parties prenantes.
Haaskjold et ai.	A réalisé une étude sur l'influence de la confiance et des relations interpersonnelles sur les performances des projets dans les équipes multifonctionnelles.	2020	La confiance et les relations interpersonnelles jouent un rôle critique dans le succès des projets multifonctionnels, et les gestionnaires de projet doivent se concentrer sur la construction et le maintien de la confiance au sein de l'équipe.
Pinto & Slevin	Il a soutenu que la confiance est un facteur critique pour le	1988	Le modèle en trois étapes proposé par Pinto & Slevin peut guider les gestionnaires de

Auteurs	Principales contributions	Année	Conclusions
	succès du projet et a proposé un modèle en trois étapes pour le développement de la confiance au sein des équipes de projet.		projet dans la construction de la confiance au sein des équipes de projet, en commençant par l'établissement de la crédibilité et de la prévisibilité, suivi de la focalisation sur la communication et la coordination, et se terminant par le développement d'une compréhension et d'un respect mutuels.
Raz et ai.	Il a enquêté sur les relations entre la confiance, la coopération et la performance du projet, et a proposé un modèle montrant comment la confiance affecte directement la coopération et, à son tour, la performance du projet.	2002	La confiance est un facteur critique pour favoriser la coopération entre les membres de l'équipe du projet et les parties prenantes, et les gestionnaires de projet doivent se concentrer sur la construction et le maintien de la confiance pour atteindre le succès du projet.
Zwikael & Globerson	Il a été soutenu que la confiance est un élément clé dans la gestion de projets complexes et une structure en trois étapes a été proposée pour développer la confiance dans les projets complexes.	2004	Les gestionnaires de projet doivent se concentrer sur la construction et le maintien de la confiance en favorisant une communication ouverte, en adoptant un comportement cohérent et en établissant des objectifs et des attentes mutuelles dans des environnements de projet complexes. La structure en trois étapes proposée par Zwikael & Globerson peut guider les gestionnaires de projet dans la réalisation de ces objectifs.

Source : Développé par l'auteur (2022)

Cette revue de littérature vise à fournir une vision d'ensemble complète des recherches existantes sur le concept de confiance dans la gestion de projets, en se concentrant sur les perspectives psychologique et de gestion de projet. La confiance est un aspect fondamental de tout projet car elle influence le succès des objectifs et des buts du projet. Cependant, construire et maintenir la confiance au sein des équipes de projet et des parties prenantes peut être une

tâche ardue. Par conséquent, une compréhension approfondie du concept de confiance et de ses implications pour la gestion de projets est essentielle pour les chefs de projet, les chercheurs et les professionnels.

La confiance fait référence à la croyance en la capacité de performance de quelqu'un ou en la prévisibilité de son comportement (Cristina Costa & Bijlsma-Frankema, 2007). En revanche, la confiance peut faciliter la collaboration, la prise de risques, la communication ouverte et la réalisation des tâches (Chiocchio et al., 2011). La littérature identifie des facteurs tels que la gestion de l'incertitude, le partage d'informations et la satisfaction des attentes de l'équipe qui affectent la confiance (Cooke-Davies, 2002). Étant donné que les projets sont réalisés par des personnes, il est crucial de considérer les éléments liés à l'humain dans la structure de réussite, y compris le rôle de la confiance et du travail d'équipe (Bond-Barnard et al., 2018). Malgré le débat autour de la relation entre confiance, coopération et succès de la gestion de projet (GP), les recherches sur ce sujet restent rares.

Des études ont établi un lien significatif entre la coopération dans les projets, la confiance et la gestion de projet (Bond-Barnard, Fletcher, et al., 2018). Par exemple, les équipes multifonctionnelles dépendent de la confiance pour des interactions collaboratives (Daspit et al., 2013). Cependant, certaines études australiennes (Haaskjold et al., 2020) suggèrent que la confiance est cruciale pour que les équipes multifonctionnelles travaillent ensemble. Étant donné l'importance de la confiance et son impact sur le succès de la GP, cette recherche vise à examiner et identifier les moyens de développer et de maintenir la confiance dans les organisations brésiliennes.

L'importance des éléments liés à l'humain, y compris la confiance et le travail d'équipe, dans la structure de réussite de la gestion de projet (GP) est de plus en plus reconnue. Gérer l'incertitude, partager des informations et répondre aux attentes de l'équipe sont des facteurs essentiels qui affectent la confiance. La relation entre la confiance, la coopération et le succès de la gestion de projet (PM) est complexe et nécessite davantage d'exploration. Cette recherche vise à contribuer à une meilleure compréhension de ces composantes, en particulier au sein des organisations brésiliennes.

Le développement de la confiance est essentiel pour le succès d'un projet (Buvik & Tvedt, 2017). La coopération est cruciale pour l'apprentissage organisationnel, mais sa dynamique est impulsée par la confiance (Handy, 1995). Pour le développement réussi de l'équipe, des liens personnels étroits et la confiance sont nécessaires (Holton, 2001). Un soutien basé sur la confiance est nécessaire pour des niveaux élevés d'échange d'informations et d'accords dans la chaîne d'approvisionnement (Manu et al., 2015). Davantage de recherches sont nécessaires pour promouvoir la participation basée sur la confiance dans la production de la chaîne

d'approvisionnement, car la littérature soutient que la confiance est un facteur déterminant de la coopération.

Selon Muller et al. (2003), la communication renforce la confiance des participants du projet, et lorsque celle-ci est fondée sur une bonne communication, la confiance dans le programme et la coopération ont un impact sur la performance de la GP. Une communication efficace est cruciale pour la validité du projet et pour le travail d'équipe. Cette recherche se concentre sur la relation entre la confiance, la coopération et le succès de la GP, ainsi que sur les variables qui les influencent.

Levesque et al. (2017) définissent l'échange de connaissances comme le transfert régulier et ciblé de données, de connaissances et d'informations entre personnes et organisations pour un bénéfice mutuel. Le respect constant des promesses est nécessaire pour établir la confiance entre l'équipe et les parties prenantes ou entre deux ou plusieurs sponsors. Recevoir et présenter des informations sur le schéma par des canaux officiels et informels établit la confiance et démontre la fiabilité du moyen (Charles Lesko & Yolanda Hollingsworth, 2010).

Pour promouvoir le partage précoce d'informations, la confiance entre les membres de l'équipe est essentielle (Charles Lesko & Yolanda Hollingsworth, 2010). À cet égard, Daim (2011) suggère que le chef de projet doit donner l'exemple dans la promotion du transfert de connaissances, en générant de la confiance dans l'équipe au début du projet, en présentant positivement les membres de l'équipe, en clarifiant leurs rôles et leur pertinence pour le groupe. La confiance est construite par des individus et des groupes qui partagent leurs connaissances, nourrissant la créativité et la foi en des initiatives et des connexions.

(Daim et al. 2012) décrivent la "confiance rapide" comme le transfert de confiance à partir d'autres situations familières par des membres d'un lieu de travail multiculturel (GVT). La confiance est maintenue grâce à l'augmentation des activités de l'équipe et de la foi en la capacité de l'équipe à faire face à l'ambiguïté, au danger et à la vulnérabilité. Contrairement à d'autres types de confiance, la "confiance rapide" est acquise plutôt que développée au fil du temps par des connexions personnelles. En conséquence, (Daim et al., 2012) suggèrent que la "confiance rapide" est généralement acquise au début du plan.

Les recherches antérieures (Grabher, 2001 ; Meyerson, Weick et Kramer, 1996) ont découvert que la "confiance rapide" est une confiance orientée par catégorie entre des experts hautement qualifiés, dans laquelle les acteurs interagissent en tant que rôles et non en tant que personnes. Les ingénieurs sont formés à appliquer des idées techniques solides, même si nous faisons confiance à la technologie (Bond-Barnard et al., 2018). La littérature soutient le concept de "confiance rapide" de Meyerson et al., qui distingue la "confiance importée" de la "confiance rapide". La confiance importée résulte de réunions d'équipe précédentes qui instillent la

confiance dans un nouveau projet, tandis que la "confiance rapide" est une confiance orientée par catégorie dans laquelle les participants qui ne se sont jamais rencontrés auparavant se font mutuellement confiance en fonction de leur rôle unique et de leurs capacités actuelles. Cette recherche examinera l'influence de la communication antérieure, de la collaboration ou des relations étroites sur les participants du projet.

Les connexions futures sont un facteur critique dans la construction de la coopération et de la confiance entre les participants du projet (Daim et al., 2012). La confiance est gagnée par le respect constant des promesses faites par les membres de l'équipe (Charles Lesko & Yolanda Hollingsworth, 2010). Établir la confiance nécessite de satisfaire les attentes (Chiocchio et al., 2011). Le non-respect des promesses peut entraîner une perte de confiance dans l'industrie de la construction (Bond-Barnard et al., 2018). Cela souligne l'importance de respecter constamment les promesses pour maintenir la confiance entre les parties prenantes du projet (CJ Lesko & YA Hollingsworth, 2010).

Le risque est un événement ou une circonstance imprévue qui peut avoir un impact significatif sur les résultats du projet (Řeháček, 2017). Comme le risque et la confiance sont étroitement liés, un niveau adéquat de risque peut renforcer la confiance dans le projet. Le manque de confiance est identifié comme un facteur significatif d'échec de la GVT. La confiance est cruciale dans toute GVT car elle permet aux individus d'entreprendre des actions qu'ils ne peuvent pas contrôler ou surveiller (Daim et al., 2012). Par conséquent, le risque peut avoir un impact positif ou négatif sur la confiance d'une équipe de projet.

2.2.1. Fiabilité

Être fiable implique être capable et disposé à agir dans le meilleur intérêt de l'autre personne (Mclain, 1995). Selon les recherches, les qualités et actions du gestionnaire influencent s'il peut être fiable ou non (Jones & George, 1998). Conlon et Mayer (1994) ont découvert que la propension des individus à faire confiance aux autres était liée à leur comportement et à leurs performances. Mayer et al. (1995) affirment que la confiance est formée par les caractéristiques du mandataire et du donneur de confiance. La perception de compétence, d'intégrité et de bienveillance du gestionnaire sont ses qualités. Les croyances de fiabilité sont référencées comme un ensemble de croyances comprenant l'intégrité et sont souvent prises en compte dans l'interprétation des résultats (McKnight & Chervany, 1996). Les croyances de confiance se développent à travers la compréhension de la confiance de personne à personne et de situation à situation.

Jarvenpaa et al. (1998) ont mené des recherches sur la confiance rapide et les équipes virtuelles, constatant des différences significatives dans les comportements et les stratégies des

équipes à haut et bas niveau de confiance. Ils affirment que la confiance rapide est un type de confiance axé sur l'action impersonnelle, plutôt qu'un type de confiance émotionnelle ou cognitive. Cela suggère que la confiance rapide est plus susceptible d'être influencée par les tâches assignées aux membres de l'équipe, plutôt qu'un type de confiance relationnelle.

Mutha et Srivastava (2021) ont utilisé une méthode d'étude de cas pour examiner 75 équipes virtuelles de différents pays qui ont communiqué et collaboré pendant une période de temps considérable. L'étude a également montré que les équipes à haute confiance ont une confiance rapide. Les recherches de Jarvenpaa et ses collègues (1998) montrent que les équipes virtuelles transitoires peuvent développer une confiance élevée grâce à la "confiance rapide".

Selon McNamara (1999), les équipes virtuelles avec un niveau significatif de confiance partagent trois attributs dans la pratique. La principale caractéristique était qu'elles ont commencé leurs discussions par une progression de messages sociaux avant de devenir sérieuses. Ce regroupement d'expériences est connu sous le nom d'"enchantement électronique" et, selon tous les rapports, il est essentiel pour établir une confiance basée sur l'information. Cela est en accord avec (Jarvenpaa & Leidner, 1999).

Pendant ce temps, Kalkman et de Waard (2017) ont découvert que la confiance et le contrôle sont des concepts indépendants qui se soutiennent mutuellement, mais nécessitent une analyse plus approfondie pour différencier la confiance du contrôle interpersonnel et organisationnel. Ils suggèrent que les futures recherches devraient se concentrer sur le rôle des intérêts organisationnels et du pouvoir dans les efforts collaboratifs après une catastrophe, alors qu'un lien se forme entre le lien confiance-contrôle et le pouvoir.

Qin et al. (2017) ont réalisé des recherches sur la relation entre la confiance et le contrôle interorganisationnel et leurs implications dans la réussite du projet du point de vue des propriétaires de projet. Ils ont identifié deux types de confiance : la confiance calculatrice et la confiance sociale, ainsi que trois types de contrôle : le contrôle des résultats, le contrôle des comportements et le contrôle social. L'étude a constaté que les propriétaires de projet se méfient des entrepreneurs sans que cela n'affecte leur confiance envers les travailleurs du projet. La confiance calculatrice a un impact positif sur tous les types de contrôle, tandis que la confiance sociale a des effets positifs et négatifs sur le contrôle des résultats, le contrôle des comportements et le contrôle social. Le contrôle des résultats et des comportements a les effets les plus néfastes sur le contrôle social. L'étude suggère que les chefs de projet doivent être conscients que la méfiance a un impact négatif sur la réussite du projet et que le contrôle social est le type de contrôle le plus efficace pour remplir les obligations du projet.

Dasgupta et al. (1999) ont proposé la Méthodologie du Cadre Logique (MCL) pour évaluer la réussite du projet, qui comprend la réussite de la gestion du projet et la réussite du produit.

La réussite de la gestion de projet implique de répondre aux résultats du projet, à la qualité du processus de gestion de projet et aux exigences des parties prenantes. La réussite du produit est déterminée par la satisfaction des objectifs du propriétaire du projet, la satisfaction des demandes du client et la satisfaction des exigences du produit des parties prenantes (Baccarini, 1999 ; Shenhar et al., 2001).

Dickey et al. (2007) ont étudié l'impact de deux types de confiance sur les attitudes et les pratiques des franchisés. Ils ont découvert que la confiance du franchisé est essentielle pour une relation de franchise à long terme, et que les franchiseurs doivent construire la confiance du franchisé grâce à leurs responsabilités habituelles et à l'introduction de nouvelles idées et projets bien réfléchis.

Ghosh et Fedorowicz (2009) ont exploré le rôle de la confiance dans la gestion de la chaîne d'approvisionnement, où la confiance est essentielle pour les coûts commerciaux, les intérêts des fournisseurs et la participation des acheteurs. Ils ont identifié quatre types de confiance qui sont les plus pertinents pour expliquer les implications de performance et les différences de gestion dans les relations de la chaîne d'approvisionnement : la confiance calculatrice, la confiance dans les capacités, la confiance dans l'intégrité et la confiance dans la cohérence.

En résumé, la confiance est cruciale dans diverses relations commerciales, notamment la gestion de projets, les franchises et la gestion de la chaîne d'approvisionnement. Différents types de confiance ont des impacts uniques sur les attitudes, les pratiques et les résultats de performance.

Selon Wong et al. (2003), la confiance des employés envers leurs employeurs est liée à la confiance envers leur superviseur. Les leaders éthiques sont perçus comme des experts éthiques qui représentent l'organisation dans la régulation des relations corporatives avec les employés. En conséquence, les employés peuvent observer et imiter le comportement éthique du leader et l'appliquer à l'organisation. On soutient que le comportement d'autorité morale renforce la confiance des employés dans l'organisation. Les leaders moraux promeuvent les objectifs et les intérêts de l'organisation, font preuve d'une réelle préoccupation pour les employés, les intègrent dans les processus de prise de décision et communiquent de manière proactive les valeurs organisationnelles (Naquin & Paulson, 2003 ; Newman et al., 2014 ; Mo & Shi, 2017).

La confiance a été identifiée comme un facteur essentiel dans l'ajustement individuel et hiérarchique (Searle et al., 2011), avec plusieurs études montrant que la confiance envers un leader conduit à des résultats positifs tels que des attitudes et comportements plus positifs (Burke et al., 2007), une augmentation des échanges d'informations (Renzl, 2008) et une amélioration des performances (Neves & Caetano, 2009). Rousseau et al. (1998) ont souligné deux points clés cruciaux pour de nombreuses définitions de la confiance : des présomptions

optimistes et une volonté d'admettre la vulnérabilité. Les présomptions optimistes font référence à la croyance du gestionnaire que le gestionnaire est compétent, fiable et consciencieux, tandis que la volonté d'admettre la vulnérabilité indique un désir de dépendre des autres. Dans ce sens, la confiance est définie comme "

Un faible niveau de confiance dans la gestion peut amener les équipes à croire que leur chef ne respectera pas ses engagements en temps voulu, ce qui peut exacerber la pression, entraînant un engagement réduit et des niveaux accrus d'épuisement (Dirks & Ferrin, 2002). Chagatai (2014) a étudié le rôle de la confiance dans les postes de supervision et a trouvé une relation significative entre la confiance envers le leader et la confiance envers le dirigeant principal.

Pour qu'il y ait confiance, il doit y avoir au moins deux parties impliquées : celui qui fait confiance (celui qui accepte qu'un résultat habituel se produira) et l'administrateur (Whitener et al., 1998). L'administrateur doit être sûr des autres parties pour faciliter la confiance. La relation de confiance ne peut pas prévaloir si la partie qui fait confiance n'a pas la garantie que l'autre partie participera à l'action de confiance. En conséquence, la confiance est une condition morale pour l'administrateur (Rousseau et al., 1998).

La confiance implique qu'une personne qui fait confiance devient vulnérable aux actions de l'administrateur (Schoorman et al., 2007). Si l'administrateur cesse d'aider dans les tâches régulières, la confiance entre les deux parties peut être rompue. Les implications de la confiance en général indiquent que l'administrateur tiendra compte de sa déclaration et agira de manière prudente ou compatissante. C'est le point de vue issu des recherches sur la signification de la confiance. La confiance est souvent formée ou détruite en fonction d'une évaluation de ce qui s'est passé auparavant (Zhang et al., 2008).

Les relations de confiance brisées peuvent prendre beaucoup de temps à réparer. Pour rétablir ces liens, l'administrateur doit informer l'administrateur de ce qui s'est mal passé précédemment et confirmer que les prochaines certifications seront respectées. La confiance est une condition psychologique influencée par le point de vue de l'administrateur. L'administrateur doit donner à l'administrateur l'impression qu'il peut lui faire confiance. Il y a une forte probabilité que la confiance se développe si un administrateur perçoit qu'un administrateur est direct et fiable (Kramer, 1999). En conséquence, la confiance se développe avec le temps et tient compte de la tolérabilité apparente et de la régularité des interactions (Gill et al., 2005).

La confiance de la supervision et la confiance du conseil d'administration sont deux aspects de la confiance des travailleurs (Chughtai & Buckley, 2008). Les niveaux de confiance qu'un membre de l'équipe a envers son employeur sont appelés confiance envers le chef. Le conseil d'administration se préoccupe des niveaux de confiance qu'un membre de l'équipe a envers l'affiliation globale. Les leaders sont responsables de l'affiliation thérapeutique et ont pour

mission de définir et d'atteindre les objectifs de l'affiliation d'entraide. La confiance envers les leaders est largement la confiance quotidienne de l'affiliation médicale. Bien qu'elle soit souvent désignée sous différentes formulations telles que la confiance managériale ou hiérarchique, l'expression la plus courante de la confiance du conseil d'administration a été sous-entendue dans cette étude.

Selon Dirks et Ferrin (2001), la confiance inspire le partage de données en augmentant la divulgation de celles-ci aux autres et en permettant aux autres de comprendre leurs propres pensées. Par conséquent, la confiance influence le partage de données du point de vue de l'expéditeur et du destinataire des données (McEvily et al., 2003b). Les données provenant d'une source fiable sont perçues comme plus crédibles et les individus ont plus tendance à les prendre pour leur valeur nominale. De plus, la confiance peut favoriser le partage de données en diminuant notre propension à filtrer les gens et à nous protéger. Les individus sont plus enclins à obtenir et à fournir des données s'ils n'attendent pas de conséquences négatives de leurs actions.

En conclusion, cette section a présenté une revue complète de la littérature sur le concept de confiance dans la gestion de projets. L'importance de la confiance dans le succès du projet a été largement reconnue, et son impact sur la communication de l'équipe, la prise de décision et la collaboration a été amplement discuté.

Sur la base de la revue de la littérature, il est clair que la confiance joue un rôle critique dans la gestion de projets. Construire et maintenir la confiance est essentiel pour une communication efficace du projet, la prise de décision et la collaboration. La revue a également montré qu'il existe plusieurs facteurs qui peuvent influencer le développement de la confiance dans les équipes de projet. En tant que tels, les gestionnaires de projet et les professionnels doivent être conscients de ces facteurs et prendre les mesures appropriées pour favoriser la construction de la confiance au sein de leurs équipes.

À l'avenir, la recherche sur la confiance dans la gestion de projets devrait se concentrer sur le développement et le test de modèles de mesure qui peuvent évaluer avec précision le niveau de confiance dans les équipes de projet. Le développement de mesures fiables et valides de la confiance est essentiel pour une gestion efficace de la confiance et pour comprendre l'impact de la confiance sur le succès du projet.

2.3. Modèles de mesure de confiance

Comme nous l'avons vu dans les sections précédentes, la confiance est un aspect fondamental de la gestion de projet et peut avoir un impact important sur le succès des résultats du projet. Cependant, mesurer la confiance peut être une tâche difficile car c'est un concept subjectif qui peut varier en fonction des perceptions et des expériences individuelles. Dans cette section, nous aborderons le sujet de la confiance en explorant les modèles clés de mesure de la confiance proposés dans la littérature.

2.3.1. Le modèle de confiance de Mayer et Davies

(Mostafa & Kasamani, 2021) a créé un modèle de confiance basé sur plusieurs caractéristiques du trustee et du trustee (von der Ohe & Martins, 2016). Ce modèle couramment utilisé de confiance inclut les qualités du gestionnaire, les attributs du gestionnaire et le risque inhérent à la situation. Selon cette approche, la confiance dans une relation de travail dyadique est décrite comme le désir d'un individu d'être exposé aux actions de l'autre individu dépendant d'une activité particulière qui est importante pour le gestionnaire, en accordant peu d'attention à la capacité du gestionnaire à filtrer ou à contrôler le fiduciaire. Cette représentation met l'accent sur le comportement du gestionnaire et souligne des facteurs qui sont essentiels pour un climat de confiance virtuelle. La propension du gestionnaire à faire confiance et les décisions du gestionnaire concernant la fiabilité du fiduciaire, évaluées en termes de compétence, de sincérité et de considération, tels que perçues par le gestionnaire, jouent un rôle important (Moro et al., 2018). Bien que la sincérité ne soit pas incluse dans ce modèle, elle est intégrée parmi les règles de fiabilité les plus prédominantes par différents experts tels que McKnight, Cummings et Chervany (1998). L'évaluation du risque dans la situation détermine la confiance d'une personne et la confiance subséquente dans le comportement, qui dépend de la confiance d'une personne dans la fiabilité des rencontres en question (c'est-à-dire la disposition à prendre le risque).

2.3.2. Le modèle de confiance de McKnight

Selon McKnight et al. (2000), le développement de la confiance est un processus laborieux. L'hypothèse de reconnaissance gère les perceptions sociales qui surviennent lorsque les individus s'efforcent de clarifier le passé ou l'avenir des autres ou d'eux-mêmes (Hollon & Kriss, 1984). Les individus peuvent attribuer leurs préoccupations à d'autres facteurs individuels ou situationnels. Les raisons peuvent également être trouvées au sein du gestionnaire lui-même. Un gestionnaire peut commettre des erreurs d'attribution ou avoir des préjugés qui maintiennent

une cohérence intellectuelle face à des contraintes de données, de temps ou d'intention limitées. Les prémisses antérieures (par exemple, attitude de confiance et facteurs institutionnels) influenceront le traitement des données, ne fournissant que des données compatibles avec les hypothèses traitées. Par exemple, une personne avec une forte croyance peut considérer le silence des autres comme un problème mécanique plutôt que leur astuce. Une partie avec une attitude négative de croyance peut mal juger une non-participation pacifique similaire par rapport aux autres (Pinsonneault & Caya, 2005).

2.3.3. Le modèle de confiance de Dirks et Ferrin (2001)

Selon (Tulubas & Celep, 2012), la fonction de la confiance dépend de la présence d'une "force situationnelle". Dans des circonstances ou des conditions où il y a un système faible, où les personnes ont besoin d'une supervision pure ou d'autres éléments solides pour décoder le comportement des autres, la confiance dans les capacités se produit comme un effet immédiat. La confiance surmonte les problèmes entre individus et affecte directement les résultats. Dans des environnements ou des contextes où la construction est véritablement surprenante, où il y a une certaine orientation et des données pour analyser le leadership des autres, mais où il subsiste une certaine vulnérabilité quant à ce que le comportement de l'autre partie implique, la confiance joue un rôle directif. Il existe une variété d'éléments qui influencent les attitudes et les actions, et la confiance est le moyen par lequel ces raisons sont comprises. Des signaux externes tels que les normes et les réglementations "surdéterminent" la manière dont les autres agiront dans des contextes (ou des environnements) dotés d'une structure substantielle. Il y a un minimum d'incertitude et d'ambiguïté dans de tels environnements, et la confiance joue un rôle mineur dans la compréhension des actions des autres.

2.3.4. Le modèle de confiance de Galvin (2000)

Le modèle de confiance de Galvin (2000) est un cadre théorique qui propose une approche multidimensionnelle pour mesurer la confiance au sein des organisations. Selon ce modèle, la confiance comprend quatre dimensions distinctes : l'intégrité, la bienveillance, la compétence et la prévisibilité.

L'intégrité fait référence à la perception selon laquelle une organisation ou un individu se comporte de manière éthique et avec des principes moraux. La bienveillance reflète la croyance selon laquelle l'organisation ou l'individu a à cœur les meilleurs intérêts des autres et agira en conséquence. La compétence reflète la perception selon laquelle l'organisation ou l'individu

possède les compétences et les capacités nécessaires pour remplir ses responsabilités et atteindre ses objectifs. La prévisibilité fait référence à la perception selon laquelle l'organisation ou l'individu est fiable et cohérent dans son comportement au fil du temps (Galvin, 2000).

Le modèle de confiance de Galvin suggère que ces quatre dimensions sont interdépendantes et travaillent ensemble pour influencer les perceptions de confiance. Le modèle propose que les organisations peuvent accroître la confiance en se concentrant sur ces quatre dimensions et en construisant une réputation d'intégrité, de bienveillance, de compétence et de prévisibilité.

CHAPITRE 3 - Méthodologie de recherche

Le chapitre trois de la thèse fournit une explication détaillée du projet de recherche et des méthodes utilisées dans l'étude. Le chapitre décrit l'approche multiméthodes qui a été adoptée, impliquant une combinaison de logique déductive, d'approche positiviste, de démarche nomothétique et d'étude transversale. Cette approche a été choisie pour aider à comprendre le phénomène complexe de la confiance basée sur la contrainte dans le contexte de la gestion de projet, largement discuté dans la littérature par Dias (2018; 2016).

3.1. Philosophie de la recherche et recherche quantitative

Une approche de recherche quantitative a été choisie pour cette étude en se basant sur la philosophie de recherche positiviste, qui postule que la réalité peut être observée et mesurée (Saunders, Lewis, & Thornhill, 2009). Cette approche a été choisie car elle permet de quantifier le phénomène de confiance dans la gestion de projets, plutôt que de s'appuyer uniquement sur l'interprétation. Comme le souligne Creswell (2014), "la recherche quantitative est une méthode pour tester et mesurer les relations entre les variables, pouvant fournir une compréhension objective et précise du phénomène étudié".

De plus, le choix d'une approche quantitative a également été motivé par l'hypothèse selon laquelle les entreprises brésiliennes sont confrontées à une nouvelle dynamique dans le macro-système, faisant face à divers défis en matière de gestion et de performance efficaces des projets. Comme l'ont observé Sekaran et Bougie (2016), la recherche quantitative est particulièrement utile lorsqu'il s'agit de traiter de grands échantillons, ce qui est souvent nécessaire lors de l'étude de phénomènes dans des organisations complexes. L'utilisation de méthodes quantitatives peut aider à identifier des modèles et des tendances, et fournir des résultats fiables et valides qui peuvent éclairer les processus de prise de décision.

Un autre avantage d'une approche de recherche quantitative est la capacité de généraliser les résultats à des populations plus vastes. Selon Babbie (2017), la recherche quantitative est souvent utilisée pour établir des relations de cause à effet entre les variables et peut fournir des informations applicables à des populations plus larges. Cela est particulièrement pertinent pour cette étude, qui vise à examiner l'impact de la confiance sur l'efficacité de la gestion de projets dans les organisations brésiliennes.

La fiabilité et la validité sont des aspects importants d'une recherche quantitative. La fiabilité des constructions permet la mesure d'un ensemble de facteurs qui sont internement cohérents dans leur mesure et donc répétables pour d'autres chercheurs (Hair et al., 2006).

L'alpha de Cronbach est une mesure de l'intercorrélation et de la fiabilité des éléments. Il mesure dans quelle mesure un ensemble d'éléments mesure une seule construction latente unidimensionnelle. Théoriquement, l'alpha varie de zéro à 1, car il s'agit du rapport de deux variances. Des valeurs plus élevées d'alpha sont préférables. Un coefficient alpha de Cronbach d'au moins 0,70 est généralement considéré comme indiquant un ensemble fiable d'éléments (De Vaus, 2002). La fiabilité et la validité sont des aspects importants d'une recherche quantitative.

George et Mallery (2003) fournissent les règles suivantes : alpha > 0,90 est excellent ; alpha > 0,80 est bon ; alpha > 0,70 est acceptable ; alpha > 0,60 est discutable ; alpha > 0,50 est mauvais ; et alpha > 0,50 est inacceptable. Bien que la haute fiabilité soit une condition nécessaire pour des constructions fiables, elle n'est pas une condition suffisante sans validité. Les variances moyennes extraites mesurent la variance capturée par les indicateurs par rapport à l'erreur de mesure, et elles devraient être supérieures à 0,50 pour justifier l'utilisation d'une construction (Barclay et al., 1995). Cependant, la fiabilité composée est la fiabilité d'une échelle sommée et doit être supérieure à la limite de 0,70.

3.2. Le design de l'étude

Cette section présente la structure et le design de la recherche quantitative utilisée.

3.2.1. L'approche multiméthodes

Les données primaires ont été collectées à l'aide d'une enquête basée sur un questionnaire électronique via Google Forms de mars à septembre 2020. Les invitations ont été envoyées à 1 000 candidats à partir de groupes WhatsApp de startups et d'entreprises brésiliennes, y compris la base de données LinkedIn des gestionnaires de projets et des cadres.

N=253 réponses ont été considérées comme valides. Par conséquent, le taux de réponse était de 25,3 %. Les données ont été analysées statistiquement à l'aide d'IBM SPSS version 23 et SmartPLS 3.2. Cependant, les inconvénients des méthodes utilisées sont quantitatives et non probabilistes, où les réponses s'appliquent à l'échantillon, ce qui en fait une étude empirique.

Selon Hair et al. (2019), la modélisation par équations structurelles (SEM) est une technique statistique avancée qui permet l'analyse des relations causales entre les variables dans un modèle théorique. Cette technique est largement utilisée dans les sciences sociales, la psychologie, les affaires, l'éducation et d'autres domaines pour tester des hypothèses sur les relations entre les variables.

Le processus commence par la formulation d'un modèle théorique, qui est une représentation graphique des relations entre les variables d'intérêt. Selon Kline (2016), les données sont ensuite collectées pour les variables, et l'analyse est réalisée à l'aide de techniques statistiques sophistiquées pour estimer les paramètres du modèle. L'analyse permet de tester la validité du modèle théorique et d'examiner les relations entre les variables.

Le SEM permet l'analyse de modèles complexes avec de nombreuses variables et des relations entre elles. De plus, la technique permet l'inclusion de variables latentes, qui ne peuvent pas être mesurées directement, mais sont déduites à partir d'autres variables observables. Comme le mentionne Byrne (2016), le modèle théorique doit inclure des variables exogènes (causales) et endogènes (causées). Les variables exogènes sont des variables indépendantes dans un modèle théorique qui sont considérées comme des causes de variations dans les variables dépendantes, également appelées variables endogènes.

Les variables exogènes sont importantes dans le SEM car elles aident à expliquer les relations entre les variables dépendantes et indépendantes. Selon Schumacker et Lomax (2016), le modèle théorique en SEM inclut des variables exogènes pour mieux comprendre comment elles affectent les variables endogènes et pour examiner des hypothèses sur les relations entre elles. Un exemple de variable exogène pourrait être le niveau d'éducation d'un individu dans une analyse des salaires, comme le soulignent Jöreskog et Sörbom (2015).

Après la formulation du modèle théorique, les données des variables incluses dans le modèle doivent être collectées à l'aide d'échelles appropriées et précises, comme recommandé par Brown (2015). Ensuite, un logiciel d'analyse doit être sélectionné. Selon Hair et al. (2019), il existe plusieurs logiciels d'analyse SEM disponibles sur le marché, tels que AMOS, LISREL, Mplus, entre autres. Dans cette étude, le logiciel Smart PLS version 3.3 a été utilisé.

Dans ce logiciel, le modèle d'analyse théorique a été spécifié, ce qui a impliqué la création d'un diagramme de chemin décrivant les relations entre les variables. De plus, des hypothèses sur les relations entre les variables ont été spécifiées, comme suggéré par Hair et al. (2019).

Avant d'estimer les paramètres du modèle, il est important de vérifier l'adéquation du modèle aux données. Cela peut être fait à l'aide de diverses statistiques telles que l'indice de fit comparatif (CFI), l'indice Tucker-Lewis (TLI) et l'erreur quadratique moyenne d'approximation (RMSEA). Après avoir vérifié l'adéquation du modèle, il est nécessaire d'estimer les paramètres du modèle en utilisant des techniques d'estimation telles que les moindres carrés ordinaires (OLS) ou la méthode du maximum de vraisemblance (ML), comme expliqué par Byrne (2016).

Après avoir estimé les paramètres du modèle, il est important d'évaluer les résultats. Cela implique l'analyse des coefficients de chemin, du R carré de chaque variable endogène et de la signification statistique des paramètres. Enfin, l'interprétation des résultats implique l'examen

des schémas de relation entre les variables, comme discuté par Kline (2016). Cela peut aider à confirmer ou à réfuter les hypothèses initiales sur les relations entre les variables et à développer de nouvelles hypothèses et théories.

3.3.6 - Logiciel d'analyse quantitative et outils logiciels de Microsoft Office

Smart PLS version 3.3

CHAPITRE 4 - ANALYSE DES DONNÉES ET RÉSULTATS

Le Chapitre Quatre est le point culminant de la recherche effectuée, car il présente les résultats obtenus à partir des données collectées et analysées. Ce chapitre vise à fournir une analyse détaillée des résultats de la recherche, y compris des résultats statistiques, des tableaux et des graphiques illustrant les principaux aspects de l'étude. L'accent est mis sur l'interprétation et la discussion des résultats, fournissant des informations sur l'impact de la Confiance Basée sur l'Engagement dans la Gestion de Projets dans les organisations brésiliennes.

4.2. Analyse des DONNÉES ET des RÉSULTATS.

Tout d'abord, l'échantillon de l'étude, l'instrument de collecte de données, le modèle structurel et le modèle théorique (ANNEXE X) seront évalués. Ainsi, cette unité est divisée en quatre blocs. Selon l'instrument de collecte de données et le modèle initial, l'échantillon est pris en compte, puis le modèle ajusté. Enfin, l'effet réel du construit Confiance Contrainte (TR) dans le modèle est révélé.

4.2.1. Statistiques d'échantillonnage et descriptives

Nous avons collecté les données de l'étude entre mars et septembre 2020. Pour cela, nous avons utilisé un formulaire électronique comprenant 32 modèles d'indicateurs et sept questions relatives au profil de l'échantillon. Sur les 253 questionnaires remplis, nous avons obtenu 151 réponses valides. Parmi les erreurs les plus courantes des répondants, on note le remplissage incomplet des questionnaires.

En évaluant la composition de l'échantillon, nous pouvons constater que 42 % sont des experts, 29 % sont des titulaires d'un master, 15 % sont des étudiants de premier cycle et 14 % sont des docteurs. Nous supposons donc que 84 % de l'échantillon possède une connaissance du sujet à un certain niveau, en plus de sa formation académique de base, comme illustré dans la Figure 01 ci-dessous.

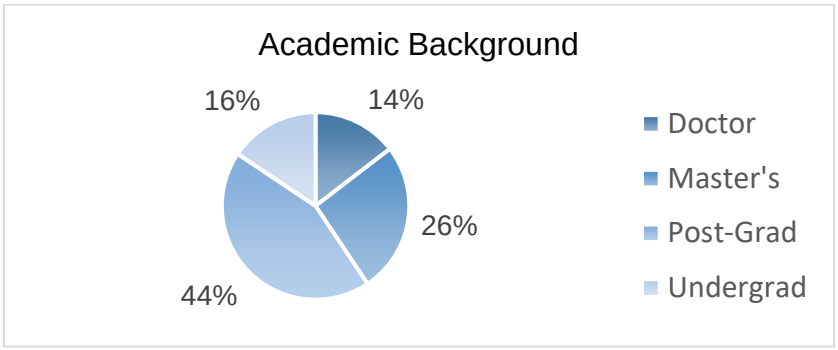

Figura1Formação acadêmica dos entrevistados

En évaluant le niveau de certification en gestion de projets, on constate que plus de 60 pour cent de l'échantillon n'est pas certifié en gestion de projets, même si plus de 65 pour cent de l'échantillon a plus de cinq ans d'expérience professionnelle dans le domaine des projets, comme le montre la Figure 02 ci-dessous:

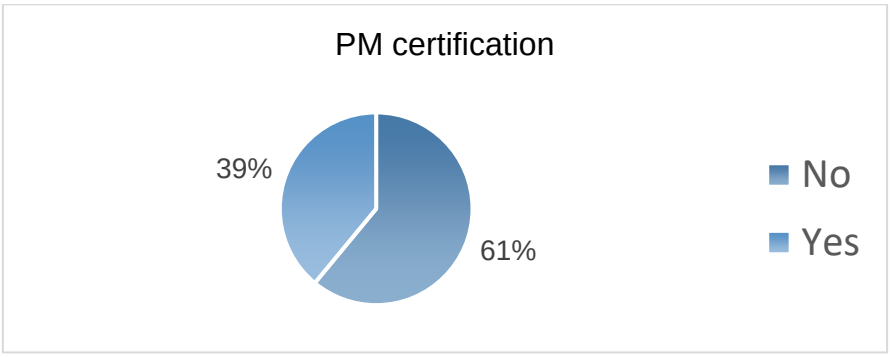

Figure2: Certification en gestion de projets des répondants

Veuillez consulter la Figure 03 ci-dessous, qui présente le temps d'expérience professionnelle des répondants à l'enquête (en années):

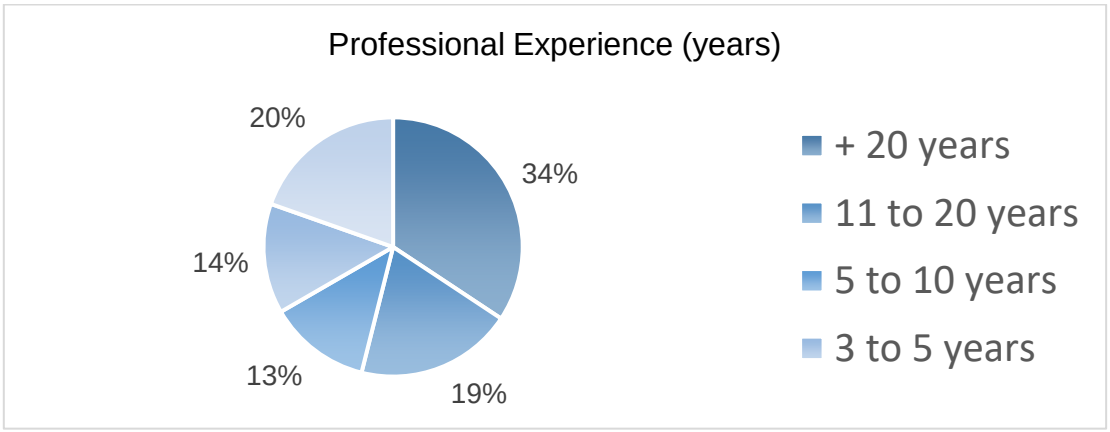

Figure3 Expérience professionnelle

La Figure 04 ci-dessous illustre la répartition par tranche d'âge de l'échantillon, comme suit :

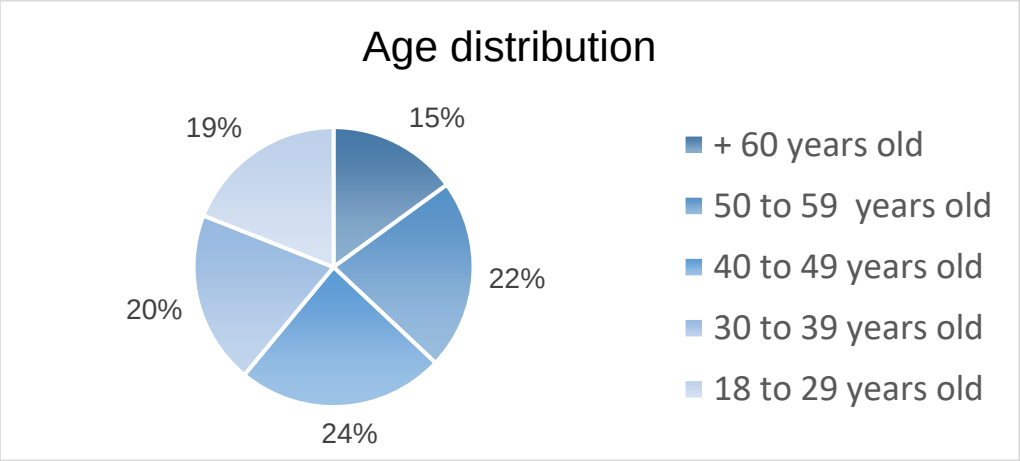

Figure 4 Distribution d'âge

Veuillez noter dans la Figure 04 que lors de l'observation de la tranche d'âge, la distribution reflète la maturité des répondants. Plus de 60 % des enquêtés ont plus de 40 ans, tandis que seulement 19 % sont des enquêtés de moins de 40 ans. Dans la section suivante, les résultats de l'analyse descriptive sont présentés.

XXXX

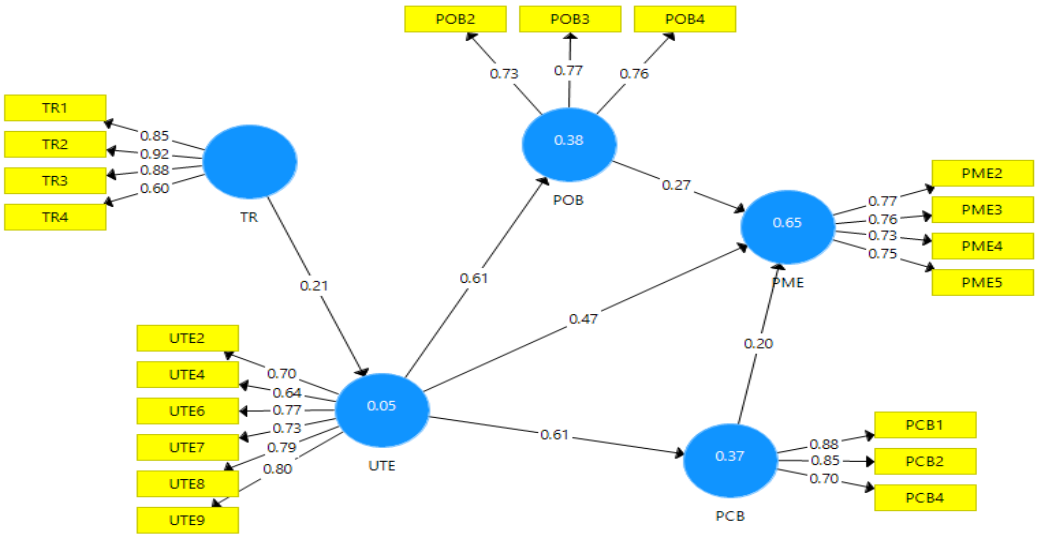

Figure 10: Modèle ajusté avec charges factorielles

On observe une charge factorielle assez acceptable entre les relations des construits et entre les items et leurs respectifs construits. Ainsi, nous continuerons à évaluer le modèle.

Le Modèle Ajusté travaille donc avec les mêmes hypothèses que le modèle proposé (voir Figure 09).

En observant la direction des forces factorielles présentées dans la Figure 10, on peut constater qu'il n'y a pas de direction opposée aux hypothèses. Ainsi, il n'est pas possible de rejeter aucune des hypothèses pour le moment.

La méthode Bootstrap a été utilisée pour vérifier la significativité au niveau de 5 pour cent, où les hypothèses pour la technique sont les suivantes :

H0 : coefficient > 0,05

H1 : coefficient < 0,05

La Figure 11 ci-dessous présente les résultats du test de significativité du modèle théorique à travers la valeur P.

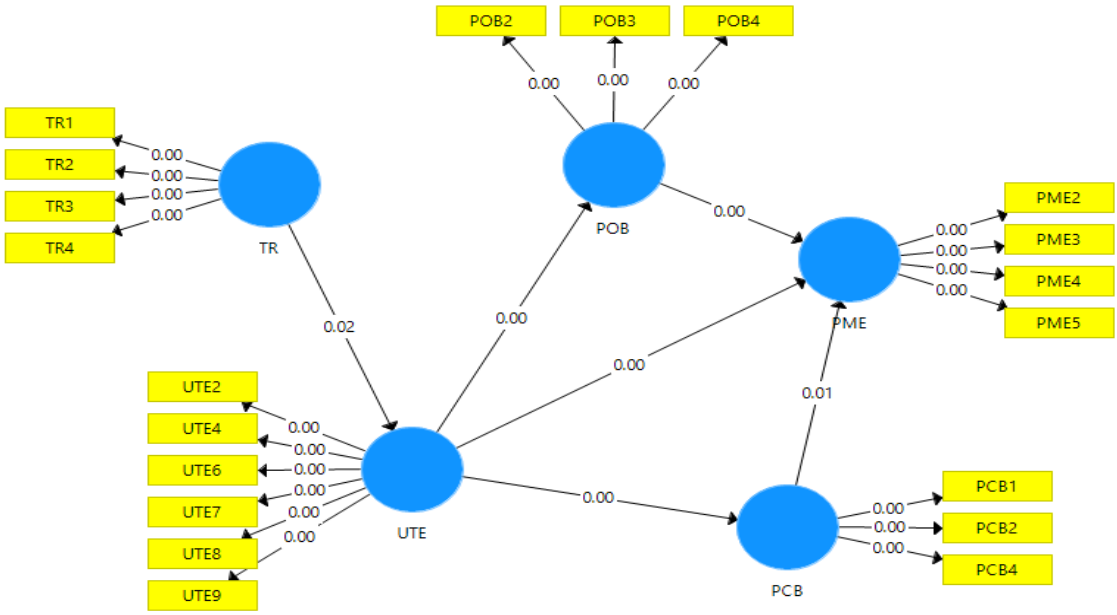

Figure 11 - Test de la valeur P

Le modèle ajusté a montré des résultats significatifs pour toutes les relations, c'est-à-dire que la valeur p est inférieure à 0,05 pour tous les éléments. Ainsi, nous pouvons supposer qu'avec les ajustements des variables observées, l'insignifiance existante entre le CONSTRUCT TR et UTE a été corrigée.

La même chose s'est produite avec les observations de RT qui n'avaient pas de signification précédemment. Maintenant, avec l'ajustement du modèle, la signification a été atteinte.

Pour la validation du modèle de mesure, nous avons utilisé la cohérence interne et la validité convergente, en utilisant la fiabilité composite et la variance moyenne extraite (AVE), respectivement. Ensuite, nous avons évalué la validité discriminante en utilisant la méthode Crossroad et HTMT, suivant Henseler, Ringle et Sinkovics (2009), et nous l'avons appliquée au modèle proposé.

Ainsi, la validation du modèle peut se poursuivre sans remettre en question sa signification statistique, comme le montre le Tableau 9 ci-dessous:

Tableau 9 Observations du modèle ajuste

Items	Affirmative	Mean	Median	Min	Max	Standard Deviation	Observeds used	P-Value
PCB1	Maintaining good relationships with subcontractors can positively affect the overall performance of the contractor.	4.152	4.000	1.000	5.000	0.904	151	0.000
PCB2	Good relationships with previous clients can increase cooperation and trust between owners and contractors, and create stability in contractor behavior.	4.026	4.000	1.000	5.000	0.913	151	0.000
PCB4	Frequent material replacement can cause claims, fluctuations in product costs, and higher transaction costs. Claims can be resolved in a friendly manner, but some may degenerate into unnecessary conflicts and disputes.	4.179	4.000	1.000	5.000	0.870	151	0.000
SME2	Transaction costs are inevitably incurred in the decision-making process, but proper decision-making reduces the amount of time spent on unexpected problems, minimizes divergences, and helps keep a project on schedule and on budget.	4.272	4.000	2.000	5.000	0.763	151	0.000
SME3	Effective and efficient communication will ensure that all team members are aware of the decisions, thus leaving no room for uncertainty in terms of individual responsibilities and objectives.	4.377	4.000	1.000	5.000	0.735	151	0.000
SME4	The potentially unpleasant consequences of conflict often include filing claims that sometimes end up in disputes, which in turn reduce the efficiency of project management.	4.079	4.000	1.000	5.000	0.953	151	0.000
SME5	The existence of technical competence, i.e. the appropriate qualifications and experience, is the driving room for quick decisions, smooth operations and ease of communication.	4.252	4.000	1.000	5.000	0.900	151	0.000
POB2	Organizational learning can be effective if lessons learned from completed projects are kept in organizational memory and used in future projects, thereby promoting stability in owner behavior.	4.424	5.000	2.000	5.000	0.750	151	0.000
POB3	Punctuality of payments by the owner eliminates uncertainty and may be favorable to the lower number of complaints by the contractor, and can minimize the frequency and magnitude of disputes.	4.040	4.000	1.000	5.000	0.989	151	0.000
POB4	Transferring any risks to the contractor or withretaining any risks may cause an increase in the owner's costs.	3.894	4.000	1.000	5.000	0.964	151	0.000
TR1	There are cases where, even without knowing the other party, you have to trust her.	3.649	4.000	1.000	5.000	1.037	151	0.000
TR2	Trust can arise in unexpected circumstances, even with strangers.	3.808	4.000	1.000	5.000	1.090	151	0.000
TR3	If the circumstances require, I can trust a complete stranger.	3.437	4.000	1.000	5.000	1.148	151	0.000
TR4	You can trust a stranger in extreme cases.	3.159	3.000	1.000	5.000	1.235	151	0.001
UTE2	A poorly defined scope, as well as incomplete plans and specifications can increase the number of post-contract changes by owners, thus increasing uncertainty in owner behavior.	4.589	5.000	2.000	5.000	0.774	151	0.000
UTE4	Competent contractors can operate efficiently and can promote a problem-free environment, thus contributing to a more stable environment.	4.205	4.000	2.000	5.000	0.731	151	0.000
UTE6	When the scope of a project is not well defined, initial drawings and specifications are likely to change, leading to many complaints and change requests.	4.490	5.000	1.000	5.000	0.845	151	0.000
UTE7	Incomplete plans and specifications can increase the number of disagreements and disputes.	4.510	5.000	1.000	5.000	0.788	151	0.000
UTE8	Disabled bid agents can create a less competitive procurement process.	4.364	5.000	2.000	5.000	0.759	151	0.000
UTE9	Better integration, collaboration, and communication in the interface between desing and construction can reduce uncertainty in the transaction environment.	4.358	5.000	2.000	5.000	0.808	151	0.000

La Tableau 10 présente les résultats de la cohérence interne et de la validité convergente du modèle, comme suit :

Tableau 10 : Résultats de la cohérence interne et de la validité convergente du modele

	L'Alpha de Cronbach	rho_A	Confiabilité composite	Variance extraite moyenne (VEM)
pcb	0,743	0,734	0,854	0,663
Pmes	0,748	0,753	0,840	0,568
POB	0,659	0,637	0,796	0,565
Tr	0,856	0,992	0,890	0,674
ute	0,835	0,838	0,880	0,551

Le Tableau 10 présente des niveaux acceptables de fiabilité, respectant les limites entre 0,70 et 0,95 pour la fiabilité composite suggérée par Diamantopoulos et al. (2012), sans aucun indice dépassant 0,95, ce qui garantit la validité des construits.

En ce qui concerne la cohérence interne, il est possible de constater que l'alpha de Cronbach présente des résultats dans la plage acceptable de 0,60. Et rho_A, considéré par Dijkstra & Henseler (2015) comme une mesure approximative précise de la fiabilité du construit, présente des résultats dans la plage souhaitée entre 0,60 et 0,95, ce qui confère une bonne fiabilité au modèle.

Pour vérifier la validité convergente, la méthode de la variance extraite moyenne (AVE) a été utilisée, qui a présenté des résultats acceptables supérieurs à 0,50, indiquant que les construits expliquent au moins 50 pour cent de la variation de leurs items, ce qui peut être observé dans le modèle proposé.

Après les tests de validation convergente et l'étude de la cohérence interne du modèle, il est nécessaire d'évaluer la validité discriminante du modèle, qui explique empiriquement dans quelle mesure un construit est distinct des autres. Le critère de chargement croisé a été utilisé. La validité est observée en vérifiant les charges des items sur leurs construits respectifs par rapport aux charges des différents construits, conformément à Henseler, Ringle et Sinkovics (2009).

Par conséquent, pour être considéré comme valide, l'item doit présenter une charge factorielle plus élevée sur son construit respectif que sur tout autre construit, comme présenté dans le Tableau 11 ci-dessous:

Tableau 11: Charge factorielle plus élevée sur son construit respectif que sur tout autre construit

	pcb	Pmes	POB	Tr
PCB1	0,882	0,482	0,394	-0,059
PCB2	0,847	0,460	0,317	-0,134
PCB4	0,704	0,507	0,345	0,227
PME2	0,463	0,773	0,571	0,217
SME3	0,468	0,758	0,568	0,097

La Tableau 11 montre que le modèle respecte le critère de charge croisée, ce qui indique qu'il est acceptable. Le test de rapport hétérotrait-monotrait (HTMT) des corrélations (Voorhees et al., 2016) a été utilisé pour poursuivre l'analyse discriminante.

Pour être considéré comme valide selon le HTMT, le résultat doit être inférieur à 0,90. Des valeurs allant jusqu'à 0,95 sont considérées comme acceptables pour les constructions ayant des constructions conceptuelles similaires ou d'origine similaire, selon Henseler et al. (2015). Par conséquent, le Tableau 12 présente le HTMT de la manière suivante :

	pcb	**Pmes**	**POB**	**Tr**
Pmes	0,795			
POB	0,538	0,796		
Tr	0,243	0,183	0,119	
ute	0,740	0,938	0,738	0,216

Tableau 12 : Validité Discriminante – HTMT

	Pcb	**Smes**	**POB**	**Tr**
Smes	0.795			
POB	0.538	0.796		
Tr	0.243	0.183	0.119	
Ute	0.740	0.938	0.738	0.216

Observez dans le Tableau 12 que les constructes présentent une validité discriminante conforme aux attentes, ce qui permet de poursuivre l'évaluation.

4.2.2. Mesurer l'évaluation

Le modèle structurel est principalement composé des étapes suivantes : vérification de la colinéarité à l'aide du VIF, confirmation du coefficient de détermination (R2), valeur F et valeur P pour la significativité, ainsi que l'évaluation des résidus.

La première étape de validation du modèle structurel consiste à vérifier la colinéarité. Pour cela, on utilise le VIF (Variance Inflation Factor). Selon Mason & Perreault (1991) et Becker et al. (2015), des résultats inférieurs à 5 sont suggérés, avec idéalement des résultats inférieurs à 3. Comme le montre le tableau 13 ci-dessous :

Tableau 13 : VIF

VAR	VIF
PCB1	4.849
PCB2	4.646
PCB4	1.125
PME2	1.381
PME3	1.412
PME4	1.447
PME5	1.551
POB2	1.022
POB3	4.971
POB4	4.955
TR1	2.179
TR2	2.159
TR3	2.740
TR4	1.567
UTE2	1.638
UTE4	1.354
UTE6	2.099
UTE7	1.976
UTE8	4.426
UTE9	4.599

Observez dans le Tableau 13 que le VIF du Modèle montre que les résultats pour les construits et leurs relations sont considérés comme acceptables dans la plupart des cas, avec souvent des résultats inférieurs à 5. Ainsi, étant donné les problèmes potentiels de colinéarité, nous pouvons examiner le R2 des construits endogènes, comme illustré dans le Tableau 14, comme suit :

Tableau 14: R2 et R2 ajusté

	Quadrado R2	R2 ajustado
PCB	0,367	0,363
PME	0,647	0,640
POB	0,377	0,373
UTE	0,046	0,039

On peut observer un coefficient de détermination supérieur à 60 % pour les PME, ce qui est très intéressant pour le modèle, selon les paramètres de Hair et al. (2012). Par conséquent, le modèle présente un pouvoir explicatif modéré à élevé.

Après avoir vérifié le coefficient de détermination (R2), il est essentiel d'examiner la taille du coefficient de chemin pour évaluer le pouvoir prédictif du modèle. Ainsi, on peut observer les résultats des coefficients de chemin dans le tableau XX77X. Ces résultats montrent une forte influence du construct UTE sur les construct POB et PCB, ainsi qu'un impact modéré directement sur les PME, comme illustré ci-dessous :

Tableau 15: Coefficients de chemin

	PCB	PME	POB	TR	UTE
PCB		0,203			
PME					
POB		0,267			
TR					0,214
UTE	0,606	0,467	0,614		

Le résidu présenté par l'échantillon a été vérifié pour compléter l'étude du modèle théorique. Pour cela, on utilise le SRMR (écart résiduel moyen standardisé). La valeur attendue pour le SRMR doit toujours être très proche de zéro, tandis que toute valeur élevée indique un échantillon très encombré, ce qui indique de graves problèmes de mesure. Pour le modèle, un

SRMR de 0,11 a été trouvé, considéré raisonnablement adéquat mais non idéal. Ce volume de résidus peut être expliqué par la taille de l'échantillon, qui répond aux propositions des modèles PLS, selon HAIR et al. (2012). Cependant, il est considéré comme faible selon plusieurs paramètres statistiques.

CHAPITRE 5 – DISCUSSION

5.1. Chapitre Introduction

H1 - UTE influence positivement le PME soutenu (p-valeur (0,00) < 0,05)

Comme l'hypothèse selon laquelle l'Incertitude de l'Environnement de Transaction (UTE) influence positivement l'Efficacité de la Gestion de Projet (PME) a été confirmée, cela peut avoir plusieurs conséquences importantes pour les organisations et pour la gestion de projet en général.

Tout d'abord, cela signifie que les organisations doivent être conscientes de l'impact de l'UTE sur le PME et doivent donc investir dans des stratégies et des ressources pour gérer adéquatement l'incertitude de l'environnement. Cela peut inclure la mise en œuvre d'outils et de techniques de gestion des risques, l'amélioration des capacités de prévision et de planification, ainsi que le développement des compétences des gestionnaires de projet pour faire face aux situations de forte incertitude.

De plus, la constatation que l'UTE peut influencer positivement le PME peut amener les organisations à adopter une attitude plus proactive et flexible en matière de gestion de projet. Au lieu d'éviter les projets présentant un degré élevé d'incertitude, les organisations peuvent choisir de les adopter et de profiter des opportunités d'apprentissage et d'innovation qui peuvent surgir dans des environnements incertains.

Enfin, l'hypothèse selon laquelle l'UTE influence positivement le PME peut conduire à une plus grande valorisation et reconnaissance du rôle de la gestion de projet dans les situations de forte incertitude. Les chefs de projet capables de gérer efficacement l'incertitude environnementale peuvent être considérés comme des ressources précieuses pour les organisations, capables de générer des résultats positifs dans des conditions difficiles.

5.1.1. H2 - L'UTE influence positivement le PCB soutenu (p-valeur (0,00) < 0,05)

Comme l'hypothèse selon laquelle l'Incertitude de l'Environnement de Transaction (UTE) influence positivement le Comportement du Contractant (PCB) a été confirmée, cela peut entraîner plusieurs conséquences importantes pour les organisations et la gestion des contrats en général.

Tout d'abord, cela signifie que les organisations doivent prendre conscience de l'impact de l'UTE sur le PCB et, par conséquent, adopter des stratégies et des pratiques pour gérer adéquatement l'incertitude de l'environnement. Cela peut inclure la mise en place de mécanismes de surveillance et de contrôle, l'utilisation de contrats plus flexibles et adaptables,

ainsi que le développement des compétences et des capacités des gestionnaires de contrats pour faire face aux situations d'incertitude élevée.

De plus, la constatation que l'UTE peut influencer positivement le PCB peut amener les organisations à adopter une approche plus collaborative et partenariale avec leurs contractants. Au lieu d'adopter une attitude défensive ou contradictoire à l'égard des contractants, les organisations peuvent chercher à établir des relations de confiance et de coopération leur permettant de faire face plus efficacement à l'incertitude de l'environnement.

Enfin, l'hypothèse selon laquelle l'UTE influence positivement le PCB peut conduire à une plus grande valorisation et reconnaissance du rôle de la gestion des contrats dans les situations d'incertitude élevée. Les gestionnaires de contrats capables de faire face efficacement à l'incertitude de l'environnement peuvent être considérés comme des ressources précieuses pour les organisations, capables de générer des résultats positifs dans des conditions difficiles. Cela peut conduire à une plus grande professionnalisation du domaine de la gestion des contrats et à une demande accrue de professionnels spécialisés dans ce domaine.

5.1.2. H3 - L'incertitude de l'environnement de transaction (UTE) influence positivement le Potentiel d'Opportunités d'Affaires (POB) soutenu (p-valeur (0,00) < 0,05).

Comme l'hypothèse selon laquelle l'incertitude de l'environnement transactionnel (UTE) influence positivement la prévisibilité du comportement du contractant (POB) a été confirmée, cela peut avoir plusieurs conséquences importantes pour les organisations et la gestion des contrats en général.

Tout d'abord, cela signifie que les organisations doivent prendre conscience de l'impact de l'UTE sur le POB et, par conséquent, doivent adopter des stratégies et des pratiques pour gérer adéquatement l'incertitude de l'environnement. Cela peut inclure l'utilisation de contrats plus détaillés et spécifiques, la mise en place de mécanismes de surveillance et de contrôle plus rigoureux, et l'adoption de processus de communication plus clairs et transparents.

5.1.3. H4 - Le Comportement du Contratado (PCB) influence positivement l'Efficacité du Gestionnaire de Projet (PME) soutenu (p-valeur (0,01) < 0,05)

Comment la hypothèse selon laquelle le Comportement de l'Entrepreneur (PCB) influence positivement l'Efficacité de la Gestion de Projets (PME) a été confirmée peut avoir plusieurs conséquences importantes pour les organisations et la gestion de projets en général.

Tout d'abord, cela signifie que la collaboration et la communication efficaces entre les entrepreneurs et les chefs de projet peuvent être essentielles à la réussite du projet. Les chefs de projet doivent travailler en étroite collaboration avec les entrepreneurs pour comprendre leurs besoins et attentes, et les entrepreneurs doivent fournir des informations et des ressources de manière opportune et appropriée afin que les chefs de projet puissent accomplir leur travail efficacement.

De plus, la constatation que le PCB peut influencer positivement le PME peut amener les organisations à adopter une attitude plus collaborative et partenariale envers leurs entrepreneurs. Au lieu d'adopter une position défensive ou antagoniste à l'égard des entrepreneurs, les organisations peuvent chercher à établir des relations de confiance et de coopération qui leur permettent de relever les défis de la gestion de projets de manière plus efficace.

Enfin, l'hypothèse selon laquelle le PCB influence positivement le PME peut conduire à une plus grande valorisation et reconnaissance du rôle de l'entrepreneur dans l'assurance de l'efficacité de la gestion de projets. Les entrepreneurs capables de fournir des informations et des ressources de manière opportune et appropriée, et de travailler en étroite collaboration avec les chefs de projet, peuvent être considérés comme des ressources précieuses pour les organisations capables de générer des résultats positifs dans des projets complexes et stimulants. Cela peut conduire à une plus grande professionnalisation du domaine de la gestion de projets et à une demande accrue de professionnels spécialisés dans ce domaine.

5.1.4. H5 - PCB influence positivement la PME avec un soutien statistique significatif (p-valeur (0,00) < 0,05)

Si l'hypothèse selon laquelle la Prévisibilité du Comportement de l'Entrepreneur (POB) influence positivement l'Efficacité de la Gestion de Projets (PME) est confirmée, cela peut avoir plusieurs conséquences importantes pour les organisations et la gestion de projets en général.

Tout d'abord, cela signifie que les organisations doivent faire des efforts pour établir des contrats clairs et bien définis avec leurs entrepreneurs, qui énoncent clairement les attentes, les responsabilités et les délais pour les deux parties. Cela permettra aux chefs de projet de travailler de manière plus efficace, car ils auront une compréhension claire de ce qui est attendu des entrepreneurs.

De plus, le constat que le POB peut influencer positivement le PME peut amener les organisations à adopter une position plus sélective dans le choix de leurs entrepreneurs, en donnant la préférence à ceux qui ont un historique de comportement prévisible et fiable. Cela peut contribuer à réduire l'incertitude et les risques associés à la gestion de projets, augmentant ainsi les chances de succès.

Enfin, l'hypothèse selon laquelle le POB influence positivement le PME peut entraîner une plus grande importance accordée à la gestion des risques et à l'évaluation des performances des entrepreneurs. Les organisations peuvent chercher à mettre en place des systèmes de surveillance et d'évaluation qui permettent de détecter d'éventuels écarts ou problèmes de comportement des entrepreneurs, et prendre des mesures préventives ou correctives pour assurer l'efficacité de la gestion des projets.

En résumé, la confirmation de l'hypothèse selon laquelle le POB influence positivement les PME peut conduire à une plus grande professionnalisation et efficacité dans la gestion de projets, avec des organisations plus sélectives dans le choix de leurs entrepreneurs, des contrats plus clairs et bien définis, ainsi qu'une surveillance et une évaluation plus efficaces.

5.1.5. TR influence positivement l'UTE avec un soutien statistique significatif (p-valeur (0,02) < 0,05)

Comme l'hypothèse selon laquelle la Confiance Contrainte (TR) influence positivement l'Incertitude de l'Environnement Transactionnel (UTE) a été soutenue, cela peut avoir plusieurs conséquences importantes pour les organisations et la gestion de projets en général.

L'hypothèse selon laquelle la confiance contrainte influence positivement l'incertitude de l'environnement transactionnel a des implications importantes pour les pratiques organisationnelles et de gestion de projets. Ce résultat suggère que dans les situations où la confiance contrainte prévaut, le niveau d'incertitude dans les environnements transactionnels peut augmenter, ce qui peut avoir des effets négatifs sur l'efficacité et l'efficacité des échanges sur le marché. Les organisations et les chefs de projet doivent être conscients de ces implications et prendre des mesures pour gérer la confiance contrainte et réduire ses effets négatifs.

Une des principales conséquences de la confiance contrainte est l'augmentation des coûts de transaction associés aux échanges sur le marché. Lorsqu'une partie est contrainte de faire confiance à une autre en raison du manque d'alternatives ou d'options, il peut être nécessaire d'investir davantage de ressources dans la surveillance, la négociation et l'exécution des contrats. Cela peut entraîner des coûts de transaction plus élevés, ce qui peut réduire l'efficacité et l'efficacité des échanges sur le marché. En tant que tels, les organisations et les chefs de projet

doivent être conscients des situations dans lesquelles la confiance contrainte peut prévaloir et prendre des mesures pour atténuer ses effets négatifs.

Une autre conséquence importante de la confiance contrainte est le risque de comportement opportuniste. La confiance contrainte peut créer des opportunités de comportement opportuniste, tel que le risque moral, les problèmes d'agression ou d'évitement, qui peuvent miner l'efficacité des échanges sur le marché et réduire la fiabilité des parties impliquées. Pour gérer ce risque, les organisations et les chefs de projet doivent être vigilants en surveillant le comportement des parties impliquées et prendre des mesures pour atténuer le risque de comportement opportuniste. Cela peut inclure l'établissement de contrats et de réglementations clairs, l'investissement dans la construction de relations à long terme basées sur la confiance, et la promotion de la transparence, de la responsabilité et de la justice dans les pratiques organisationnelles et de gestion de projets.

En résumé, l'hypothèse selon laquelle la confiance contrainte influence positivement l'incertitude de l'environnement transactionnel met en évidence l'importance de comprendre et de gérer la dynamique du pouvoir dans les environnements transactionnels. Les organisations et les chefs de projet doivent être conscients des situations où la confiance contrainte peut prévaloir et prendre des mesures pour gérer les risques qui y sont associés. Cela comprend la réduction des coûts de transaction, la gestion du risque de comportement opportuniste, la promotion de la transparence et de la justice, et l'investissement dans la construction de relations à long terme basées sur la confiance. En agissant ainsi, les organisations et les chefs de projet peuvent améliorer l'efficacité et l'efficacité des échanges sur le marché et créer de la valeur pour leurs parties prenantes.

La Table 16 présente les résultats des hypothèses du modèle ajusté proposé et indique le coefficient de chemin, comme suit :

Tableau 16: Résultat des hypothèses

Chance	Résultat
H1 - UTE influence positivement PME	Soutenu
H2 - UTE influence positivement o PCB	Soutenu
H3 - UTE influence positivement POB	Soutenu
H4 - PCB influence positivement PME	Soutenu

H5 - POB influence positivement PME	Soutenu
H6 - TR influence positivement a UTE	Soutenu

5.2. Résumé des résultats

Sur la base des résultats obtenus, on peut conclure que les variables étudiées sont interconnectées de différentes manières et que ces interconnexions peuvent influencer de manière significative les performances de la gestion de projets dans des environnements d'incertitude.

Plus spécifiquement, il a été observé que l'incertitude de l'environnement transactionnel et la prévisibilité du comportement de l'entrepreneur ont un effet significativement positif sur l'efficacité de la gestion de projets. Cela suggère que les organisations doivent être conscientes de l'incertitude de l'environnement et du comportement des entrepreneurs lors de la planification et de la gestion des projets, afin d'améliorer les performances globales.

De plus, il a été observé que le comportement de l'entrepreneur a également un effet significativement positif sur l'efficacité de la gestion de projets, ce qui indique que les organisations doivent prendre en compte attentivement les antécédents de performance et le comportement des entrepreneurs lors de l'établissement de relations de confiance.

Cependant, l'hypothèse selon laquelle la confiance contrainte influence positivement l'incertitude de l'environnement transactionnel a été rejetée, suggérant que d'autres moyens de gérer l'incertitude de l'environnement doivent être envisagés, notamment des stratégies plus globales de gestion des risques et l'adoption d'une attitude critique à l'égard des entrepreneurs.

En résumé, les résultats des hypothèses mettent en évidence l'importance de prendre soigneusement en compte l'incertitude de l'environnement, le comportement des entrepreneurs et les relations de confiance lors de la planification et de la gestion de projets dans des environnements d'incertitude, afin d'améliorer les performances globales de la gestion de projets.

Title: The Impact of Trust on Project Management Efficiency in Brazilian Organizations

Abstract:

Project management has been a topic of great interest in the business world, as successful project completion is critical to a company's success. Among the factors that influence project success, the concept of trust is considered in project management literature as an essential element. This research aims to investigate the impact of Compelled-Based Trust on project management efficiency in Brazilian organizations. The purpose of this thesis is to advance the project management literature by examining how Compelled-Based Trust influences project management efficiency and by outlining mechanisms that may support the development of trust among project team members. The literature review indicates that trust has been extensively addressed within project management research. Despite this substantial body of work, studies specifically exploring the effects of Compelled-Based Trust on project management efficiency remain limited. Most of the research has focused on the positive effects of trust, and few studies have investigated the negative effects of Compelled-Based Trust on project management efficiency. Our objective is to understand how Compelled-Based Trust affects the relationship between team members and project managers and how it impacts project success. This research uses a multi-method approach, using both quantitative and qualitative methods to collect and analyze the data. The quantitative component of the study followed a cross-sectional design, with data collected through electronic questionnaires. Invitations were distributed to 1,000 participants associated with WhatsApp groups of Brazilian startups and companies, as well as to contacts from a LinkedIn database of project managers and executives. Data analysis was conducted using SmartPLS 3.2, employing Structural Equation Modeling (SEM) techniques. The findings indicate that Compelled-Based Trust negatively affects project management efficiency in Brazilian organizations. This form of trust undermines the quality of interactions between team members and the project manager, which in turn reduces overall project performance. The research indicates that Compelled-Based Trust should be avoided in project management. The main conclusion of this thesis is that Compelled-Based Trust has a negative impact on project management efficiency in Brazilian organizations. The thesis contributes to the literature by providing insights into how Compelled-Based Trust affects project management efficiency. The implications of this research are that project managers need to be aware of the negative

effects of Compelled-Based Trust and should focus on building trust relationships based on other factors to ensure project success.

Keywords: Project Management, Compelled-Based Trust, Brazilian Organizations, Trust Relationships.

Remerciements

First, I would like to express my sincere gratitude to my supervisor and mentor Dr. Farid El Massioui for the continuous support of my doctoral studies and related research, for his patience, motivation, and insightful comments. To my dear co-supervisor Dr. Bouchaib Bahli, I am thankful for his guidance that helped me to complete this doctoral thesis and give me the support to persevere and move forward. Without both of you I would not have achieved this, I am eternally grateful.

To Professor Samuel Barros, my best friend, with whom I had the opportunity to exchange ideas and who was a great supporter during the course of this thesis.

My sincere thanks also go to Dr. Jorge Cardoso who envisioned a broader perspective and provided the unique opportunity of academic enrichment for Brazilian faculty to study overseas. Without his invaluable support, I would not have seized this opportunity.

Finally, the most powerful supporters of this journey, my grandmother Maria de Lourdes, my wife Diana Quintella, and my children Arthur and Theo Albergarias. They are my reason… to be honest, they are all my reasons.

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List of Abbreviations

AMOSS – Analysis of Moment Structures

ANCOVA – Analysis of Covariance

APM – Association for Project Management

AVE – Average Variance Extracted

CFA – Confirmatory Factor Analysis

FPB – Federal Bureau of Prisons

GVT – Global Virtual Team

HRM – Human Resource Management

HTMT – Heterotrait-Monotrait Ratio

KPMG – Klynveld Peat Marwick Goerdeler

LFM – Logical Framework Methodology

LISREL – Linear Structural Relations

LMX – Leader–Member Exchange

MBA – Master of Business Administration

Mplus – (Statistical software for latent variable modeling)

PCB – Project Contractor Behavior

PM – Project Management

PMBOK – Project Management Body of Knowledge

PME – Project Management Efficiency

PMI – Project Management Institute

POB – Predictability of Owner Behavior

RBV – Resource-Based View

R^2 (R-squared) – Coefficient of Determination

R&D – Research and Development

SEM – Structural Equation Modeling

SME – Small and Medium-sized Enterprises

SRMR – Standardized Root Mean Square Residual

TL – Transformational Leadership

TR – Compelled Trust

UTE – Transaction Environment Uncertainty

VIF – Variance Inflation Factor

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Introduction

1.1 Context

Project management is a critical field for the success of organizations in various sectors. It is the discipline of planning, organizing, and managing resources to achieve specific goals within a defined timeframe. According to Saleem (2021), effective project management involves a range of activities, including risk assessment, resource allocation, schedule development, and communication. The complexity of these activities requires a structured approach to ensure that projects are delivered on time, within budget, and to the satisfaction of stakeholders.

The field of project management has undergone substantial evolution, resulting in the emergence of multiple methodologies and frameworks designed to support practitioners. The Project Management Institute (PMI) has established itself as a leading professional body in this domain, offering standards, certifications, and resources that guide project management activities. Among these contributions, the *Project Management Body of Knowledge* (PMBOK Guide) remains one of the most widely adopted frameworks in the industry.

As technological advances and globalization accelerate, the strategic importance of project management has expanded. Projects have become increasingly complex, requiring managers to address shifting stakeholder expectations, rapid technological developments, and globally integrated supply chains. This environment demands technical proficiency alongside interpersonal abilities such as communication, leadership, and teamwork, as highlighted by Donia et al. (2020). Consequently, organizations that invest in developing project management capabilities can enhance their competitive position through more efficient and effective project delivery.

In parallel, trust has emerged as a central theme in management research, particularly within construction-project management. Chow et al. (2012) conceptualize trust as a mental state involving a willingness to assume risk based on positive expectations regarding another party's intentions or behaviors. Prior studies have associated higher levels of trust with improved project outcomes and strengthened stakeholder collaboration. In this regard, Saleem (2021) emphasizes that "mutual trust" is a fundamental condition for sustaining organizational relationships.

The concepts of trust and distrust are commonly used to measure trust on a continuum. However, recent studies suggest that trust and distrust are two distinct yet related factors, and low trust doesn't necessarily mean high distrust. Clark and Payne (1997) defined distrust as the perception that an individual's standards or expectations would cause them to respond inadequately to all situations. Most scholars believe that trust and distrust are two distinct and opposing concepts (McKnight & Chervany, 2001).

In construction projects, the relationship between project owners and contractors is typically temporary. Within this short-term arrangement, trust and distrust coexist, influencing the control mechanisms employed by project owners. In many cases, owners have limited direct oversight of project execution and depend on contractors to meet deadlines. As a result, owners adjust their control practices, and contractors work to comply with established schedules. This study seeks to analyze how project owners structure contractor control methods, considering the interplay between trust, distrust, control practices, and their implications for project success.

The growing prominence of interfirm collaboration in the contemporary economic context has intensified research on the role of trust in fostering coordination and cooperation between organizations. Although the literature acknowledges the relevance of trust in cooperative intrafirm relationships, uncertainty remains regarding its specific function and its effects on performance across different levels of analysis, as noted by McCabe et al. (2003). A key issue in understanding trust within economic exchange lies in examining how individual-level attributes are translated into the organizational level.

Current philosophical frameworks addressing the role of trust in economic communication, including transaction cost economics, demonstrate internal conflict regarding the multidimensional nature of trust (Williamson 1975, 1985). In particular, transaction cost theory suggests that companies act strategically, leading to a "cross-level fallacy" that assigns (micro) individual motives and actions to (macro) organizations (Rousseau 1985). It is essential to develop models of intrafirm communication that go beyond depicting trust as an organizational property without articulating the relationship between micro and macro levels, as this approach would not fully capture the human aspect of the organization.

There is much uncertainty in the social exchange and economic sociology literature regarding the dynamics of trust across multiple levels of analysis and how trust is linked across levels (Meyer *et al.*2008). While social exchange theory emphasizes the importance of interpersonal relationships in promoting trust and preventing opportunistic behavior among firms, this

perspective fails to address how relational trust impacts economic exchange within and between complex social systems like organizations. Moreover, despite the theoretical recognition of the importance of trust in economic exchange (Bromiley & Harris, 2006), little research has been conducted to explain how trust, viewed as a multi-level phenomenon, affects intra-firm exchange performance. Although trust has been proposed in the organizational economics literature to reduce opportunistic behavior and transaction costs, resulting in more efficient management (Bromiley & Harris, 2006), the specific nature of the trust-performance relationship in a multi-level context remains a critical theoretical and empirical issue.

Throughout the organizational literature, the importance of trust in building relationships is widely recognized. According to Brower *et al.* (2009), "Without the general trust that people have in each other, society itself would crumble." Aho (2007) also notes that trust is an essential component of every close or significant relationship, as few relationships rely solely on what is known with certainty about the other person. Many researchers have similarly stated that if people did not trust each other, human civilization would come to a complete halt (Azahari & Nayan, 2020). In modern organizational structures, such as virtual community organizations, trust is particularly critical (Wicks et al., 1999). The issue of trust lies at the heart of running a successful virtual team (Gould, 2004), with trust being a way to "manage people you don't see" in the virtual world (Handy, 1995). According to Lipnack and Stamps (1999), trust is a "must-have" attribute for effective organizations in virtual teams in the Information Age. Trust is one of the top five critical success indicators in virtual teams, according to Jugdev et al. (2001).

Defining Trust is a challenging task, as the concept encompasses various meanings. Scholars have recognized the importance and function of trust in interpersonal relationships, but its definitions have been inconsistent. In the literature, trust has been described in multiple ways, including through dictionary and analytical definitions. Trust is a complex and multi-layered concept (Lewis & Weigert, 1985), which explains why scholars have provided various definitions. For instance, according to Webster's dictionary (1976), trust is "complete conviction and certitude about the person, fitness, power, or reality of a person or thing."

Trust is a complex construct with various meanings and implications in the literature. In addition to terms such as certainty, reliance, confidence, dependence, and confirmation, trust is also associated with sureness, certitude, conviction, believability, credit, and positivizes in the dictionary. Among these, the qualities of trust that stand out are limit, dependence,

constancy, certainty, and truth. At least one of these qualities should be present in a trust exchange between two parties. Trust is typically based on the assumption that someone is reliable or trustworthy. It is worth noting that trust can be used as a noun, verb, adjective, or metaphor in everyday English. Researchers from various academic disciplines have examined trust, each offering their own definitions and perspectives. To understand the linkages between scholarly definitions and everyday usage of the term, it is useful to examine some of the definitions put forward by experts. While there is agreement among researchers on the complex nature of trust, different definitions have been proposed. For example, Rotter (1971) described trust as a broad tendency to expect others to fulfill expectations. In this definition, the trustee assumes that the trusted individual will meet expectations. Larzelere and Huston (1980) defined trust as "the extent to which one person considers another (or others) to be benign and legitimate." Honesty and benevolence are seen as essential aspects of trust in this conception. Baier (1986) viewed trust as "perceived vulnerability to another's expected but unexpected hostility (or lack of benevolence) toward one." In this definition, vulnerability is emphasized and defined in terms of objects or things that one values and shares with another person who has some discretion over them. Vulnerability implies the risk of losing something valuable.

Standard and Rodney (1996) proposed a different approach to defining trust, stating that it is "the act of placing trust in someone else or thing," as well as "the strong conviction in the trustworthiness and integrity of someone else or thing." This description highlights the attributes of trust, such as confidence, conviction, honesty, and integrity. Gambetta (1988) defined trust as the belief that another's actions will be beneficial rather than harmful. In this context, the trustee trusts the trusted party's decency or good intentions. Cummings (1996) described collective trust as the mutual confidence among group members that they will fulfill their commitments, will be honest in the discussions leading up to those commitments, and will not take advantage of others. Sarker et al. (2003) defined trust in virtual teams as the collective dependence of individuals on their indirectly ranked team members (i.e., collectively). This is one of the few definitions that directly links trust to virtual teams.

1.2 Trust in organizational setting

Trust is characterized by Chadwick (2001) as the willingness to invest resources in another party based on positive expectations derived from past good shared experiences. Trust is exhibited by the expectancy or belief that the other person will act benevolently. As one party's actions affect the outcomes of another, trust requires an ability to be vulnerable, assume risk, and have some degree of dependence on the other (Zhang et al., 2008). The comprehensiveness of trust's characteristics has resulted in a variety of research approaches. Although most research treats trust as a multidimensional construct, there is disagreement over its content, role, and number of dimensions (Seppänen et al., 2007).

According to Tan and Lim (2009), most research focuses on three primary aspects of trust: ability, benevolence, and integrity. Each of these factors combined influences trust, and the specific meaning of each varies significantly depending on the context. In particular, the more a trustee recognizes these three attributes in another person, the greater their level of trust in that individual. Manila and Afsarmanesh (2008) describe ability as the trustee's knowledge, skill, or competence, as well as their experience. This aspect recognizes that trust relationships are based on the trustee's ability to perform well and meet the trustee's expectations.

Additionally, integrity refers to the extent to which the trustee adheres to their preferred principles. This aspect fosters trust, which is based on the consistency of past actions, credible communication, and adherence to fairness principles. Meanwhile, benevolence refers to the trustee's perception of how concerned the other person is about their well-being, assuming that the other person is acting in their best interest. The trustee's goals and motivations are the primary considerations here. For example, empathy is demonstrated through fair and open communication, delegation of decision-making, and sharing of control, among other things (Msanjila and Afsarmanesh, 2008).

Trust can be characterized as the belief that an individual or institution will act competently, fairly, transparently, and with concern (Lindstrom, 2007). According to Butler Jr (1991), trust is also built on loyalty, openness, availability, and consistency. Creating a climate of trust in an organization requires a unique environment and, most importantly, a willingness to foster creativity and enhance the quality of workers' work.

Furthermore, trust is a critical aspect in the transmission of information and the development of new knowledge. According to Hoe (2007), trust adds value to an organization. On the one hand, trust impacts the knowledge creation process, and on the other hand, it regulates the knowledge transformation process. Trust is a component of tacit knowledge that is developed through a socialization process, as explained by Nonaka et al. (2000). Trust among

organizational members is essential for the exchange of information, especially tacit knowledge. Trust allows individuals to gain new experiences, leading to the creation of new derived knowledge. As human knowledge is generated and extended through social interactions, trust may serve as a platform for the knowledge creation process (Anussornnitisarn et al., 2010).

Thus, to adjust to an information based society, perceive the worth of scholarly capital and deal with these immaterial resources (Ramachandran et al., 2008). Inside trust – confidence in colleagues, the board, innovation, and IT frameworks applied in the association – and outside trust – trust between working together foundations (accomplices – outer trust; Zhang et al., 2008) are two kinds of authoritative trust. The singular level – believe that is created when representatives initially communicate with another person to the individual – the gathering level – believe that improves connections and creates participation or responsibility (Connell et al., 2003) and the authoritative level – believe that is created when workers initially cooperate with another person to the individual – and the hierarchical level – believe that is created when representatives initially associate with another person to the individual – and the singular level – believe that is created when representatives initially collaborate with another person to the individual – Individual and hierarchical inadequacies are defeated by means of trust, which impacts coordination and control (Zeffane & Connell, 2003).

The gathering's level of trust empowers data trade and improvement. It is comprised of flat trust, which identifies with the representative's associations with colleagues, and vertical trust, which alludes to the worker's trust in their nearby chief and senior administration (Hoe, 2007). "Past research has influentially demonstrated that a worker is taking an interest in somewhere around two social trade connections at work: one with their nearby boss, and one with their association," as indicated by the review (Zhang et al., 2008).

Most of hierarchical trust research has zeroed in on trust in an immediate pioneer, like an administrator, director, or work-bunch pioneer (Tan & Lim, 2009) . This plainly suggests that concentrating on partner trust might carry another perspective to the flow research, which is overwhelmed by vertical relationship studies. As indicated by Mayer et al. (1995), trust in associates (level trust) is an individual's preparation to be defenseless to the exercises of different workers over whose conduct and activities they have no impact. Colleagues are individuals from an association with comparable degrees of force or authority with whom a worker contacts all through the normal business day. Trust in associations (all out trust) is characterized in much the same way to confide in partners as a worker's availability to be

helpless to the demonstrations of an association over which the individual in question has no control (Mayer et al., 1995; Tan and Lim, 2009).

The trust aspects recorded above are connected, however they likewise decide each other's presence. Tan and Lim (2009) guarantee that trust in partners is significant. Trust in associations, specifically, affects different types of trust, which, thusly, affects different kinds of trust. At the hierarchical level, it has an effect. Along these lines, it has been noticed that Employees' confidence in their managers is connected to their confidence in the organization (Wayne, Shore, & Liden, 1997)

1.3 Limitations of prior research

The relationship between organizational trust and project management efficiency has been a topic of interest in the literature, as trust is considered a essential factor in project success. However, previous studies have presented some limitations in their exploration of this relationship, which warrants further investigation. In this section, we will discuss the limitations of previous studies on the relationship between organizational trust and project management efficiency (Lindstrom, 2007; Butler Jr, 1991).

A major limitation identified in prior research concerns the absence of agreement on how trust should be defined and measured. Trust is a multidimensional construct that can be conceptualized in several ways, which makes its measurement particularly demanding. Consequently, studies examining the relationship between trust and project management efficiency employ divergent definitions and measurement instruments, leading to inconsistent findings and constraining the development of a consolidated understanding of this relationship (Lindstrom, 2007; Butler Jr., 1991).

A further limitation lies in the predominant focus on individual-level trust rather than organizational-level trust. Most investigations explore the relationship between the project manager’s trust and project success, without accounting for the broader organizational environment. This gap is substantial, as trust is influenced by factors operating across multiple analytical levels. A comprehensive understanding of the relationship between organizational trust and project management efficiency therefore requires consideration of organizational determinants of trust and their effects on managerial processes.

Finally, previous studies have primarily focused on the positive effects of trust on project management efficiency, neglecting the potential negative effects. Trust can lead to complacency, over-reliance on others, and a lack of vigilance, which can have detrimental effects on project performance. Thus, it is essential to explore not only the positive but also the negative effects of trust on project management efficiency. In light of these limitations, it is essential to further investigate the relationship between organizational trust and project management efficiency (Wayne, Shore e Liden, 1997). By addressing these limitations, we can develop a more comprehensive understanding of the relationship between trust and project success and develop strategies to enhance project management efficiency (Lindstrom, 2007; Butler Jr, 1991).

To advance a clearer understanding of the limitations in the literature addressing the relationship between organizational trust and project management efficiency, a table was developed summarizing the key gaps reported in previous studies. This synthesis serves to pinpoint the areas that require further examination in order to build a more complete understanding of how trust relates to project management efficiency. In the next section, this table will serve as the foundation for the research objectives, which aim to address these gaps and contribute to the scholarly discussion on the topic.

Table 1: Literature gap

Author/Year	Objective	Limitation	Reference
Lindstrom (2007)	Investigate the relationship between trust and project success	Lack of consensus on definition and measurement of trust	Lindstrom, P. (2007). The impact of trust in project management. International Journal of Project Management, 25(7), 691-698.
Butler Jr. (1991)	Examine the role of trust in project management	Focus on individual-level trust, neglecting organizational-level trust	Butler Jr., J. K. (1991). Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. Journal of management, 17(3), 643-663.

Author/Year	Objective	Limitation	Reference
Wayne, Shore, & Liden (1997)	Investigate the relationship between employee trust in their manager and trust in the organization	Focus on a single dimension of trust, neglecting its multifaceted nature	Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. Academy of Management Journal, 40(1), 82-111.

Source: adopted from Wayne et al (1997); Butler Jr. (1991) and Lindstrom (1997)

The topic of the gap in previous literature highlights that although studies have been conducted on the relationship between organizational trust and project management efficiency, there are limitations in the research conducted. These limitations include the lack of consensus in defining and measuring trust, the focus on individual trust rather than organizational trust, and the lack of investigation into the negative effects of trust on project performance. The presented table summarizes the gaps found in the literature, highlighting the limitations and objectives of each author. Finally, the importance of the present research in filling these gaps is emphasized to develop a more comprehensive understanding of the relationship between organizational trust and project management efficiency, as well as to develop strategies to improve project management efficiency in Brazilian organizations.

1.4 Research purpose

Due to a set of factors and the complex environment of projects, a large number do not reach their objectives (APM, 2015; PMI, 2015; Standish Group, 2015), while only 40% are in line with the organizational strategy (KPMG, 2010; PMI, 2014). Nowadays, project management is understood as a phenomenon or event that extends the capacity of the organizational system, and is responsible for strategy implementation and the development and launching of new products/solutions (Bakker & Knoben, 2014; Leufkens & Noorderhaven, 2011; Levering, Ligthart, Noorderhaven, & Oerlemans, 2013; Winter, Smith, Morris, & Cicmil, 2006).

Value creation for organizations is one of the key elements of business (Mittal & Sheth, 2001; Payne & Holt, 2001). Significant research has been done on how projects and programs can

contribute to the value creation process for strategy, and consequently, for stakeholders (Eskerod & Riis, 2009; Lechler & Cohen, 2009; Thomas & Mullaly, 2007; Winter & Szczepanek, 2008; Zhai, Xin, & Cheng, 2009).

Trust in Portuguese comes from the Latin word ‘confidere’ which literally means “faith in common” (Dias, 2016). This is different from the English word Trust which comes from the archaic German Trost meaning "faith in the other” (Online Etymology Dictionary, 2016). It is defined as a positive expectation regarding the conduct of the other (Lewicki, McAllister, & Bies, 1998) or a psychological vulnerability based on the expectation of reciprocity from the other. Trust implies at least two parties are involved: the one that trusts and the other in whom trust is placed (Rousseau, Sitkin, Burt, & Camerer, 1998).

A gap found in the literature is that trust is basically a relation between two parts: the trustor, the one that is willing to behave in favor to the second part that is a trustee. In the literature is possible to understand that the interactions between the parts, and them behavior, is going to determinate the level of engagement (Mayer, Davis, & Schoorman, 1995; Schoorman, Mayer & Davis, 2007).

The key point is what if the parts do not know each other and needs to work in the same project management environment. Is that possible to measure the level of willingness between the parts to stablish trust in this new situation?

Trust is also a very important factor regarding knowledge sharing. It is needed to point that trust requires a proactive effort of the project leaders to create an appropriate environment to facilitate the information exchange. Knowledge integration has a significant impact in improving business performance and also project performance plus project management efficiency. (Rauniar, Rawski, Morgan, & Mishra, 2019).

Psychological contracts are the beliefs of individuals about the reciprocal obligations between them and their organizations (Rousseau, 1998). A psychological contract is also defined as a philosophy, not an exact science. Qualities such as respect, compassion, objectivity, and trust are components that form the beliefs about the relation (Bond Baker, 2009). They can affect a variety of situations that are not necessarily employer-employee (Rousseau, 1998). Whether fulfilled or breached, psychological contracts are important because they affect a number of important organizational outcomes. Balanced psychological contracts are necessary for a continuous and harmonious relationship between employees and employers (Sims, 1994).

The psychological contract theory projects the idea that individual goals create resistance or acceptance of changes at the workplace, and highlights the importance of an individual's beliefs regarding mutual obligations towards the organization (Rousseau, 1990, 1995). When psychological contract duties are met, high levels of trust and loyalty between employees and employers are created, which in turn can lead to higher customers' satisfaction (Restubog, Bordia, Tang, & Krebs, 2010; Wilkens & Nermerich, 2011).

Particularly, there has been an emphasis on relational contracting (Doloi, 2009; Rahman & Kumaraswamy, 2008; Rahman, Kumaraswamy, & Ling, 2007) and project alliances (Chow, Cheung, & Chan, 2012; Davis & Love, 2011; Walker & Lloyd-Walker, 2016) as means for the attainment of increased levels of trust across project teams.

As trust affects psychological contracts (Shahnawaz & Goswami, 2011), the study of context where trust occurs (Dias, 2016) can be significant to project managers in order to understand how to engage and prepare themselves to develop skills for their duties (Lopes, Sbragia, & Qualharini, 2016). The lack of equivalency in employees' perceptions of the psychological contract is a critical issue for managers to address (Jepsen & Rodwell, 2012).

The orientation of employees towards delivering results has many possible influence factors on the psychological contract, and a trustful relation between the parties will reflect on project performance and reveal how this can affect the project environment (Shahnawaz & Goswami, 2011). In an organization, through the perspective of the resource-based view (RBV), project management can be considered a competence of the organization (Ljubica, Dulčić, & Aust, 2016). When psychological contracts are breached or unfulfilled, the breach leads to mistrust, dissatisfaction, and possible dissolution of the employment relationship itself (Robinson, 1996).

The rationale presented in the previous section gave birth to the following Research Question: *What is the impact of trust on project management efficiency regarding Brazilian organizations?*

1.5 Research Overview

Several studies have indicated that trust is present among project team members, depending on the nature of projects, industries, and contexts (Dayan & Di Benedetto, 2010). This relationship is associated with high-performance teams and successful outcomes (Oliveira &

Rabechini, 2019; Mach, Dolan & Tzafrir, 2010). However, the exact mechanisms of how this relationship is established and how trust influences performance are not fully clear. A more in-depth analysis is needed to understand the mechanisms and impacts of trust in the specific context of project management.

The overall objective of this study is to investigate the impact of Compelled-Based Trust on project management efficiency in Brazilian organizations. To reach the objective, the phenomenon of compelled circumstantial trust that project managers are subject to, when performing their duties in the project environment, with the objective of contributing to their enhanced productivity and efficiency in project management (Brinkhoff, Özer & Sargut, 2015). Compelled circumstantial trust is a phenomenon that occurs, for instance, when there is a change of any key stakeholder in the project environment, or when a new project manager takes over the project (Dias, 2016). Therefore, it is necessary to trust the inherited administrative legacy and those that are part of it, which may represent a potential problem for an efficient project management model, and become a challenge for the project manager and, ultimately, for the sponsor (Shahnawaz & Goswami, 2011). The thesis development discusses compelled circumstantial trust through a validated scale as an evolution of the thesis development in Rennes (Lopes, 2019), then published an article (Lopes et al 2021). This scale was used to understand the impact of trust in project management efficiency.

The model used to develop the present thesis, is based in a previous research conducted, to assess whether (i) the predictability of the project owner's behavior; (ii) the predictability of the contractor's behavior; (iii) the project management efficiency; and (iv) the uncertainties in the transaction environment are determinants to reduce transaction costs in projects. It was employed the test presented by Li et al. (2012) in their paper 'Factors that affect transaction costs in construction projects', and conducted a quantitative analysis using partial least squares structural equation modeling. As trust is a construct of this model, we tested the influence of trust in transaction costs in a specific sector (oil and gas), in a particular type of project (construction). Then the dependent variable that was transaction costs was taken away, and the new dependent variable in the model is project management efficiency. It was included in the original model also the independent variable compelled circumstantial trust linked to uncertainty in transaction environment.

CHAPTER 2: LITERATURE REVIEW AND RESEARCH DEVELOPMENT

The present section provides an extensive literature review on our research constructs addressing both the psychological and project management perspectives. The discussion is grounded in various theoretical frameworks and empirical studies that have been conducted over the years to explore the concept of trust and its implications in project management.

The first perspective examined is the psychological view of trust, which has been extensively studied over recent decades. Trust has been conceptualized in multiple ways: some scholars define it as a belief, whereas others interpret it as a behavior or an attitude. Key contributions to this perspective include those of Lewicki and Bunker (1995), Rotter (1980), and Rousseau et al. (1998).

The discussion then shifts to the project management perspective, which has gained substantial attention in the past ten years. Whittington et al. (1999) report a significant increase in the adoption of project-based structures within European firms, rising from 13% to 42% over a four-year period. Within this context, the effectiveness of project management has become a central concern, given its influence on the attainment of project objectives. The project management literature encompasses themes such as success factors, risk management, and project team coordination.

The purpose of this literature review is to advance the understanding of trust within project management in Brazilian organizations, while identifying the challenges managers encounter when establishing and sustaining trust in the workplace. The review aims to assist researchers and practitioners by synthesizing recent studies on trust and its implications for project management. By drawing on different theoretical perspectives, the study seeks to clarify the complex relationship between trust and project performance in the Brazilian context.

2.1 Trust Defined

In the literature on trust, there are three primary forms of trust: interpersonal (individual) trust, institutional-based (generic) trust, and dispositional trust (Sarker et al., 2003). Six trust constructs have been identified and defined: trusting intent, trusting behavior, trusting

beliefs, system trust, dispositional trust, and situational decision to trust. The interpersonal category pertains to trust between individuals or groups. In this case, trust is directed from one individual to another person, people, or thing(s). When the trusting entity is a group, at least two people or groups trust each other (Marks et al., 2001). Most researchers have examined trust in the context of interpersonal relationships (Kinnersley & Magner, 2008). Institutional trust, also known as impersonal trust, refers to trust elements related to an organization or institution (Shapiro, 1987). Trust is often considered by sociologists to be a formal characteristic (Lewis and Weigert, 1985). Dispositional trust is a type of trust based on the trustee's personality traits; that is, the trustee has a general propensity to trust people in a variety of situations. Some researchers view trust as a relational attribute. Shapiro, Sheppard, and Cheraskin (1992), on the other hand, offer a different perspective on trust. They identified three different types of trust in the context of a business relationship: trust based on constraint, trust based on knowledge, and trust based on identification.

Relational trust is a significant and common occurrence in the workplace, described by Shapiro (1987) as "a belief that another person's statement, promise, verbal or written statement can be trusted." According to McKnight et al. (1998), interpersonal trust is a person-specific concept in which one person relies on a particular other person, described as a dyadic interaction. They also classified relational trust as a situation-specific concept, only applying in certain conditions.

Relational trust, understood as a situational condition, is described by McKnight et al. (1998) as an interplay between cognitive and emotional dimensions. Cognition-based trust arises from individuals' assessments of others' reliability, guiding decisions about whom to trust and under which circumstances. In contrast, affect-based trust—according to McAllister (1995)—is grounded in emotional connections and genuine concern for another's well-being. Individuals who cultivate this form of trust tend to build stronger emotional bonds and interpersonal qualities, which, as noted by Chowdhury (2005), promote emotional openness and social closeness.

Chowdhury (2005) found that trust is a strong predictor of complex information exchange in the workplace, and teams lacking information sharing should focus on building cognition-based trust. This aligns with McAllister's findings (1995). Tallman & Hsiao (2004) identified four categories of relational trust: calculative, skill, social, and integrated. They conducted face-to-face interviews with 74 healthcare professionals using telemedicine systems and found a positive relationship between relational trust and performance.

Reliability involves being capable and willing to act in the best interest of the other person (Mclain, 1995). Trustworthiness is influenced by the trustee's qualities and behaviors (Good, 1988). Trust is formed by the trustee's perceived competence, honesty, and benevolence (Mayer & Davies, 1995). Another study considers honesty a key factor in interpreting the results, which are referred to as "consistent beliefs" (McKnight & Chervany, 1996). "Trusting beliefs," on the other hand, refer to an individual's understanding of trust in a person-to-person and situation-to-situation basis (McKnight & Chervany, 1996). The most common trusting beliefs are ability, benevolence, integrity, and honesty (McKnight & Chervany, 2000), which are referred to as "attributes of trustworthiness." Each of these attributes is discussed in the following sections.

Trusting assumption is a type of social trust characterized as an individual's ability to engage in trusting behavior towards others in a given situation (Dobing, 1993). It involves depending on another party with a perceived sense of relative security, despite the possibility of adverse outcomes (Currall & Judge, 1995). In virtual environments, trust in objective may need to be demonstrated to make progress. Trust in objective involves dependence on another person and is situational (Currall & Judge, 1995). The five basic components of trusting assumption are: (I) expected negative outcomes; (ii) dependence; (iii) perceptions of security; (iv) situation-specific context; and (v) lack of dependence on control (Bonoma, 1976; Gambetta, 1988; Lewis & Weigert, 1985; Gove, 1981).

Confidence in conduct is often linked to relational trust and refers to an individual's willingness to rely on another person in a specific situation with a sense of relative security, despite the possibility of unfavorable outcomes. This type of trust is also characterized by a lack of control. In a virtual setting, it may be difficult to determine if project managers relinquish control to team members when they engage in trusting behavior and demonstrate trust in each other. Institutional trust, the second type of trust category, is impersonal and related to the organization. Unlike relational trust, it does not depend solely on individual-to-individual relationships, but on non-personal structures. Institutional trust refers to the degree to which one believes that legitimate impersonal structures are in place to facilitate successful future endeavors. This type of trust is context-specific and may vary between organizations and different situations. Some researchers have also referred to institutional trust as system trust, underlying assurance, and situational normality. Underlying assurance refers to the belief that structures such as guarantees, rules, promises, legal recourse, or other mechanisms are in place to promote success. For example, in a virtual project setting, team members expect that

employee contracts approved by the organization will be honored, and any disputes arising will be handled cooperatively by the organization's legal team following existing procedures.

In circumstances where an employee perceives discrimination based on racial or cultural background, trust in institutional structures can provide an important layer of protection. Another component of institutional trust is situational ordinariness, characterized by the belief that the environment supports success due to its stability and favorable conditions. This perception strengthens trusting intentions and increases individuals' willingness to rely on others, as such reliance is viewed as appropriate within that context. Familiarity with organizational norms also discourages unethical or opportunistic behavior. Consequently, confidence in institutional rules and procedures contributes to the development of trust among team members, even when face-to-face interaction is absent.

Institutional trust can be further reinforced through the adaptation of rules, protocols, and other organizational safeguards. When employees feel mistreated or believe that proper procedures related to trust have not been followed, they tend to rely on institutional guidelines as a means of recourse and protection.

The third class of trust is dispositional trust, which refers to an individual's consistent tendency to trust across various situations and people (Sarker et al., 2003). Unlike the other two types of trust, dispositional trust is not situation-specific. According to McKnight and Chervany (1996), an individual has dispositional trust to the extent that they have a stable inclination to trust others in a wide range of situations. They identify two reasons for expressing dispositional trust: belief in people and belief in position. The former refers to the belief that people are generally trustworthy, while the latter suggests that trusting others leads to better outcomes, even if they are not always good. Experiential and non-experiential trust building are two theories of trust building, with the former being the most dominant. It suggests that trust develops through communication and shared experience with the trustee (Jarvenpaa & Leidner, 1999). Positive interaction is a fundamental factor for trust to develop, while negative interactions may lead to suspicion. Factors such as shared practices, repeated interactions, and shared experiences have been proposed to facilitate the development of trust (Mayer et al., 1995). Interacting with others helps to gain insight into their personality, preferences, and behavior, leading to the formation of trust based on a prediction of their actions in specific situations.

Time is a perceived characteristic in trust development in traditional settings (Blau, 1964; Lewicki & Bunker, 1996). Trust is viewed as an outcome of historical and ongoing

communication that defines the relationship, where trust develops gradually through personal interaction and communication (Lewicki & Bunker, 1995). The traditional model of trust suggests that trust is primarily based on accumulated individual information gained through intellectual appraisal or emotional response.

Non-experiential trust building, suggests that non-experiential factors, such as institutional settings or character attributes, are significant in building trust, particularly when there is no experiential basis for trusting. Factors such as institutional policies and regulations can be managed, while character-based issues cannot, but managers can take action to address their effects on trust. Therefore, fostering a workplace that employees perceive as secure and fair should increase their trust in management (McKnight & Chervany, 2005). Additionally, managers should be aware of the impact of dispositional (character) issues on trust and take action accordingly. For instance, a project manager who needs to deal with a team member with a low propensity to trust will need to spend more time building their trust.

Lewicki & Bunker (1996) identified three forms of trust relevant to business relationships: prevention-based, information-based, and identification-based trust. Prevention-based trust rests on the assumption that individuals honor their commitments due to fear of punishment. This form, sometimes referred to as analytical trust, is characterized by the predominance of disciplinary risk over the appeal of rewards. A key factor for its effectiveness is the monitoring and reporting of trust violations. It depends on elements of power and control that shape specific behaviors. Although labeled as trust, McKnight and Chervany (1996) contend that it more closely resembles a power-based control mechanism. In traditional organizational settings, task managers rely on a degree of authority that enables the use of power-based control practices to ensure task completion.

McAllister (1995) argues that excessive checking and protective behavior waste administrative resources and hinder achievement of major work targets. The second type of trust, information-based trust, is grounded in social consistency and a judgment of the likelihood of the other's possible selection of practices (Shapiro et al., 1992). As people become more acquainted with each other, they come to anticipate each other's behavior with confidence, based on accumulated information that contributes to consistency and trust (Shapiro et al., 1992). Normal communication and romance are key elements of information-based trust in everyday relationships, where friendships are based on regular communication. Interruptions to this communication can break down the predictability of the other's behavior, but restoring communication can lead to a gradual rebuilding of trust. This perspective on trust

development is similar to the experiential view proposed by (McKnight & Chervany, 2005). The third type of trust proposed by (Shapiro et al., 1992) is identification-based trust, which is based on sympathy and shared values. At this level, trust exists because the parties understand and like each other's needs, creating a mutual understanding that allows them to represent each other effectively (Chadwick, 2001).

The significance of trust in project management is widely acknowledged. As previously discussed, trust is fundamental for establishing relationships among project team members, stakeholders, and clients, particularly in contexts where effective delivery depends on intensive collaboration and coordination across multiple actors. Lewicki and Bunker (1996) argue that trust is essential to the development of business relationships and grows over time through repeated positive interactions. In project management, this implies that trust should be established early and strengthened throughout the project lifecycle. Effective communication, sustained collaboration, and transparency all contribute to maintaining trust within the team while fostering a project culture conducive to successful outcomes.

Trust is consistently identified as a critical factor in project success. Lewicki and Bunker (1996) outline three forms of trust that influence business relationship development: prevention-based trust, information-based trust, and identification-based trust. In the traditional view, trust evolves in alignment with the development of the relationship and relies primarily on accumulated information about the individuals involved. Conversely, McKnight and Chervany (2005) propose that trust may also emerge through non-experiential mechanisms, shaped by institutional conditions or personal characteristics that inform expectations even prior to direct interaction.

Trust plays a critical role in achieving project goals and promoting collaboration among project team members. As McAllister (1995) suggests, excessive monitoring and protective behavior can be a waste of managerial resources. Managers who engage in these behaviors will have fewer resources to achieve major work objectives. As a result, creating a workplace that employees feel is fundamentally secure and fair should increase employee trust in management (McKnight & Chervany, 2005). Managers should also be aware of the effects of dispositional (character) issues on trust, as a project manager dealing with a team member who has a low propensity to trust will spend more time earning that person's trust.

In conclusion, trust is a fundamental element in project management and must be continuously cultivated. By developing prevention-based, information-based, and identification-based trust, project managers enhance team cohesion and support the

achievement of project goals. Managers should also recognize the influence of non-experiential factors on trust formation and foster a fair and secure organizational environment that reinforces confidence in management.

Effective trust management is essential for project success. As outlined by Lewicki and Bunker (1996), the three forms of trust that support business relationships — prevention-based, information-based, and identification-based — are applicable to project management contexts. Open communication, information exchange, and consistent behavior contribute to the development of these forms of trust. Sustaining trust over time strengthens stakeholders' sense of reliability and contributes to positive project outcomes.

Building trust in project settings is a continuous process that requires deliberate effort. Shapiro, Sheppard, and Cheraskin (1992) argue that information-based trust develops from social consistency and assessments of how likely others are to adopt certain behaviors. This form of trust is strengthened through predictable actions and regular communication. Similarly, McAllister (1995) notes that trust may grow through transparent communication and the demonstration of positive intent. As trust accumulates, it can generate a reinforcing cycle of mutual understanding and improved performance. Therefore, effective trust management is essential for project success and depends on persistent commitment throughout the project lifecycle.

Effective trust management is not only essential for project success but also for organizational success. Organizations that establish and maintain high levels of trust among their employees, partners, and customers are more likely to achieve their goals and maintain long-term relationships (Gefen et al., 2014). However, trust can be challenging to build and maintain, especially in organizations that operate in complex and dynamic environments. To address this challenge, researchers have studied different factors that contribute to the development and maintenance of trust in organizations, including communication, transparency, and leadership (Mayer et al., 1995).

Communication is one of the primary factors influencing trust within organizations. Open, honest, and consistent communication practices contribute to the development of trust among organizational members (Mayer et al., 1995). Communication also facilitates information sharing and reduces uncertainty, both of which are essential for trust formation (Gefen et al., 2014). Furthermore, effective communication fosters a sense of community and shared values, which plays a crucial role in sustaining organizational trust (Mayer et al., 1995).

Transparency represents another important component in building trust. It pertains to the degree to which organizations act and make decisions in an open and honest manner (Gefen et al., 2014). When transparency is present, it promotes an environment characterized by trust and accountability. Organizational members are more inclined to trust leaders and colleagues when they perceive transparency and integrity in interactions. Conversely, lack of transparency can generate suspicion and erode trust within the organization (Mayer et al., 1995).

2.2 The psychological side of trust

According to Rotter (1967), trust is a belief that a person or entity is reliable, and it is closely linked to risk-taking behaviors and decision-making. Rousseau et al. (1998) argue that trust involves optimistic assumptions about the trustee's competence, dependability, and honesty, as well as a willingness to be vulnerable and rely on the trustee. Meanwhile, Mayer et al. (1995) emphasize that trust is a multi-dimensional construct involving both cognitive and affective components. Understanding the nuances of trust and how it operates can lead to a better understanding of human behavior and decision-making.

Trust can be applied in various contexts, including interpersonal, organizational, and societal levels. In interpersonal relationships, trust is essential for forming and maintaining meaningful connections, and it is associated with better communication, cooperation, and intimacy (Fukuyama, 1995). In organizational contexts, trust is fundamental for effective leadership, employee engagement, and organizational performance (Mayer et al., 1995). On a societal level, trust is critical for social cohesion, civic engagement, and the functioning of democratic institutions (Putnam, 2000). As such, understanding the psychology of trust can provide insights into various aspects of human society and interactions.

Trust is a key feature of interpersonal and organizational relationships and is shaped by factors such as organizational culture, leadership, transparency, and communication. Dirks and Ferrin (2001) note that perceiving leadership as trustworthy strengthens trust within teams. Mayer et al. (2005) emphasize that organizational cultures grounded in honesty, transparency, and fairness support trust formation. Conversely, lack of transparency and inadequate communication can generate mistrust and undermine team effectiveness (Trevino et al., 2006).

Trust is also influenced by factors beyond the organizational setting. Project complexity and environmental uncertainty, according to Kinnunen et al. (2017), heighten the need for collaboration and communication while increasing reliance on mutual trust to manage risks and unforeseen events. Trust must therefore be viewed as a dynamic construct subject to internal and external influences, making it important to examine how it is formed and sustained across contexts, particularly in project management.

Despite its relevance, trust is not simple or uniform. Internal factors such as leadership, organizational culture, and individual differences shape how trust develops (Gambetta, 1988; Dirks & Ferrin, 2001). External influences include societal norms, institutional structures, and historical legacies (Luhmann, 1979; Uslaner, 2002). Trust is not static; Lewicki and Bunker (1996) describe it as a dynamic, context-dependent phenomenon that can emerge, be reinforced, or deteriorate over time. Understanding these influences provides insight into how trust can be cultivated and maintained across organizational environments.

Trust can be described as "a psychological condition characterized by the willingness to accept vulnerability based on favorable expectations about another's intentions or behavior" (Bozic et al., 2019) ‘Trust arises just when a shortcoming that may have been taken advantage of was not taken advantage of,' as (Delgadillo et al., 2017) expressed it. These 'positive assumptions' depend on earlier great common contacts and perspectives on the other party's dependability, yet the 'goal to accept weakness' is a danger taking demonstration (Tzafrir and Dolan, 2004). For instance, the depending party expects the depending party to follow up for their sake (without consistent observing Authoritative trust envelops not simply the assumptions that individuals have of each other, yet additionally the various organizations of hierarchical connections and practices. Hierarchical trust, as per (Gilbert & Tang, 1998), is a worker's faith in and support for a business: the representative figures the business will be straightforward and finish with vows. From a hypothetical angle (Fulmer and Gelfand, 2012), one might trust the association while accepting that her or his prompt manager has a forceful attitude.

As previously mentioned, trust is a essential component in organizational contexts, and it has been linked to employee engagement and organizational performance (Mayer et al., 1995). In order to better understand how trust operates within organizations, various studies have explored the factors that affect trust within the workplace. For instance, Naquin and Paulson (2003) found that moral leaders who demonstrate genuine concern for employee well-being can foster trust and improve employee attitudes and behaviors. Similarly, Newman et al.

(2014) found that involving employees in decision-making processes and empowering them to take on leadership roles can also enhance trust within the organization.

Despite the advantages associated with trust in organizational contexts, establishing and sustaining trust can be difficult due to several factors. Communication is one such factor: when communication is ineffective or ambiguous, it can diminish trust and generate misunderstandings and conflict (De Cremer & Tyler, 2005). Cultural differences and power asymmetries also shape the level of trust within organizations, influencing how individuals interact and collaborate (Gambetta, 1988; Dirks & Ferrin, 2001).

Trust is a complex phenomenon that can be influenced by a variety of factors, both internal and external to an organization. In the previous section, we discussed some of the challenges associated with building and maintaining trust within organizational settings. Now, we turn our attention to examining the different types of trust that exist within organizations. By understanding the nuances of trust at different levels within an organization, we can gain insights into how to foster and maintain trust in the workplace. This section will explore the concept of trust within organizations, including both relational and generic trust, and how they relate to the performance of project teams.

2.2.1 Trust within organizations

The character of the trustee may make a difference in the sort of trust. Personal trust (Ahteela & Vanhala, 2018) what's more indifferent trust (Ahteela & Vanhala, 2018), for instance, showed how persons' trust in unmistakable foci (boss and association) affected work environment divulgence choices. There is by and large a fluctuation in a singular's degree of trust in dissimilar referents (Fulmer and Gelfand, 2012). Besides, dissimilar degrees of authoritative trust have particular association highlights and, accordingly, fluctuated results (Maley & Moeller, 2014). Therefore, this article addresses both relational (Costigan et al., 1998) and generic (Costigan et al., 1998) hierarchical trust (McCauley & Kuhnert, 1992). Relational trust is a dyadic association that is partitioned into two classes: horizontal trust (individual workers' trust in their colleagues) and vertical trust (confidence in direct supervisors) (McCauley & Kuhnert, 1992). Relational trust dependent on the other party's capacity/capability, sympathy, care, genuineness, as well as reliability (Mayer et al., 1995; Williams, 2001). In outline, we portray relational trust as "a singular worker's ideal

assumptions regarding the skill, benevolence, and reliability of their associates and quick supervisor’s dependent on past great common encounters."

Associations may profit from supplementing indifferent sorts of trust, despite the fact that a tight administrative job and relational trust are essential. In case a representative can trust the organization for which she or he works, she or he can trust their future in it, regardless of whether different laborers and managers can't give sufficient help for the advancement of solid relational trust. Accordingly, on the off chance that specialists could trust the association without knowing each chief and significant player by and by, the association would be more effective (Kramer, 1999). Relational trust depends on relational contact between people inside a particular association, while generic trust depends on jobs, cycles, and notoriety (Holtgrave et al., 2020). Workers' examination and certainty that the association will make a move that is helpful or essentially not dangerous to them is alluded to as confidence in the association (Donia et al., 2020). The conduct of profoundly apparent good examples, for example, top administration may prompt decisions about indifferent trust among representatives (Kramer, 1999; Lampaki and Papadakis, 2018). Most specialists' decisions to trust senior administration, as indicated by Costigan et al. (1998), depend on the outcomes of their choices as opposed to coordinating individual information on their person or conduct. Unoriginal trust is characterized as "the singular worker's assumptions regarding the business' ability and reasonableness" in this exploration.

2.2.2 Trust and performance

Colquitt, (Colquitt et al., 2007) used a Meta assessment to discover a substantial link between task performance and trust. Besides, trust affects work fulfillment , hierarchical responsibility (Ouedraogo and Ouakouak, 2018), a more pleasant mental agreement, representatives' work practices, remembering an optional exertion for benefit of a wide scope of partners (OCB), cooperation, and information sharing (Colquitt et al., 2007). A few examinations have uncovered that believing connections have direct prescient ramifications on client joy, deals, and benefit levels, incorporating staff trust in their chief (Mayer, and Tan, 2000). 'More noteworthy degrees of trust are probably going to bring about more inspirational perspectives, more elevated levels of coordinated effort and different sorts of work conduct,

and better degrees of execution,' as indicated by Dirks and Ferrin (2001). (p. 451). Therefore, trust might be utilized to acquire an upper hand.

2.3 Project management and trust: a literature review

The topic of trust in project management has been widely discussed in the literature and has been the subject of study by many researchers in recent years. The success of a project largely depends on the trust among team members and other stakeholders involved. In this sense, section 2.2 of this paper presents a literature review on the relationship between trust and project management, addressing both the psychological and project management perspectives. Among the most cited authors, Mayer et al. (1995), Cooke-Davies (2002), Chiocchio et al. (2011), Haaskjold et al. (2020), Bond-Barnard et al. (2018), among others, stand out. For better visualization and understanding, we present a table below with the main authors and their contributions to the topic at hand

Table 2- Literature gap

Authors	Main Contributions	Year	Conclusion
Chiocchio et al.	Proposed a three-level framework to evaluate trust in projects, considering trust in team members, trust in external project partners, and trust in project managers.	2011	The three-level framework proposed by Chiocchio et al. can be useful for project managers to assess and develop trust within project teams and stakeholders.
Cooke-Davies	Identified the importance of managing uncertainties, sharing information, and meeting team expectations for building trust.	2002	Effective communication practices, transparent decision-making, and consistent behavior enable project managers to strengthen and sustain trust among team members and project stakeholders.

Authors	Main Contributions	Year	Conclusion
Haaskjold et al.	Conducted a study on the influence of trust and interpersonal relationships on project performance in cross-functional teams.	2020	Trust and interpersonal relationships are central to the success of cross-functional projects, making it essential for project managers to actively cultivate and sustain trust within the team.
Pinto & Slevin	Argued that trust is a critical factor for project success and proposed a three-stage model for trust development in project teams.	1988	The three-stage framework proposed by Pinto and Slevin provides project managers with a structured approach for fostering trust within project teams. It begins with establishing credibility and predictability, progresses through enhanced communication and coordination, and ultimately leads to the development of mutual understanding and respect.
Raz et al.	Investigated the relationships between trust, cooperation, and project performance and proposed a model showing how trust directly affects cooperation and, in turn, project performance.	2002	Trust is a key driver of cooperation among project team members and stakeholders, and project managers should prioritize its development and maintenance to support successful project outcomes.
Zwikael & Globerson	Argued that trust is a key element in the management of complex projects and proposed a three-stage framework for trust development in complex projects.	2004	In complex project settings, project managers should work to build and sustain trust through open communication, consistent behavior, and the alignment of mutual goals and expectations. The three-stage framework advanced by Zwikael and Globerson

Authors	Main Contributions	Year	Conclusion
			provides structured guidance for achieving these objectives.
Rehan, A., Thorpe, D., & Heravi, A.	Investigated the leadership behavioral practices of project managers and their impact on project success in the Australian construction sector. Identified four key factors: relationship management, leading by example, self-management, and interpersonal sensitivity.	2024	Leadership behaviors characterized by inclusiveness, constructive feedback, and emotional regulation have a strong positive influence on project outcomes, underscoring trust as a relational mechanism embedded within effective leadership.
Shang, K., Wu, J., & Cao, Y.	Examined the effects of trust and contract governance on project performance through knowledge sharing in consulting projects, using SEM and fsQCA.	2023	Trust and contract governance indirectly improve project performance by enabling knowledge sharing, demonstrating that trust serves as a cognitive and structural facilitator of cooperation and control.
Zhang, Y., & Li, D.	Explored the mediating roles of team communication, employee trust, capability, and atmosphere in the relationship between project manager competence and project performance.	2024	Trust mediates the link between managerial competence and project success, indicating that psychological and communicative factors strengthen the impact of technical skills on performance.

Authors	Main Contributions	Year	Conclusion
Liu, X., Kassa, A., & Tekleab, A. G.	Analyzed whether intrateam trust and organizational trust are substitutable, using social exchange and HSIP theory.	2025	Organizational trust can serve as a substitute for intrateam trust, and the interaction between the two enhances team reflexivity and performance. This demonstrates that multi-level trust processes form the foundation of collective efficacy.
Badrinarayanan, V.	Investigated trust-building strategies in virtual project leadership during the post-pandemic era, using a mixed-method design.	2024	Virtual leaders must intentionally foster high-trust environments to maintain team effectiveness in digitally mediated projects, highlighting trust as a fundamental component of virtual collaboration and leadership.
Fareed, M. Z., Su, Q., Almutairi, M., Munir, K., & Fareed, M. M. S.	Examined the mediating roles of trust and job satisfaction in the relationship between transformational leadership and project success in the public sector.	2022	Trust and job satisfaction significantly mediate the influence of transformational leadership on project success, underscoring the role of affective and cognitive trust as key mechanisms of leadership effectiveness.
Bai, J., Su, J., Xin, Z., & Wang, C.	Conducted a meta-analytic structural equation modeling study differentiating the effects of calculative and relational trust on organizational performance.	2024	Both calculative and relational trust positively affect performance, yet through different pathways—information exchange and commitment—helping to clarify inconsistencies in previous research on interorganizational trust.
Wang, X., & Yin, Y.	Investigated how trust networks affect	2025	The density and stability of trust networks help reduce conflicts and

Authors	Main Contributions	Year	Conclusion
	interorganizational conflict and project performance in the construction sector.		improve project performance, demonstrating that trust operates as a structural governance mechanism within complex interorganizational systems.
Abson, E., Schofield, P., & Kennell, J.	Explored how trust facilitates shared leadership in project-based organizations through qualitative multi-case analysis.	2024	Trust is a necessary condition for shared leadership, operating at both intra- and intergroup levels, enabling distributed authority and collaboration across project teams.
Chuang, M.-L., Galli-Debicella, A., & Han, X.	Analyzed the relationships among leader trust, team interactions, and project performance in higher education settings using SEM.	2021	Trust in leaders enhances the quality of team interactions, which indirectly contributes to improved project performance. This suggests that relational trust operates mainly through social-cognitive mechanisms rather than exerting direct effects on performance.
Castro, M., Bahli, B., Figueiredo, R., & Barcaui, A.	Investigated the impact of team trust in project managers on project success and job satisfaction using a Brazilian sample and quantitative modeling.	2023	Team trust in project managers is a strong predictor of project success and job satisfaction, showing that cognition-based trust has a more decisive impact on performance than affective satisfaction in temporary organizational settings.
Li, H., Feng, J., Zhang, K., & Xu, C.	Examined the antecedents and mechanisms of trust between owners and PMC contractors under the Project Management Consultancy (PMC) model.	2022	Both calculative and relational trust improve project performance, with relational trust exerting a stronger effect. This highlights how mutual reliability and social similarity help reduce transaction costs in collaborative settings.

Authors	Main Contributions	Year	Conclusion
Mata, M. N., Khan, F. H., Khan, K. I., & Martins, J. M.	Analyzed how team diversity influences project performance through trust and absorptive capacity in IT projects.	2021	Trust and absorptive capacity mediate the effects of team diversity on project outcomes, demonstrating that the cognitive integration of diverse knowledge relies on cooperation mechanisms driven by trust.
Rai, S. S., & Koodamara, N. K.	Studied how trust in leaders affects organizational commitment, employee silence, and the moderating role of ethical leadership.	2025	Trust in leaders reduces employee silence and strengthens normative commitment, particularly under ethical leadership. This demonstrates that trust moderates behavioral inhibition and reinforces organizational alignment.

Source: developed by the author (2022)

This literature review aims to provide a comprehensive overview of the existing research on the concept of trust in project management, focusing on both the psychological and project management perspectives. Trust is a fundamental aspect of any project, as it influences the success of project objectives and goals. However, building and maintaining trust within project teams and stakeholders can be a challenging task. Therefore, a thorough understanding of the concept of trust and its implications for project management is essential for project managers, researchers, and practitioners alike. This review will analyze the relevant literature on trust and project management, highlighting the key findings, theories, and frameworks that have been proposed over the years, and providing insights for future research in this field.

Confidence refers to the belief in someone's capacity to perform or predictability of their behavior (Cristina Costa & Bijlsma-Frankema, 2007). Trust, on the other hand, can facilitate collaboration, risk-taking, open communication, and task performance (Chiocchio et al., 2011). Literature identifies factors such as managing uncertainty, information sharing, and meeting team expectations that impact trust (Cooke-Davies, 2002). Because projects are ultimately delivered by people, it is fundamental to consider human-related elements in the success framework, including the role of trust and teamwork (Bond-Barnard et al., 2018).

Despite the debate surrounding the relationship between trust, cooperation, and PM success, research on this topic remains scarce. The goal of this research is to better understand the complex interactions that exist between these components.

Studies have found a significant link between project cooperation, trust, and PM (Bond-Barnard, Fletcher, et al., 2018). For instance, cross-functional teams rely on trust for collaborative interactions (Daspit et al., 2013). However, some Australian studies (Haaskjold et al., 2020) suggest that trust is essencial for cross-functional teams to work together. Given the importance of trust and its impact on PM success, this research aims to examine and identify ways to develop and maintain trust within Brazilian organizations.

The importance of human-related elements, including trust and teamwork, in PM success framework is increasingly recognized. Managing uncertainty, information sharing, and meeting team expectations are essential factors that impact trust. The relationship between trust, cooperation, and PM success is complex and requires further exploration. This research aims to contribute to a better understanding of these components, particularly within Brazilian organizations.

The development of Trust is essential for the success of a project (Buvik & Tvedt, 2017). Cooperation is critical for organizational learning, but its dynamics are driven by Trust (Handy, 1995). For successful team development, close personal connections and Trust are required (Holton, 2001). Trust-based support is necessary for high levels of information exchange and supply chain agreements (Manu et al., 2015). Further research is needed to promote trust-based participation in supply chain production, as literature supports Trust as a factor in determining cooperation.

According to Muller et al. (2003), communication enhances project participants' confidence, and when founded on good communication, program trust and cooperation impact PM performance. This research focuses on the relationship between Trust, cooperation, and PM success, as well as the variables that influence them.

Levesque et al. (2017) define knowledge exchange as the regular, directed transfer of data, knowledge, and information among people and organizations for mutual benefit. Consistently following through on promises is necessary to establish Trust among the team and stakeholders or between two or more sponsors. Receiving and presenting scheme information across official and informal channels establishes trust and demonstrates the medium's trustworthiness (Charles Lesko & Yolanda Hollingsworth, 2010).

To promote early information sharing, trust among team members is essential (Charles Lesko & Yolanda Hollingsworth, 2010). Accordingly, (Daim, 2011) suggests that the project manager should lead by example in promoting knowledge transfer, building trust in the team at the beginning of the project by introducing team members positively, clarifying their roles and relevance to the group. Trust is built by individuals and groups sharing their expertise, fueling creativity and faith in initiatives and connections.

Daim et al. (2012) describe "rapid trust" as the transfer of trust from other familiar situations by members of a multicultural workplace (GVT). Trust is maintained through increasing team activities and faith in the team's ability to deal with ambiguity, danger, and vulnerability. Unlike other types of trust, "rapid trust" is brought in rather than developed over time through personal connections. As a consequence, (Daim et al., 2012) suggest that the most "rapid trust" is generally acquired at the plan's outset.

Prior research (Grabher, 2001; Meyerson, Weick, & Kramer, 1996) has found that "fast trust" is a category-driven trust between highly trained experts, in which players interact as roles rather than people. Engineers are taught to apply solid technical ideas, even if we trust technology (Bond-Barnard et al., 2018). The literature supports Meyerson et al.'s rapid trust concept, which distinguishes "imported trust" from "swift trust." Imported trust results from previous team meetings instilling trust in a new project, while swift trust is a category-driven faith where participants who have never met before trust each other based on their unique role and current capabilities. This research will examine the influence of previous communication, collaboration, or a close relationship on project participants' trust levels (Daim et al., 2012).

Future connections are a critical factor in building cooperation and trust among project participants (Daim et al., 2012). Trust is earned through consistent fulfillment of promises made by team members (Charles Lesko & Yolanda Hollingsworth, 2010). Establishing trust requires the satisfaction of expectations (Chiocchio et al., 2011). Failure to deliver on promises can result in a loss of trust in the construction industry (Bond-Barnard et al., 2018). This highlights the importance of consistently meeting promises to maintain trust among project stakeholders (CJ Lesko & YA Hollingsworth, 2010).

Risk is an unforeseen event or circumstance that can significantly impact project outcomes (Řeháček, 2017). As risk and trust are closely linked, a suitable level of risk can increase project trust. Lack of trust is identified as a significant factor in GVT failure. Trust is essential in any

GVT as it allows individuals to perform actions they cannot control or monitor (Daim et al., 2012). Therefore, risk can either positively or negatively impact the trust of a project team.

Rehan et al. (2024) emphasize the behavioral dimension of leadership as a key determinant of project success, noting that trust emerges implicitly through inclusive leadership practices and transparent relationship management. Their findings show that emotional regulation and interpersonal sensitivity enhance team cohesion, creating a psychologically safe environment that supports collaboration and task commitment. From a cognitive perspective, trust moderates the relationship between leadership behavior and project performance, underscoring the relational nature of managerial influence.

Shang et al. (2023) expand this discussion by presenting trust and contract governance as complementary mechanisms that shape cooperation through both explicit and tacit knowledge sharing. Their results reveal that trust, beyond its affective dimension, functions as a structural facilitator of knowledge integration and control, aligning cognitive and organizational processes to improve performance. This highlights the dual role of trust as both a psychological condition and an operational enabler within project governance systems.

Zhang and Li (2024) contribute by revealing the mediating role of trust in the relationship between project manager competence and project outcomes. The study provides evidence that technical competence alone does not ensure project success unless supported by communicative clarity, team trust, and emotional climate. The integration of trust into this model aligns with cognitive theories of cooperation, indicating that shared mental models and interpersonal reliability enhance collective performance.

Liu, Kassa, and Tekleab (2025) extend the discussion by integrating social exchange theory with heuristic–systematic information processing to explain how trust functions across organizational levels. Their findings indicate that organizational-level trust can offset shortcomings in intrateam trust, suggesting an interdependence between psychological safety and institutional reliability. This interaction demonstrates that trust operates concurrently at individual and systemic levels, shaping reflexivity, engagement, and overall project efficiency.

Badrinarayanan (2024) examines virtual project environments and argues that the post-pandemic shift to remote work requires deliberate trust-building strategies. Using mixed methods, the author shows that virtual leaders face substantive challenges in establishing credibility and cohesion without physical proximity. The study points to consistent

communication, transparency, and empathy as core cognitive mechanisms through which virtual trust develops, directly influencing team performance and project outcomes.

Fareed et al. (2022) advance the psychological understanding of leadership effectiveness by identifying trust and job satisfaction as mediators between transformational leadership and project success. Their results suggest that cognitive and affective trust convert leadership behaviors into higher team commitment and goal alignment. This supports the view that trust functions as an internalized belief system within organizational cognition, shaping motivation and perceptions of managerial reliability.

Bai et al. (2024) provide a meta-analytic synthesis differentiating calculative and relational trust in interorganizational exchanges. Their analysis shows that calculative trust is grounded in rational assessments of predictability and risk, whereas relational trust stems from ongoing commitment and communication. This distinction clarifies the dual cognitive foundations of trust — analytic evaluation and social bonding — offering a more precise framework for understanding its multidimensional influence on organizational performance.

Wang and Yin (2025) expand the conceptualization of trust by applying network theory to project governance. Their study demonstrates that dense and stable trust networks can mitigate interorganizational conflict and enhance collaboration efficiency. Trust, in this sense, assumes a structural-cognitive role that stabilizes relational uncertainty across organizational interfaces. The findings reinforce the systemic nature of trust as both a social and informational infrastructure within complex project environments.

Abson, Schofield, and Kennell (2024) examine shared leadership and identify trust as the central antecedent that enables distributed authority in project-based organizations. Their findings show that both intragroup and intergroup trust are essential for maintaining cohesion and alignment among autonomous teams. From a cognitive standpoint, trust functions as a coordination heuristic that reduces ambiguity, strengthens perceptions of psychological safety, and supports collaborative decision-making under shared leadership structures.

Chuang, Galli-Debicella, and Han (2021) explore the relationship between leader trust and team performance in academic project environments, demonstrating that trust operates primarily by enhancing interpersonal communication and collective interaction. Their results indicate that trust influences performance indirectly—by fostering cognitive synchronization and open information exchange—highlighting its role as a mediating psychological mechanism within team processes.

Castro et al. (2023) provide a seminal contribution to Latin American research by empirically examining, within the Brazilian context, the influence of team trust in the project manager on project success and job satisfaction. The study shows that cognitive trust—derived from perceptions of the leader's competence, integrity, and predictability—has a more substantial effect on performance than affective satisfaction. This is significant for cognitive psychology applied to management, as it suggests that in temporary organizations, rational trust processing partly substitutes for stable emotional bonds. The findings also underscore the importance of soft skills in project leadership, revealing that the project manager's credibility and behavioral consistency create conditions that support cooperation and team commitment, thereby mediating collective performance. Conducted with methodological rigor and statistical analysis in R, the study aligns Brazilian scholarship with international trends by framing trust as a strategic variable for predicting project success.

Li et al. (2022) analyze the formation of trust between owners and contractors in Project Management Consultancy (PMC) models, revealing that calculative trust derives from perceived competence and reputation, whereas relational trust emerges from social similarity and the quality of interactions. The study shows that trust operates as a hybrid governance mechanism—both economic and cognitive—reducing transaction costs and enhancing collaborative efficiency. The differentiation between these two dimensions of trust underscores the importance of shared mental models in managing complex, multi-actor projects.

Mata et al. (2021) position trust as a key mediating factor between team diversity and performance in information technology projects. Their findings indicate that knowledge and value diversity enhance performance only when trust and absorptive capacity—defined as the ability to recognize, assimilate, and apply new knowledge—are present. Trust thus functions as a cognitive catalyst for collective learning and as an emotional stabilizer in highly heterogeneous settings, reducing goal fragmentation and promoting functional integration.

Rai and Koodamara (2025) deepen the understanding of the psychological effects of trust in leaders on organizational commitment. Their results show that trust reduces employee silence and increases normative commitment, particularly under ethical leadership. This interaction reveals that trust in leaders not only regulates affective engagement but also functions as a cognitive filter that shapes perceptions of fairness, psychological safety, and reciprocity. The mediation of silence as a psychological variable highlights the importance of trust processes for emotional and cognitive expression among employees in rigid hierarchical contexts.

2.3.1 Integrative factors and innovation

The efficient utilization of ideas and information accessible to a project team or organization is knowledge integration (Somer, 2017). The purposeful use of knowledge, creativity, and effort to extract new or different advantages from resources is characterized as innovation. It encompasses all procedures for generating new concepts and turning them into usable goods. The outcomes of trustworthy knowledge exchange/transfer and cooperation include knowledge application and innovation. According to research, the correct level of customer-supplier involvement decreases control costs, reduces the risk of loss, and opens up new educational opportunities (Dubois & Gadde, 2000).

According to Webster's dictionary (1976), confidence, dependence, faith, hope, reliance, assurance, certainty, certitude, conviction, credibility, credit, and positiveness are among the terms associated to trust in the dictionary. In the chosen definition, the following characteristics of trust stand out: capacity, reliance, dependability, confidence, and truth. In a trust transaction between two parties, at least one or more of these characteristics must be present. When it comes to trust, one must rely on someone who is thought to be trustworthy or dependable. We should also mention that trust may be represented as a noun, verb, adjective, or idiom in daily English. Researchers from several academic areas have examined trust, each offering their own definitions and perspectives. When seeking to comprehend the linkages that exist between scientific definitions and daily use of the word, it is vital to explore some of the definitions offered by researchers. The multifaceted components of trust are agreed upon by researchers (BEng). This discussion examines some portion of the trust definitions used by the literature. One of the first trust scholars, (Rotter, 1971), described trust as a broad inclination to anticipate others to fulfil expectations. The trustor makes the presumption in this definition that the trusted person will meet expectations. "The amount to which a person considers another person (or individuals) to be benign and honest"(Larzelere & Huston, 1980). The traits of honesty and compassion are viewed as vital in this concept for one to be trusted by others. Trust,, according to (Baier, 1986), is "recognised vulnerability to another's probable but unanticipated ill will (or lack of good will) toward one." The accentuation in this definition is on weakness, which is depicted as far as the items or things

that one qualities and shares with another person who has some circumspection over them(Brockner et al., 1996).

Susceptibility implies the risk to lose some most valuable thing. On the second side,(Gambetta, 1988)approaches trust from a different perspective, one that focuses on uncertainty and the necessity for monitoring. "Trusting a person" means believing that if given the chance, he or she will not act in a way that is harmful to us, according to (Gambetta, 1988). "Trust will typically be relevant when at least one party is free to disappoint the other, free enough to avoid a risky relationship, and constrained enough to consider that relationship an attractive option," he says. (Gambetta, 1988)extends this argument by claiming that an unsupervised individual will abuse the confidence placed in them. If concerns of trust uncertainty are to be handled, Gambetta (1988) believes that monitoring a trustee is essential. As a result, trust becomes a matter of monitoring. Why watch someone if you trust them, one could wonder. Can you trust someone while yet feeling the need to keep an eye on them? Consider the case of a company whose management has persuaded its workers that they have been given permission to utilise the network capabilities as a productivity tool. Can workers feel trusted if management instals rigorous monitoring controls utilising security-related software packages that provide it access to all of the employees' network-related activities? Employees will typically believe that management does not trust them. In light of the aforementioned concept of trust, management might claim that they trust their staff and that the safety efforts are just a wellbeing net to dispose of vulnerability.

Billhardt & Szendrei (1995) research included 194 managers and professionals in a field setting. The study's findings show that managers' perceptions of their peers' trustworthiness may be assessed along two dimensions: the level of affect-based trust and the extent of cognition-based trust. In general, levels of cognition-based trust were greater than levels of affect-based trust, according to the research. Cognition-based trust is the outcome of a purposeful appraisal of others' traits, as well as a process of balancing the rewards of trusting against the hazards of doing so (Lewicki & Bunker, 1996). This sort of trust is based on an individual's judgments of the trustworthiness of the interacting parties, which are characterized by their capacity, honesty, and compassion (Mayer et al., 1995).

As a condition of trust, the other party's cognitive abilities are assessed. If the person is being checked matches the evaluating person's prospect, the evaluating person is likely to fabricate a serious level of relational confidence in the assessed individual. A top level degree of awareness based trust maybe enable the evaluator to have faith in the person’ being assessed

and actively participate in collaborative work and seek information from individuals he or she believes in (Chowdhury, 2005). (Chowdury et al., 2005) investigated the links between interpersonal trust and complicated information exchange in the workplace. The data for the research was gathered via a survey of 164 MBA students. The amount of trust between dyads is a strong predictor of complicated information exchange, according to the study's results. According to (Chowdury et al., 2005), trust must be built amongst all team members in order to increase information sharing. He believes that teams that need information sharing should place a greater emphasis on creating awareness based trust rather than affect-based trust. This discovery is consistent with (McAllister, 1995) findings.

Calculative, capability, social, and coordinated associated trust were perceived as the four classifications of relational trust. (Paul & McDaniel Jr, 2004) change explored the connection between relational trust and the exhibition of virtual synergistic connections. Eye to eye interviews with 74 significant medical services specialists were directed utilizing three telemedicine networks in the United States. Their examination found proof of a link between associated trust and implementations. Measured trust is established on the possibility that trust is a kind of exchange (Lewicki & Bunker, 1996). Estimated trust is generally called math based trust (McAllister, 1995) and reasonable trust (Lewicki & Bunker, 1996; Jarvenpaa et al., 1998). Ability trust is a sort of social trust reliant upon the other party's ability to accomplish what they ensure they will do (Mayer et al., 1995).This type of trust depends on an evaluation of the other party's insight and abilities. At the point when the abilities important to finish a task are not held back inside one individual, capability trust is fundamental to decrease joint endeavors. This is an illustration of a situation that may emerge in a virtual undertaking where one individual can't be anticipated to have the important capacities in general. All things being equal, every individual from such a group is a specialist in their own subject. On the off chance that colleagues accept other colleagues are skilled, they are more disposed to take an interest in a communitarian relationship. Social trust, the third classification, is characterized as how much one has an individual relationship to the next party and need to do useful for them, autonomous of self absorbed benefit reasons (Jarvenpaa et al., 1998). Standardizing trust (Child, 1998), selflessness trust (Sako, 1998) influence based faith (McAllister, 1995), and character trust are instances of social trust (Lewicki & Bunker, 1996) These definitions depend vigorously on a craving to help the other individual. The numerous originations of social trust all include the idea of one party understanding the other and eminently avoid the idea of calculative trust. The various types of trust are joined in the coordinated perspective on

relational trust. Despite the fact that they are particular and vacillate autonomously of each other, various types of trust are linked with one another (Mayer et al., 1995). In different connections, trust might take on many structures, and in specific cases, numerous kinds of trust might blend and associate. Contingent upon the kind of association or phase of the relationship, relational connections are based on a blend of different types of trust. With regards to assessing the many kinds of relational trust, this might be an extremely baffling suggestion. Specialists have added to the vulnerability by characterizing a few sub-classifications of relational trust, as expressed previously. The manner in which relational trust has been characterized appears to have covers and irregularities. As a general rule, however, it is by all accounts a variety in naming rather than importance. A few specialists have utilized different names to depict a similar peculiarity. (Tallman & Hsiao, 2004), for instance, utilize the word social rather than influence based, as do (Costigan et al., 1998) & (Lewis & Weigert, 1985). Most researchers, then again, utilize the word kindheartedness to allude to a kind of trust that is social or influence based. The accompanying segment goes through the three most oftentimes recognized originations of associated trust that scholastics have referenced: soundness, confiding in objective, and confiding in conduct.

2.3.2. Degree of collaboration construct

Collaboration is essential for achieving shared objectives and enhancing team performance (Dietrich et al., 2010; O'Neill & Allen, 2014). Trusted teams effectively manage interdependencies, leading to improved cooperation and performance (Tyler, 2003; O'Neill & Allen, 2014). Factors such as cohesion, linkages, synchronization, commitment, proximity, and incentives influence the level of collaboration in project teams (Dietrich et al., 2010). Successful collaboration, both at the individual and team level, significantly predicts overall team and task success (Chiocchio et al., 2011).

A relation is a link between two or more people or things (Lee et al., 2018). Associations are essential in projects since they foster teamwork, which promotes project success. Many studies have been done on project player relationships and their impact on project presentation (Dietrich et al., 2010). However, most research on customer-supplier relationships, particularly in construction, focuses on collaboration (Dietrich et al., 2010) Processes of Collaboration improve inter-personal or inter-organizational Strength of these

links may determine their nature (Granovetter, 2010). Effective teamwork instills optimism and anticipation in team members, igniting partnership connections (Bresnen & Marshall, 2000) Establishing organizational project linkages has various challenges:

- demand discontinuity, i.e., rare projects make it difficult to build confidence and commitment among venture team members (Verlinde et al., 2007)
- reliant on the accomplishment of a particular project (Adams Jr et al., 2010) and
- the exclusivity of project interactions
- the actor linkage's intricacy (Bond-Barnard et al., 2018).

To aid the development of social capital or relationships in initiatives, it is necessary to create cooperation and coordination, which entails sharing information among team members (Dietrich et al., 2010) According to(Rivera et al., 2010), embedded interactions are partnerships in which organizations work together to accomplish a shared goal or gain mutual benefits.

According to Hoegl & Gemuenden (2001), excellent coordination is everyday information on shared targets, related exercises, and the state of part association across exercises. The board is one of the reasons that impact the nature of association (Bond-Barnard et al., 2018). In collective settings, liquid connections need an undeniable degree of coordination since it considers synchronized and composing movement (Dietrich et al., 2010) Coordination is used in many undertakings to adjust the group to the task point. Objectives that are compatible or agreeable decrease debates and further develop participation quality (Andersson & Pearson, 1999).

Coordination is regularly considered a method of keeping up with command over the task group and guaranteeing that project results meet assumptions. (D'Amour et al., 2005) indicated that satisfactory correspondence structures, guidelines, standards, and normalized documentation might assist with jointing activities. For instance, (Pinto et al., 1993) analyzed unit participation in undertakings and observed that group rules support the joint effort. Additionally, (Silén-Lipponen et al., 2002) found that standards and cycles help authoritative meetings and joint effort. Aggregate entertainer conduct is more unsurprising when rules control the guidelines and systems that should be continued in a venture. To accomplish more significant levels of cooperation, each colleague should embrace and follow the essential exertion standards (Dietrich et al., 2010). When the group takes interest by planning their

activities, the expense of the executives and the shot at disappointment are decreased ((Dubois & Gadde, 2000); (Ingram & Baum, 2001).

Participation among project groups typically ranges from public and authoritative lines. Actual closeness has been displayed to decidedly affect synergistic conduct in research (Dietrich et al., 2010). Actual closeness identifies with the distance between project members regarding projects and is characterized as fleeting vicinity nearby. (Van den Bulte & Moenaert, 1998) checked out the beginnings of R&D groups and noticed a connection between co-area and correspondence recurrence. As indicated by other experimental examinations, co-finding individuals expand relational abilities, advance the development of mutual perspective, and lift cohesiveness among collaborating players (Kahn & McDonough, 1997); (Moodysson & Jonsson, 2007). As per a review distributed in Dietrich et al. by Arslanian-Engoren, actual closeness decidedly impacts collaboration (2010).

Acknowledgment of and solid faith in the task's objectives and goals, enthusiasm to partake, and want to remain a part are generally parts of responsibility (Hoegl et al., 2004). One of the fundamental achievement necessities in individual and authoritative cooperation projects is the responsibility (Buvik & Rolfsen, 2015).(Bresnen & Marshall, 2000a) indicated that an entertainer's obligation to project liabilities expands participation quality. In Chen et al., Hoegl et al. seen that commitment decidedly impact workgroup quality in item advancement projects (2010). As per exact discoveries, a cross-disciplinary joint effort in a medical clinic setting offers tantamount benefits (Dietrich et al., 2010). Besides, (Cipher & Clifford, 2004) saw that commitment in a roundabout way affected work execution employing chief responsibility and hierarchical responsibility. Commitment empowers a teammate's authentic craving to take part, assembles common help, and concentrates on the job that needs to be done.

As indicated by some exploration, conflicts are "common" in helpful work and should be overseen through formalized administration instruments or coordination to fortify the connection between individuals included (Vaaland, 2004). Working environment questions will emerge as the intricacy and variety of the specialized labor force in groups develops, making it essential to address the issue in a venture (Dietrich et al., 2010; (Cordero et al., 2002). Observationally, there is a connection between resolving struggle and cooperation. For instance, (Tjosvold et al., 2003) found that having an inspirational perspective toward struggle is associated with group coordinated effort. There is an unfavorable connection between debate and joint effort, as per different examinations (Dietrich et al., 2010)

Rewards are items that persuade or urge somebody to fulfill a responsibility. They are frequently utilized in tasks to advance group execution and coordinated effort (Frodeman et al., 2017). As per Dietrich et al. (2010), the arrangement of motivations is like eight related angles that straightforwardly sway the ease of participation among different undertaking partners. The motivating forces of the numerous members ought to be adjusted for every one of the coordinating entertainers to help accomplish the shared objective and for common help to exist. At the point when (Faerman et al., 2001) took a gander at the achievement of the public-private coordination, it was not settled that adjusting thought processes was one of the most significant variables to consider. Dietrich et al. (2010) concur that coordinating motivators is a fundamental piece of effective collaboration. According to (Bresnen & Marshall, 2000b), most project consolidation strategies don't provide an essential motivator to connected members. Thus, they advocate tending to contrasts, social associations, and equilibrium of extraneous and inborn compensations to help project contribution.

Achievement may mean various things (Jugdev & Müller, 2005). The objectives of each venture partner will change after some time, as will their view of what establishes achievement. The contrast between the partner's examination of the venture's prosperity and his expectation of its culmination is utilized to decide the partner's fulfillment with it (Koelmans, 2004). Partner fulfillment might be impacted by elements, for example, the group's responsiveness to partner demands, project association, the measure of joint effort and trust in the association.

Before plunging into the parts of task achievement, recognize project achievement (estimated against the undertaking's destinations) and PM achievement (estimated against the generally utilized and customary expense, time, and quality execution measures) (Cooke-Davies, 2002). The subsequent contrast to be set up is between progress rules (the measurements by which a venture's, or alternately, business', prosperity or disappointment will be judged) and achievement models (those contributions to the administration stage that straightforwardly or in a roundabout way add to the task's, or alternately business,' prosperity) (Cooke-Davies, 2002). The achievement of an undertaking is characterized not just by how well it meets its prosperity measures but also by the partners' impression of the task's prosperity.

The spending plan and other "things-related" measures are utilized to evaluate PM execution. Practicality and reliability of undertaking expectations (together alluded to as venture execution), just as "individuals related" attributes like correspondence, trust, and cooperation, which impact camaraderie and customer fulfillment with the task, in addition to

other things (Koelmans, 2004). Moreover, research uncovers that information application and advancement assist PMs with prevailing by overcoming any barrier between "things-related" and "individuals-related" qualities. The accompanying parts go further into project execution, information application, and advancement. PM achievement might be impacted by an assortment of factors that are outside the extent of this review. These variables incorporate the measure of hazard taken, the arrangement of authoritative abilities with project objectives, and different parts of essential preparation. A few elements impact project execution. Project achievement is characterized as the achievement and continuous survey of the venture's determinants, like cost, time and quality, to evaluate the undertaking's comparative achievement. These three project measurements are worried about the effectiveness of which the executive's exercises are finished(Dalcher, 2009). Since project proficiency should be analyzed routinely throughout the task to distinguish the venture's triumphs, project execution is a fundamental proportion of PM achievement (Dalcher, 2009).

2.3.3. Trustworthiness

Being trustworthy involves being capable and willing to act in the best interest of the other person (Mclain, 1995). According to research, the qualities and actions of the trustee influence whether or not they can be trusted (Jones & George, 1998). Conlon and Mayer (1994) found that people's propensity to trust others was linked to their behavior and performance. Mayer et al. (1995) state that trust is formed by the characteristics of the trustee and trustor. The trustee's perceived competence, integrity, and benevolence are their qualities. Trustworthy beliefs are referred to as a set of beliefs that include integrity and are often considered in the interpretation of the results (McKnight & Chervany, 1996). Trusting beliefs develop through an individual-to-individual and situation-to-situation understanding of trust. The most common trusting beliefs in the literature are competence, integrity, benevolence, and honesty (McKnight & Chervany, 2000), also known as trustworthiness traits (Mayer, Davies, & Schoorman, 1995).

Jarvenpaa et al. (1998) conducted research on rapid trust and virtual teams, finding significant differences in the behaviors and strategies of high-trust and low-trust teams. They claim that rapid trust is a type of depersonalized action-oriented trust rather than an emotive or cognitive type of trust. This suggests that quick trust is more likely influenced by the assigned

duties of team members rather than a relational type of trust. Mutha and Srivastava (2021) used a case study method to examine 75 virtual teams from different countries who had communicated and collaborated for a considerable length of time. Their study also showed that high-trust teams have rapid trust. Jarvenpaa and colleagues' research (1998) shows that transient virtual teams might develop high trust through "rapid trust" rather than the experiential type of trust used in traditional trust development.

According to McNamara (1999), virtual teams with the significant level of trust share three attributes practically speaking. The main trademark was that they began their discussions with a progression of social messages prior to getting serious. This grouping of experiences is known as "electronic charming," and it is by all accounts critical in making information based trust. This is in accordance with (Jarvenpaa & Leidner, 1999).

Tucker and Panteli (2003) examined 18 overall virtual groups inside a global IT firm. Interviews were led with individuals who worked for a specific organization and were important for socially changed, topographically dissipated, and innovation empowered worldwide virtual groups. Besides, the respondents had gone through over two months as a component of an overall virtual group. The normal characteristics and practices seen in worldwide virtual groups are displayed in Table 3-2. The groups were separated into two classifications: high-trust and low-trust, in light of the level of shared targets they experienced, just as issues of power and correspondence. As found in the table, groups with a significant degree of trust had more prominent positive outcomes in every one of the three regions evaluated. (Jarvenpaa et al., 1998) coordinated an equivalent assessment and noticed basic differentiations among high and low-trust gatherings.

The high-trust bunches showed the going with qualities: a genuine degree of sincere trust and energy; task course; sublime utilizing time viably; a sensible perception of work objectives; drive and obligation; and ordinary correspondence affiliation. The low-trust gatherings, of course, had something different by and large than their sidekicks. They bestowed just once in a while, had less objectives, and offered less analysis to one another. The revelations of (Tucker & Panteli, 2003) and (Jarvenpaa et al., 1998) uncover pivotal differentiations between high-trust and low-trust teams.

Insufficient shared working relationship, according to the (Schoen & Standish, 2001), is one of the causes behind bombarding drives (for instance nonappearance of trust among partners who share risk in regards to project accomplishment). This assessment includes the need of associates in virtual settings developing trust to thrive. The disclosures recommend that when

associates need trust in one another, they can't share information or collaborate on practices that need the venture of others. This breakdown in correspondence, similarly as various activities fundamental to a gathering's display, leaves the gathering futile and, accordingly, unable to achieve its objectives as a whole.

In their study, Wu et al. (2017) examined how trust–conflict associations influence project added value, identifying two forms of trust: calculative and social trust. The findings show that both types are strongly correlated with added value, with calculative trust exhibiting the stronger impact coefficient. Task conflict positively affected added value, whereas relationship and process conflict produced negative effects. Based on these results, project teams should prioritize the development of calculative trust and cultivate trust-oriented relationships to leverage the benefits of task conflict while minimizing the detrimental effects of relationship and process conflict.

Meanwhile, (Kalkman & de Waard, 2017) found that trust and control are independent and mutually supportive concepts, but require further examination to differentiate between interpersonal and organizational trust and control. They suggest future research should focus on the role of organizational interests and power in post-disaster collaborative efforts, as a link between the trust-control nexus and power emerges. (Qin et al., 2017) conducted research on the relationship between interorganizational trust and control and its implications on project success from the perspective of project owners. They identified two types of trust: calculative trust and social trust, and three types of control: result control, behavior control, and social control. The study found that project owners' mistrust of contractors is disconnected from their confidence in project workers. Calculative trust has a positive impact on all types of control, while social trust has both positive and negative effects on result and behavior control and social control. Result and behavior control have the most harmful effects on social control. The study suggests that project managers should be aware that mistrust has a negative impact on project success, and social control is the most effective type of control to meet project obligations.

Virtual teams are defined as groups of individuals who collaborate across time, place, and organizational boundaries, facilitated by communication technology (Peterson & Stohr, 1999). They share common goals and work styles, with related performance goals to which they are both held accountable (Henry, 2015). Virtual teams have been established for projects, which are collaborative efforts towards a defined goal or completion (Krill & Juell, 1997). The level of virtuality in a team, or the amount of face-to-face and electronically-mediated

communication, has been studied by researchers (Niedeman & Beise, 1999). This categorization divides teams into four levels of virtuality: inactive, traditional, highly virtual, and fully supported. While virtual teams are similar to traditional teams, the primary mode of communication is through technology, although they may choose to communicate online even when in the same physical location (Arnison & Miller, 2002).

Virtual teams face challenges similar to traditional teams, but these difficulties are intensified by time and distance (Lipnack & Stamps, 2000). Some of the challenges project managers may face in virtual settings include problems with organization due to the absence of physical interaction and associated verbal and behavioral cues (Cascio, 2000), the cost of setting up a virtual office (Cascio, 2000), cultural differences that may create conflicts in communication efforts, managing loneliness among virtual workers (Cascio, 2000), and managing the trust relationship between team members (Handy, 1995). The issue of trust is particularly critical in virtual teams, as the absence of face-to-face interactions makes it harder to establish trust (Handy, 1995). The factors affecting virtual team success are communication, cohesion, and culture. Cohesion, which is the degree to which group members are attracted to the group and to each other, has been linked to various positive group qualities (Chidambaram, 1996). In a study conducted by Warkentin Sayeed and Hightower (1997), it was found that there was a significant difference in cohesiveness between face-to-face and virtual groups in a test setting, with face-to-face groups reporting higher cohesiveness, greater satisfaction with the decision-making process, and greater satisfaction with the group's decision. Group members' satisfaction with the group's work increases as they develop more positive attitudes toward each other (Chidambaram, 1996). A range of positive outcomes has been associated with group cohesion, including greater awareness of issues, a willingness to change, increased motivation, increased self-direction, and greater creativity (Soldz et al., 1995). Reason, according to (Lipnack & Stamps, 1999), is the "all-encompassing glue" that holds a virtual team together regardless of reporting structure.

Dasgupta et al. (1999) proposed the Logical Framework Methodology (LFM) to assess project success, which consists of project management success and product success. Project management success involves meeting project results, project management process quality, and meeting stakeholder demands. Product success is determined by satisfying the project owner's goals, meeting customer demands, and fulfilling stakeholders' product requirements (Baccarini, 1999; Shenhar et al., 2001).

Dickey et al. (2007) investigated the impact of two types of trust on franchisee attitudes and practices. They found that franchisee trust is essential for a long-term franchise relationship, and franchisors should build franchisee trust through their customary responsibilities and introducing well-thought-out new ideas and projects.

Ghosh and Fedorowicz (2009) explored the role of trust in supply chain management, where trust is critical to trade costs, supplier interests, and buyer participation. They identified four types of trust that are most relevant to explaining performance implications and management differences in supply chain relationships: calculative trust, capacity trust, integrity trust, and consistency trust. The following is a synthesis of the main literary findings.

Table 3 – Literature Gap

Author	Relevant Points
McLain (1995)	Trust involves being capable and willing to act in the best interest of the other.
Jones & George (1998)	The qualities and actions of an individual influence whether they can be trusted or not.
Conlon & Mayer (1994)	The propensity to trust others is related to their behavior and performance.
Mayer et al. (1995)	Trust is formed by the characteristics of both the trustor and the trustee.
McKnight & Chervany (1996)	Trustworthy beliefs, including integrity, are considered in the interpretation of the results
Jarvenpaa et al. (1998)	Differences between high-trust and low-trust teams and the role of rapid trust in virtual teams.
Mutha & Srivastava (2021)	High-trust teams exhibit rapid trust in virtual teams.
McNamara (1999)	The importance of starting discussions with social messages in virtual teams to build knowledge-based trust.

Author	Relevant Points
Tucker & Panteli (2003)	Differences between high-trust and low-trust teams and the positive impact of trust on teams.
Schoen & Standish (2004)	Lack of trust among partners can lead to project failure.
Wu et al. (2017)	The impact of trust on conflict associations in project added value.
Kalkman & de Waard (2017)	The relationship between trust and control in post-disaster collaborations.
Qin et al. (2017)	The relationship between interorganizational trust, control, and project success.
Peterson & Stohr (1999)	Definition of virtual teams and their collaboration facilitated by technology.
Henry (2015)	Virtual teams share common goals and related work styles.
Krill & Juell (1997)	Virtual teams are established for collaborative projects.
Niedeman & Beise (1999)	Levels of virtuality in virtual teams.
Arnison & Miller (2002)	Predominantly technology-mediated communication in virtual teams.
Lipnack & Stamps (2000)	Challenges faced by virtual teams related to communication, cohesion, and trust
Cascio (2000)	Issues of organization, cost of setting up a virtual office, and managing the trust relationship between team members.
Handy (1995)	The importance of trust in virtual teams due to the absence of face-to-face interactions.
Chidambaram (1996)	Group cohesion is associated with positive group outcomes.

Source: Created by the author (2023)

In summary, trust is essential in various business relationships, including project management, franchising, and supply chain management. Different types of trust have unique impacts on attitudes, practices, and performance outcomes.

According to Wong et al. (2003), employees' trust in their employers is linked to trust in their supervisor. Ethical leaders are viewed as ethical experts representing the organization in regulating corporate relationships with employees. As a result, employees may observe and imitate ethical leader behavior and apply it to the organization. It is argued that moral authority behavior increases employees' trust in the organization. Moral leaders promote the organization's goals and interests, demonstrate genuine concern for employees, incorporate employees in decision-making processes, and communicate organizational values proactively (Naquin & Paulson, 2003; Newman et al., 2014; Mo & Shi, 2017).

Trust has been identified as a fundamental factor in single and hierarchical appropriateness (Searle et al., 2011), with various studies showing that trust in a leader leads to positive outcomes such as more positive attitudes and behaviors (Burke et al., 2007), increased information exchange (Renzl, 2008), and improved performance (Neves & Caetano, 2009).

Rousseau et al. (1998) highlight two essential components common to many definitions of trust: optimistic assumptions and a willingness to be vulnerable. Optimistic assumptions involve believing that the other party is competent, reliable, and conscientious, while willingness to accept vulnerability reflects one’s readiness to depend on others. In this sense, trust is defined as “a mental state involving the acknowledgment of vulnerability based on specific assumptions regarding another’s goals or actions” (Elgoibar et al., 2013).

Low trust in management may lead teams to believe that their boss will not fulfill their commitments in a timely manner, which can exacerbate pressure, resulting in lower commitment and higher levels of exhaustion (Dirks & Ferrin, 2002). Chagatai (2014) investigated the role of trust in supervisory positions and found a significant relationship between trust in the leader and trust in the chief executive.

The importance of trust in the workplace has been widely acknowledged. Employees who trust their supervisors are more likely to believe that their work-related issues will be addressed by their manager (Tan & Tan, 2000). This can increase job dedication and decrease emotional exhaustion (Xanthopoulou et al., 2007). Additionally, Brower et al. (2000) found that "growing trust creates correspondence," meaning that when workers trust their employer, the employer is more likely to engage in trusting behaviors such as offering

employees more navigational freedom and allowing them to work more autonomously on their projects.

Trust is essential for satisfying relationships in various settings, including organizations (Dirks & Ferrin, 2001). However, most studies examining the effects of trust on subordinate leadership have focused only on the subordinate's trust in their superior (Dirks & Ferrin, 2002). There is limited research on the impact of the supervisor's trust in the subordinate on work performance. Brower et al. (2000) found that little research had been done on the supervisor's trust in the subordinate. We argue that the effects of trust on work performance should be examined from both perspectives, and that both being trusted by the employer and trusting the employer have separate and fundamental effects on work performance (Bowers, 2009). Our hypothesis is that trust affects work performance in different ways, and that trust should not be considered in isolation. Being trusted can eat away at performance through unanticipated factors, and therefore, both sides of the relationship must be examined to fully understand the impact of trust on work performance (Colquitt et al., 2007).

The executive's treatment of the dependent will most certainly be influenced by the chief's confidence in the secondary, which will probably effect the subordinate's direct. As example, supervisors could be extra enthralling with trusted dependents, which should be alarming to dependents(Brower et al., 2009). Furthermore, research suggests that bosses are more eager to face problems with dependents they trust (McKnight & Chervany, 2000). Furthermore, a chairman will almost certainly allocate a key assignment to a trusted dependent rather than one who isn't, since the chief has better self-reliance that the assignment will be completed competently and reliably. To be honest, confidence in a dependent's capacity to do a job effectively has been exposed of be a forerunner to trust (Mayer & Davis, 1999). Chiefs should have lower hopes for the capability and reliability of dependents they don't trust, according to this same line of thinking. To prepare for uncouthness or avoidance, managers would most likely screen and limit the decision-making authority of dependents who cannot be trusted. As a result, the reinforcement given to acceptable dependents should enhance their experience and persuade them to be more helpful and prosocial leaders. Furthermore, research shows that authorized workers are more loyal to their employers (Spreitzer & Mishra, 2002).

Without a doubt, (Serva et al., 2005) discovered that the two participants do not share a similar degree of trust (shared trust). There are several reasons to believe that the chief's and subordinate's degrees of trust may not be shared. Chiefs and dependents confront various

degrees and types of risk in the exchange relationship (Johnson et al., 2002). The danger faced by one side or the other may be essentially more important depending on their lifestyle, incentive systems, and many tiered approaches. Overseers and dependents may also perceive similar situations in unexpected ways, resulting in collective appraisals of the quality of exchanges and, as a result, of each other's; (Gill et al., 2005) may also lead to the two social affairs encouraging varying degrees of trust in one another. As a result, the trust stages of leaders and dependents are mostly unrestricted (Brower et al., 2000). Furthermore, the positive effect of confidence in the chief is likely to be aided by the head's degree of trust in the subordinate. When supervisors don't have faith in their employees, they become less enticing (Spreitzer & Quinn, 2001).

A strong nursing authority, built on a foundation of trust, is seen as a critical component in fostering a philosophy of security and joint admiration for clinical benefit relationships (Wong & Cummings, 2009). Trust, beside with sensitivity and admiration, establishes the foundation for a positive and sound progressive culture; it is a fundamental section of excellent commerce practice and strong internal relationships; essentially, it describes the center of clinical benefits working conditions by promoting patient security, importance in care, enlistment, and staff upkeep (Wong & Cummings, 2009). (Harrington et al., 1998) is now focusing on the role of power direct in establishing and maintaining high stagess of trust in nursing work contexts. Furthermore, since it includes positive exchange linkages between people and the affiliation, observed support from the affiliation was thought to be an antecedent of confidence in bosses (Tan & Tan, 2000).

Bromiley and Cummings (1995) describes trust as "a single's conviction, or a common conviction among the people from a social affair, according to which another individual or group advances extraordinary certainty endeavors to go about according to any obligations both unequivocal and inferred, is clear in whatever trades went before such obligations, and doesn't take advantage of another, regardless, at whatever point the opportunity is free". They developed an activity that had three connected components, namely, maintaining liabilities, wheeling and dealing honestly, and not taking advantage of, based on this concept. In an Italian study conducted by Vidotto, Vicentini, Argentero, and Bromiley (2008), it was discovered that by combining all items related to the three variables, an intriguing trust score could be calculated. (Dirks & Ferrin, 2002) identified several fundamental disclosures by using Meta assessment of the association among motivation and trust. They saw varied stages of aid and documented various types of constructive organization activities and practices among

the heralds who added trust. When in doubt, ground-breaking pioneers are particularly interested in exercises that build aficionados' trust and, as a result, produce positive outcomes such as lower expectations of leaving the affiliation, higher direct citizenship repeat, and more grounded legitimate liability (Holmes & O'Connel, 2003). Furthermore, since pioneers deal with the proximal contact between devotees and the affiliation in general (Yukl & Becker, 2006), faith in direct pioneers is unmistakably linked to trust in the affiliation (Dirks & Ferrin, 2002). In any event, as Dirks and Ferron (2002) demonstrate, the trust mark coordinates the relationship between trust and its archetypes.

Individual credits are suggested by selves, which are all regarded natural by the atmosphere and hence very stable. Trust has been portrayed as a distinct differentiator termed inclination to trust as a trademark. According to research, every human has a baseline amount of trust that they will loosen up to for all intents and purposes all of people with whom they collaborate. In the same way, trust has been viewed as an eminent condition. Eminent states are dynamic and vacillating scholarly, influential, or passionate states that are a component of establishing focal elements such as information sources, cycles, and outcomes (Marks et al., 2001).

In the same way, trust may be seen as an intermediary cycle in which other essential activities, attitudes, and relationships are either strengthened or reduced. For example, when in doubt, workers may speak with their pioneers, but without confidence, this connection may be limited (the ideal condition), or insufficient (without a doubt) and avoidant of evidence that might be quite harmful (e.g., botches). Instead of confiding in someone else, research that has conceived trust as an association has often done so by examining the progress of trust (Khodyakov, 2007).

Entrust will be discovered in a fashion compatible with that of a creative state, while recognizing the meaning of trademark and cycle-like implications of trust for the inspirations motivating this article. There are three main reasons for emphasizing trust as a separate state rather than a quality or cycle approach. To begin with, the article's broad reason is to nurture an integrative structure from which ideas connected to the advancement of trust in organizations may be eliminated, although having a quality viewpoint does not offer much to advance this goal. The focus of the present essay is on the reasons that go into deciding whether or not to trust in authority, rather than the continuous path of trust.

Second, as previously said, the characteristic like viewpoint depicts a distinct transformation in the inclination to trust. This distinction, although not the article's primary point of

convergence, will be investigated as a standard coordinating variable within the greater background. Third, a cycle-like approach portrays a more noteworthy perspective on trust.

The foundations of trust are a readiness to be helpless (Butler Jr et al., 1999), optimistic potentials that benefits will be obtained and advanced even when checking is impossible (Lewicki et al., 1998), and valuation of others' assumptions, honesty, enthusiasms, charm, immovable quality, and uprightness (Dirks, 2000) The writing also demonstrates how the desire to acknowledge deficiency develops over time as a result of a connection built on frequent interactions and a foundation defined by communication As a result, trust is presented as "a psychological condition remembering the purpose to identify weakness submissive for certain suppositions for the points or practices of another" for the inspirations driving the energy attempt (Nunkoo & Smith, 2014). Due to repeated associations and a history filled with letters, the need to acknowledge deficiency drives a relationship all the way through (Govier, 1994).

The assumptions or behaviors of another are being assessed in this instance, and they are those of the pioneer. Trust may exist at a multitude of stages within the affiliation, as well as changes of structure (e.g., status, quality, and progression). At the gathering stage (i.e., among partners), the drive stages (i.e., between the associate and the pioneer), the legitimate stages (i.e., between the delegates and the affiliation), and inter administrative stages (i.e., between the delegates and the affiliation), trust might exist (i.e., between affiliations). Returning to the possibility that trust is bolstered or harmed by the experiences, connections, and environment in which the relationship occurs, trust is likely to grow, especially among partners, group pioneers, and toward the affiliation as a whole.

Not only do associates participate more often, but these relationships are likely to be on a far more fundamental stages than the relationships that exist with group pioneers. Delegates will also most likely grow perspectives of trust (or skepticism) toward the partnership as a result of their understandings of the affiliation's aims and frameworks, also their communications with partners and pioneers. While considering the notion of trust in driving at various stages and structures, the present essay will concentrate on trust which prevails among a partner and his or her gathering supervisor in general. Trust which streams from the partner vertical to his or her gathering supervisor will be addressed in detail. Because much of the research has been led rather than appropriated, this concentration demonstrates confidence in vertical organizations.

Experts have attempted to identify heralds of trust in the quest to get trust and the method in which it might be developed. While the focus of this essay is on the less often discussed organization confidence, the work that has been done on trust as a more general concept may be utilized as a starting point. In this vein, we'll look at a couple of the more apparent trust models. Mayer et al. (1995) presented what is perhaps the greatest prominent and incredible model. This model was groundbreaking in that it was one of the first to depict trust as apart from its archetypes. The significance of both the obvious features of the executor as well as the nature of the trust or is apparent in this assessment of valid trust crosswise stages (Schoorman et al., 2007). Mayer et al. (1995) offered a model that looked at the archetypes of trust, emphasizing on limit, generosity, and uprightness. The trust relationship was coordinated by perceived threat and the trustee's tendency to trust. While the model had a few traits, one flaw was a lack of clarity about the repercussions of trust.

Dirks and Ferrin (2002) coordinated a meta-keen assessment of faith in power after being irritated by absence of blend throughout the composing base. Their design cultivated the harbingers of trust, trust conception, and outcomes by attending to the intricacy inside the composition. Furthermore, it evaluated the direct vs indirect organization's coordination stance. Three trailblazing factors to trust were included in their design: pioneer activity and practices, disciple credits (i.e., propensity to trust), and relationship abilities. Clear legitimate aid, participatory free heading, and disregarded presumptions were used to define pioneer action/practices. Pioneer action practices, like momentous and contingent drive types, combined interactional, procedural, and distributive value.

In any event, the study investigates the underlying associations among confidence in driving and important outcomes, harbingers, and partners. Second, the audit looks at how exhibiting the construct using elective power referents (direct pioneers vs legitimate drive) and definitions (trust types) may successfully establish varied linkages among trust in an organization, consequences and experiences. Straight pioneers (for example, chiefs) seem to be a predominantly significant referent of confidence. Finally, a hypothetical outline is presented in order to add stinginess to the expansive composition and to explain alternative viewpoints on the shape of confidence in drive and its progress.

As trusted partners in driving, we have structured gratification with pioneer and pioneer part exchange (LMX). Dependence on the pioneer and contentment with the pioneer are both adeptly relative since they both represent a disposition or judgment that people have regarding a similar referent: the pioneer. Given their proximity, we anticipate the two

variables to cover at a detectable stages with no clear causation pointing. The link among trust and LMX is especially muddled. Few studies has decoupled LMX from power trust According to (Brower, Schoolman, and Tan (2000), LMX consists of two trust fosters that should be "modified" or responded in a broad sense: the pioneer's trust in dependent and t dependent's confidence in pioneer. We regard organizational trust as a partner of disciple evaluations of the LMX produce and meta-take apart data commencing those assessments that pleasure it as a form unmistakable from LMX, given the confusing link that remains a topic of conversation.

The prospect of trusting in authority has played a significant role in a variety of written works. Regardless, as of not long ago, there has been no effort to statistically synthesize and investigate the hypothetical foundations of this collection of evaluations. They conducted the first Meta assessment of the fundamental associations between trusts in power and distinctive creates, investigated whether different form verdicts moderate these fundamental associations, and tried to deliver clarity and hypothetical stinginess to the trust in organization composition.

Any affiliation's most valued resource is trust, which is a critical element of a pleasant, productive work atmosphere. The working atmosphere is critical in times of transition to maintain the prosperity of workers, and the neighboring public. Demands of medical labor may lead to work fatigue that has been connected to health problems, reduced work competence, improved delinquency, and increased yield cause and earnings. As a result, prioritizing for repairs to monitor procedures might potentially reduce job stress. Excited tiredness, depersonalization, and a sense of insufficiency were identified as three types of burnout in the composition. The purpose of this audit was to evaluate whether helping staff's faith in overseers and the board of directors concentrated breakdown. Six ideas were offered, each investigating three kinds of be exhausted as well as the two degrees of trust. In five of the six hypotheses suggested, employees' stages of be exhausted were less when they accepted their supervisors and leaders. (Lambert et al., 2012).

For trust to exist, there should me minimum two sides: the trust or (the one which accepts that a usual result will happen and the trustee (Whitener et al., 1998). The trustee should be certain about the other parties to assist in the trustworthy movement. Trust connection can’t prevail, if the trust or has no assurance that the other party will participate in the reliable movement. As a result, trust is a spiritual condition for the trustee (Rousseau et al., 1998). Trust implies that a trust or turn out to be susceptible to the trustee's actions (Schoorman et

al., 2007). If the trustee fails to assist with the regular exercises, the trust between the two social gatherings may be broken. The implications of trust in general imply that the trustee will take their declaration into account and behave prudently or mercifully. This is the survey's take on the significance of trust. Trust is often formed or shattered based on an assessment of what has occurred before (Zhang et al., 2008).

Shattered trust relations may take up a significant amount of time to repair. To repair these associations, the trustee should reveal to the trustee what went wrong earlier and confirm that upcoming certifications are maintained. Trust is a psychological condition that is influenced by the viewpoint of the trustee. The executor should give the trustee the impression that he or she can rely on him or her. There is a considerable chance that trust will be developed if a trustee perceives a trustee to be straightforward and trustworthy (Kramer, 1999). As a result, trust develops over time and takes into account the apparent tolerability and regularity of workouts (Gill et al., 2005). For the trustee's findings to be genuine, these pieces of information don't have to be accurate. Trust, according to (Zhang et al., 2008), "is a fundamental fixing in a particular and productive social partnership". They argued that trust is essential for a productive workplace. It's been hypothesized that trust is linked to workers' more imperative effectiveness (Mayer & Davis, 1999). Relationships with employees who trust people in authority are often more potent over time than relationships with employees who don't trust upon those incharge (Robinson, 1996). The absence of trust degrades professional relationships, promises, and attempts (Harvey et al., 2003). Affiliations and delegates make mental agreements on what is generally anticipated and due to each side, and trust is a serious element of these agreements(Robinson, 1996). The social exchange rule is the foundation of trust. As a compromise, delegates will give time and effort to fill in for those they want to keep. Negative laborer outcomes are likely if delegates need trust.

Supervisory trust and board trust are two aspects of laborer trust (Chughtai & Buckley, 2008) The stages of confidence a staff member has in their employer is referred to as chief trust. The board of directors is concerned with the stages of confidence that a staff fellow has in the total affiliation. The leaders are in charge of the therapeutic affiliation and are in charge of defining and achieving the helpful affiliation's goals and objectives. The leaders' trust is, for the most part, the medicinal affiliation's day-to-day trust. Despite the fact that it is often referred to as different tiered or managerial trust in the composition, the more mutual phrase of board trust was implied in the present audit.

Despite the fact that agent trust is speculatively noteworthy for beneficial relationships, there has been hardly little examination nearby. There were just four suitable exams discovered. Trust in organizations was strongly linked to loyalty to the FPB (Federal Bureau of Prisons) among healing personnel at a New York City administration office (i.e., office obligation; Kane, Saylor, and Nacci, n.d.). (Daly et al., 2014) discovered that chief trust was correlated adversely with work tension among personnel at two immature confinement facilities. Moreover, Liou demonstrated the need of investigating the impacts of trust on therapeutic personnel. Chief trust and leaders' dependability exhibited a fundamental negative link with work pressure and a optimistic relationship with both work happiness and varying stages of liability among Midwestern remedial employees (Lambert et al., 2008). This reduced the number of assessment centers to two. In any event, the chief's trust and the boss's trust are key indicators of effective staff outcomes. Second, there has to be a lot more research done on the consequences of management and board trust.

According to Dirks and Ferrin (2002), there are two key viewpoints on trust in the composition: the individual based viewpoint and the relationship-based perspective. Mayer, Davis, and Schoorman's (1995) type of trust has been widely acknowledged and used in progressive assessment since its publication in 1995. (Schoorman et al., 2007). The energy of a party to be susceptible to the exercises of another party subject to the presumption that the other would play out a specific activity fundamental to the trustee, paying little attention to the capability to screen or switch that other party, is depicted as trust in this model (Mayer et al., 1995). When applied to the pioneer-disciple association, faith in the pioneer may be understood as the enthusiast's readiness for being shielded against their employers. Mayer et al. (1995) went on to say that the archetypes of trust in the workplace combine perspectives on the trustee's skill, reliability, and sympathetic acts toward the trustee. Individual centered view is a kind of perspective that centers on followers' perceptions of their bosses' personalities and their impact on fans' perceptions of flaws. The process of social exchange, which goes further than basic monetary transaction and creates the sense of shared responsibility, is how trust is dealt with from a relationship-based viewpoint (Brower et al., 2000). To apply this to the pioneer-lover connection, confidence in the pioneer might be seen as the fans' obligation to be shielded from their employers. The basic prototypes of this obligation are the pioneers' idea and thought (Dirks & Ferrin, 2002). However, these two points of view have distinct hypothetical foundations; both have an ordinary hypothetical location where confidence in the pioneer is a form of definite knowledge or belief that devotees are "willing/dedicated to

be weak" to their superiors. This hypothetical community is also the most widely recognized practical concept for determining trustworthiness. Trust in the pioneer has been a fantastic result of appropriate organization's efforts, particularly in the area of TL. (Yukl, 1999) said that one of the most important motivations for TL's success is the presence of followers.

Applying this to the pioneer-follower relationship, faith in the pioneer may be seen as allies' energy to be powerless against their masters. Mayer et al. (1995) went on to say that the prototypes of trust in the workplace combine the trustee's skill, dependability, and compassion toward the trustee. Individual oriented view is a kind of perspective that center's on allies' perceptions of their bosses' personalities and their influence on lovers' feelings of inadequacy. According to the relationship-based viewpoint, trust is addressed in the context of the process of social exchange which extends beyond basic monetary transaction and fosters a sense of shared obligations (Brower et al., 2000)

When applied to the pioneer adherent relationship, confidence in the pioneer might be seen as the allies' obligation to be weak in the face of their leaders. The basic prototypes of this obligation are the pioneers' idea and thought. Yet these two types of viewpoints have assorted speculative establishments, both have a regular sensible focus that trust in the creator is a kind of specific understanding or conviction that allies are "willing/dedicated to be unprotected" to their bosses. This laser-like focus is also the most widely recognized practical definition for determining trustworthiness. In the realm of TL, trust in the pioneer has been a fundamental result of successful driving for instance (Casimir et al., 2006)

Yukl (1999) said that one of the most important motivations for TL's success is the followers' trust and respect. TL's traits, such as dependability, charity, care, and thinking, are obviously comparable to the forerunners of trust in the pioneer as outlined in the two viewpoints above. There are also other reliable studies that suggest a good correlation among TL and confidence in the pioneer. Dirks and Ferrin's (2002) meta-analysis of 13 definite evaluations found that the link between TL and trust is.72. We anticipate that TL sincerely impacts allies' faith in the pioneer. Hypothesis 2: TL is inextricably linked to trust in the pioneer.

According to Dirks and Ferrin (2001), trust inspires data distribution by increasing data disclosure to others and yielding others permission to comprehend one's own thoughts. As a result, trust influences data sharing from the viewpoints of both the data sender and the data recipient (McEvily et al., 2003b). Data from a trusted source is seen as more dependable, and persons are more likely to recognize it at face worth. Furthermore, trust may promote data sharing by lowering our proclivity to filter people and protect ourselves. People are more

prepared to get and provide data if they don't expect any negative consequences from their actions.

However, if associates do not see each other as fit and trustworthy, they are less likely to identify one other's data. In addition, the question is linked to data pertaining to rehearsals (Connelly et al., 2012; Krot & Lewicka, 2011) Conducted a significant trust audit and established that trust rises in the face of an ever-increasing number of viable options. Late trends and the ability to remain conscious of a satisfying situation on an inexorably more real market motivate efforts to become organized on imaginative development. In this case, obtain a clear considerate of the reasons that influence the firm's ability to develop. The purpose of the essay is to explain the amount of trust that workers have in their bosses: affiliation (full trust), chiefs and partners (stages trust). The other hypothesis is to determine the impact of trust on try creativity based on data gathered from 241 workers According to the findings, people trust their associations the most and pioneers the least. It turns out that bosses' trust had a significant influence on progress.

Various analysts have recognized the role of vertical trust in the progression of headways (Tzafrir & Eitam-Meilik, 2005) argue that trusted forerunners are more effective in obtaining capabilities, retaining and appealing supporters, and driving change and growth. Another study on pioneer part exchange found that when dependents build a social exchange connection with their superiors, they are more likely to be interested in consistent and progressive behaviors. The chiefs' implicit trust is undoubtedly influenced by the customary development (Zhang et al., 2008). The manager's composed citizenship direct aspects of magnanimity, thoughtfulness, and uprightness have also been linked to trust in the boss (Aryee et al., 2002). When employers exhibit significant faith in their agents, (Tzafrir & Eitam-Meilik, 2005) found that they create a catalytic pay system, finance more in experts, encourage from within, and create a sharing board course. When supervisors display care for their agents' well-being, assist them with calling advancement, and value their job, they signal to their dependents that they are excited about a close by and communal exchange connection, as indicated by the exchange theory. Laborers will feel compelled to respond to the chief's exceptional acts and ideas in order to restore equilibrium in their shared exchanges. Trust is built and established by a divided exchange of expressive acts between managers and their staff. After some time, this fundamental trust is progressively developed (Ding & Zhang, 2008).

These trust impacts on HRM practices might indicate that the more the leaders' faith in their laborers, the greater their ability to deal with problems involving these delegates (Tzafrir & Eitam-Meilik, 2005). Two or three studies emphasize the need of maintaining even certainty throughout the period spent moving forward, which is one of the most important criteria for wonderful coordinated effort across individuals, groups, and connections (Ashleigh & Nandhakumar, 2007) Furthermore, trust is often seen as impacting data acquisition and distribution procedures (Hoe, 2007b). Collaboration is based on trust, and it requires an original game plan and a creative intellect. As a result, it's plausible to assume that agents' confidence in their partners influences their relationship's trust, since workers who trust their coworkers are more inclined to see their colleagues' experiences as related and socially tolerable. As a result, when these trusted partners observe how useful the affiliation's activities are, the delegates are likely to be impacted by the same conviction and, as a result, cultivate similar pieces of information that the affiliation can be reliable (Tan & Lim, 2009)

Advancement and trust Following current trends and a desire to remain conscious of excellent conditions on an inexorably more real market motivates daring to get organized on progress improvement (Krot & Lewicka, 2011). Gain a dominating understanding of elements impacting the productive progress of firm twists of events in this situation (Aragón-Correa et al., 2007; Krot & Lewicka, 2011) . A breakthrough, according to the Product Development and Management Association's definition, is "a significant concept, process, or gadget." The act of producing something else or cooperating. The presentation brings together creativity in the same way that effort expected to bring an idea or vision to fruition'.

Experts are concerned about what brands it conceivable for businesses to make progress, especially in these days, when advancement will almost certainly be the result of shared insight and interdisciplinary induction in a group rather than a brilliant idea from a single person. Currently, even the most advanced businesses don't always put a lot of money into equipment or real estate. Insightful HR contains their important hypotheses. Changes in monetary power have made non-essential resources, such as perceptive capital, an essential component of economic success (Alvarez & VanBeselaere, 2003). It implies that agents have the data capability to handle the second progression-driven linkages at the end. Today's businesses need a user-friendly system and a high stage of trust. Various experts were approached closer to rate the distinct sociocultural components in their supplication for significance for improvement execution in other assessments. Trust is a large component of selecting synergistic improvement growth in their individual regions of power, according to

the great majority of responders (91.5 percent) (Bruno & Lützhöft, 2010). Dependence is required in a dangerous environment when there is a risk of accident (Hoe, 2007a), particularly during the time spent progressing.

Recent research on affiliation trust has shown a link between trust and agent performance (Gorgu, 2000). Bulent (2000), for example, looked into trust and discovered that sales agents' confidence in their boss was strongly linked to specialized assisting behavior. Trust is a remarkable constituent of human dealings (Flores & Solomon, 1998) that is generated and grown via a split relationship between performers. Whenever they replied, the experts would strive to manufacture their exhibition, relying in their superiors (Tzafrir & Eitam-Meilik, 2005). Total patterns of legitimate learning and solid connections are required for improvement in order to accomplish reliance, altering suppositions, and contending interests. This requires faith in a variety of assumptions as well as the ability to agree. Similarly, progress requires a free and optimal interchange of thoughts and information, which response should be nurtured if trust is available (De Jong & Woolthuis, 2008). The established trust between the parties eliminates the need for constant selection of diverse social affairs legitimacy, resulting in increased decision-making collaboration. All of these perspectives on trust may have an impact on various progression stages and situations. Tan and Tan (2000) claimed that although full scale trust impacts degrees of progressive obligation and turnover goal, line chairman trust affects inventive lead and the agent's pleasure with the line boss (Baum et al., 2007) People may provide substantial resources for the affiliation, astounding job performance, and advancement success when trustworthy associations are assembled.

In drinks relations serving in Pakistan and Turkey, as well as banking associations working in Pakistan, a survey was conducted to investigate the effects of components of definitive trust such as social trust (partners trust and trust in bosses/pioneers), and influential trust on parts of progressive creativity such as thing, interaction, direct, and key innovativeness. A quantitative evaluation system was applied. Data was gathered using a focus on instrument from 202 people working in the marketing, R&D, and cash and accounting departments of beverage and banking companies. Institutional trust is essential for both thing and cycle imagination, according to the findings. Furthermore, colleagues' confidence was definitively linked to indispensable innovation. As a consequence, the findings have shown that the previous experts' viewpoint that the basis of trust rests in individual relationships isn't incompatible with the understanding of trust both inside social relations and as an established idiosyncrasy outside of social relationships.

Mumdziev & Windsperger (2013) discovered that prior research had not looked at the connection among trust, decentralization, and franchisor presentation. This poll is based on the franchisor's viewpoint on the influence of decentralization and trust on execution, which is similar to the franchisees' opinion on autonomy and social organization. The findings suggest that trust is a implementer of decentralization in foundation associations, cumulative the good presentation impact of choice possibilities arrangement, which is consistent with the embodies perspective. Overall, the study adds to our understanding of the relationship between formal organization—as measured by decision opportunities—and trust as a social variable in different tiered organizations.

Esen (2012) discovered that trust has a variety of important relationship advantages, despite the fact that they have yet to agree on how these benefits arise. In this article, we look at two alternative models from a broad perspective that show what trust might entail in terms of perspectives, views, behaviors, and execution outcomes in genuine circumstances. In the most important part of the study, we look at the model that has been used to govern the composition: Direct (guideline) repercussions for a result arrangement arise from trust. In the second part of the essay, we advocate for an optional model: Through two distinct perceptual cycles, trust aids or hinders (i.e., moderates) the impact of numerous factors on attitudinal, perceptual, social, and execution outcomes. Finally, we consider the circumstances in which all of the models are likely to be applicable. A study of observational studies spanning 40 years on the repercussions of trust in genuine situations has been added to the theory. The theoretical framework presented in this article provides insight into the cycles through which trust influences progressive outcomes, suggests ways that legitimate settings can be changed to acquire certain stages of trust or moderate the effects of low stages of trust, and provides guidance to researchers for more definitively learning the effect of trust.

Lazányi & Bilan (2017) investigated the role of trust in common learning procedures that aid advancement as a real tactic in associations. Academic viewpoints, collected from analytical compositions on the subject, as well as master and substantial experience, are used to show the struggle. The openness, within and past accomplice associations, of trust, and other essential social capital resources are determinedly reliant for their adequacy, according to disclosures, on the common learning methods that aid thinking age and affirmation in affiliations.

Customer trust is a comparing behavior after what customers obtain from business connections, according to (Azahari & Nayan, 2020). When business partners understand their

customers' needs and requirements, trust develops. Gaining a client's trust is critical not just for keeping them pleased, but also for staying in the client lifespan. Customer loyalty is defined as an evaluation of how satisfied consumers are with the company's goods, services, and competences. Information about shopper dependability, such as summaries and evaluations, may aid a company partnership in deciding how to develop or modify its items and organizations. Trust and contentment have a huge impact on the growth and survival of a company. Customers are important in business, particularly during times of conflict.

In conclusion, this section has presented a comprehensive review of the literature on the concept of trust in project management. The importance of trust in project success has been widely acknowledged, and its impact on team communication, decision-making, and collaboration has been thoroughly discussed. The literature has also identified various factors that influence the development and maintenance of trust within project teams, such as managing uncertainty, information sharing, meeting team expectations, and building strong interpersonal relationships. Furthermore, this paper has examined different theoretical models and frameworks that have been proposed to explain the complex interactions between trust and project management.

The literature review clearly indicates that trust is a central element in project management. Establishing and sustaining trust is essential for effective communication, decision-making, and collaboration within project teams. The review also highlights that various factors influence how trust develops in project settings, underscoring the importance for managers and practitioners to understand these drivers and adopt appropriate strategies to strengthen trust. Additionally, the analysis identifies gaps in existing scholarship, signaling the need for further research to clarify the relationship between trust and project management.

Going forward, research on trust in project management should focus on developing and validating measurement models that reliably capture levels of trust within project teams. Robust and accurate measurement tools are critical for effective trust management and for assessing its influence on project outcomes. Scholars should also investigate how trust operates in distinct project environments, including cross-functional and multicultural teams. Finally, practical implications require greater attention, particularly the creation of guidelines and tools to support the promotion and management of trust in project teams.

2.4 Trust measurement models

Trust is a complex and multifaceted construct that plays a critical role in interpersonal and organizational relationships. As we have seen in the previous sections, trust is a fundamental aspect of project management and can greatly impact the success of project outcomes. However, measuring trust can be a challenging task, as it is a subjective concept that can vary depending on individual perceptions and experiences. In this section, we will delve deeper into the topic of trust by exploring various trust measurement models proposed in the literature. Specifically, we will examine the trust model of Mayer Davies, the McKnight model of trust, the trust model of Dirks and Ferrin, and Galvin's model of trust. By analyzing these models, we aim to provide insights into the different dimensions and factors that influence trust and how they can be measured in practice.

2.4.1 The trust model of Mayer Davies

Mostafa & Kasamani (2021) created a trust model based on several trustee and trustee characteristics. This customary model of trust includes the trustee's qualities, the trustee's attributes, and the danger implied in the situation, and is one of the frequently utilized conventional models of trust. In their idea, trust in a dyadic work relationship is portrayed as a singular's eagerness to be presented to the demonstrations of the other affected individual dependent on a particular activity that is important to the trustee, paying little heed to the trustee's ability to screen or control the trustee. This depiction centers around the conduct of the trustee and stresses factors that are imperative to a virtual venture climate. The trustee's inclination to trust and the trustee's decisions of the trustee's reliability, as evaluated by the trustee's capacity, genuineness, and consideration as seen by the trustee, impact the sum to which an individual is leaned to trust someone else (Moro et al., 2018). In spite of the fact that genuineness is excluded from this model, it is incorporated among the most predominant rules of dependability by different specialists like McKnight, Cummings, and Chervany (1998). The evaluation of hazard in the situation decides one's trust and resulting confiding in conduct, which depends on one's trust in the concerned gatherings' reliability (i.e., availability to bring about hazard).

The trustee's perspectives on hazard depend on their evaluation of benefits or misfortunes outside of the association with the particular trustee. The degree of trust is contrasted with the degree of saw hazard in a given circumstance. The trustee will partake in confiding in

conduct if the level of trust over the limit of apparent risk; then again, assuming the degree of saw hazard surpasses the degree of trust, the trustee won't participate in any confiding in conduct. Portions of this methodology were assessed in Jarvenpaa, Knoll, and Leidner's (1999) study in overall virtual groups.

Initial Trust Formation in New Organizational Relationships: The McKnight et al. (1998) Model The underlying trust model was set up by McKnight et al. (1998) to clarify why newly framed associations, like transitory virtual groups, have high starting reliability and trust. It is a goal or availability to be determined by on someone else; reliability is a thought that goes before trust (McKnight et al. 1998). As indicated by the customary formative idea of trust, trust flinches low and develops as two individuals associate (Butler Jr, 1991) Indeed, even before individuals have had a chance to convey, solid starting trust has been seen in new up close and personal and virtual expert associations (Butler Jr, 1991).

Conclusions about the teammates are made individually according to McKnight et al. (1998), but rather use their own previous dispositions cognitive processes and institutional expectations, such as social classification and delusions of control to make judgments about the other person's earlydependability. This indicates that rather than the trustee's actions, a trustee forms opinions about others' initial reliability based on elements relating to the context and the trustee himself.

2.4.2 McKnight model of trust

According to (McKnight et al., 2000), development of trust is an attritional process. Acknowledgment hypothesis manages social insights that happen when people endeavor to clarify others' or their own past or future (Hollon & Kriss, 1984). Individuals might fault the other individual or situational factors for their concerns. The reasons may likewise be found inside the trustee himself. A trustee might commit attributional errors or have inclinations that hold intellectual consistency when faced with limitations of restricted data, time, or intention. Earlier prior assumptions (e.g., trust attitude and institutional factors) will inclination one's data handling, bringing about just data that is viable with the assumptions being handled. For instance, an individual with a solid believing demeanor could see others' quiet as a mechanical issue rather than their trickiness. A part with a negative believing demeanor might misjudge a similar peaceful as intentional nonparticipation with respect to

other people. Such attribution botches have been found in research in worldwide virtual groups (Pinsonneault & Caya, 2005).

As indicated by the customary formative idea of trust, trust starts low and develops as two individuals communicate (Butler 1991). Indeed, even before individuals have had a chance to impart, solid beginning trust has been seen in new up close and personal and virtual expert associations (Iacono & Weisband, 1997).

Individuals do not make inferences about teammates, according to McKnight et al. (1998), yet rather utilize their own prior attitudes, institutional assumptions, and intellectual cycles, for example, social arrangement and deceptions of control to make decisions about the other individual's underlying dependability. This demonstrates that rather than the trustee's activities, a trustee structures feelings about others' underlying dependability dependent on components identifying with the specific situation and the trustee himself.

Perspectives might move very little, if by any means, under the present situation. Assuming the trust level of sender has low trust in the other party, the sender is bound to misconstrue the reaction time as no cooperative direct, consequently impacting mentalities and the group's apparent aggregate exhibition.

Jarvenpaa and Leidner's (1999) trust model (Jarvenpaa & Leidner, 1999) adevised and tested the trust model presented in Figure 3-3 for global virtual teams. To describe how trust develops in virtual teams, this model adds the idea of fast trust. To attain task objectives, quick trust is included as a forerunner to an action-and-results-oriented mindset. The action outcomes orientation is a sideways approach to gaining team trust. Trust is said to be based on a member's willingness to trust as well as other members' impressions of their abilities, compassion, and honesty.

2.4.3. The trust model of Dirks and Ferrin (2001)

According (Tulubas & Celep, 2012) the function of trust is dependent on the presence of « situational strength. » In circumstances or conditions with a feeble system, when people need puresupervision or other solid components of how to decipher others’ conduct, trust capacities as an immediate effect. Trust overcomes any issues among individuals and straightforwardly affects results. In settings or settings with genuinely amazing construction, where there is some heading and data to dissect others’ lead, however there is still some

vulnerability regarding what the other party's conduct implies, trust plays a directing capacity. There are a variety of elements that effect attitudes and actions, and trust is the medium by which these reasons are understood. External signals like as norms and regulations « over determine » how others will act in settings (or environments) with substantial structure. There is minimal uncertainty and ambiguity in such settings, and trust plays little part in making meaning of others' actions.

2.4.4. Galvin's (2000) model of trust

Galvin's (2000) model of trust is a theoretical framework that proposes a multidimensional approach to measuring trust in organizations. According to this model, trust consists of four distinct dimensions: integrity, benevolence, competence, and predictability.

Integrity refers to the perception that an organization or individual acts ethically and adheres to moral principles. Benevolence reflects the belief that the organization or individual considers the interests of others and behaves in ways that support them. Competence concerns the perception that the organization or individual possesses the necessary skills and abilities to meet responsibilities and achieve goals. Predictability relates to the perception that behavior remains consistent and reliable over time (Galvin, 2000).

Galvin's trust model posits that these four dimensions are interdependent and jointly shape trust perceptions. The framework suggests that organizations can strengthen trust by cultivating and demonstrating integrity, benevolence, competence, and predictability, thereby establishing a positive and reliable reputation.

(Galvin, 2000) created and experimentally tested a model (Figure 3-4) to investigate the impact of individual trust on virtual team member collaboration. The theory of reasoned action (TRA) (McKnight et al., 1998) was used as the foundation for the model, which included additional elements that were thought to be important to virtual teams. A poll of 56 people working in 18 virtual teams in seven different firms spanning Europe and the United States was conducted for the research. The findings revealed that when a person has a high degree of trusting views and intentions toward other team members, trust-related behaviors are more likely to be shown.

The findings indicated that both personality traits and situational factors influence trust-related beliefs and intentions. The authors' model provided strong support for positive

associations between institution-based trust and an individual's willingness to trust. The relationship between trusting beliefs and trusting intentions was likewise well supported.

As noted earlier, trust is a fundamental component of organizational performance and employee engagement. In project management settings, trust plays a critical role in enabling effective communication, collaboration, and decision-making among team members (Mayer et al., 1995). However, trust in project environments is not automatic and can be shaped by a range of internal and external influences. It is therefore essential to examine how trust functions in project management and to identify mechanisms through which it can be fostered and sustained to support project success.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

Chapter Three of the thesis provides a detailed explanation of the research design and methods used in the study. The chapter outlines the multi-methods approach that was adopted, which involved a combination of deductive rationale, positivistic approach, nomothetic, and cross-sectional study. The approach was chosen to help understand the complex phenomenon of Compelled-Based Trust regarding Project Management, which has been extensively discussed in the literature by Dias (2018; 2016).

The chapter provides a detailed account of each component of the research design. Section 3.2 outlines the research philosophy and the quantitative approach adopted in the study. Section 3.3 presents the study design, including the research questions, hypotheses, and variables considered. Section 3.4 explains the primary data collection procedures, while Section 3.5 addresses the collection of secondary data.

Section 3.6 describes the data collection instruments used, and Section 3.7 details the analytical procedures applied to examine the dataset. Section 3.8 discusses issues related to access, ethics, and informed consent incorporated into the study. Section 3.9 sets out the triangulation process used to integrate data from multiple sources, ensuring the validity and reliability of the findings. Finally, Section 3.10 summarizes the main points of the chapter and provides an overview of its structure.

Overall, the chapter offers a comprehensive and rigorous explanation of the research design and methodological procedures employed, clarifying the structured approach taken in the investigation. The use of a multi-methods strategy, combined with an extensive literature review, provides a robust foundation for examining the complex phenomenon of Compelled-Based Trust in Project Management, with important implications for project management efficiency in Brazilian organizations.

3.2 Research philosophy and quantitative research

A quantitative research approach was selected for this study based on the positivistic research philosophy, which assumes that reality can be observed and measured (Saunders, Lewis, & Thornhill, 2023). This approach was chosen because it allows for the quantification of the phenomenon of trust in project management, rather than relying solely on interpretation. As stated by Creswell (2014), "quantitative research is a method for testing and measuring relationships between variables, and can provide an objective and precise understanding of the phenomenon under investigation."

In addition, the choice of a quantitative approach was also driven by the assumption that Brazilian companies are facing a new dynamics in the macro system, dealing with various challenges regarding effective project management and performance. As noted by Sekaran and Bougie (2016), quantitative research is particularly useful when dealing with large sample sizes, which is often necessary when studying phenomena in complex organizations. The use of quantitative methods can help identify patterns and trends, and provide reliable and valid results that can inform decision-making processes.

Another advantage of a quantitative research approach is the ability to generalize findings to larger populations. According to Babbie (2017), quantitative research is often used to establish cause-and-effect relationships between variables, and can provide insights that are applicable to broader populations. This is particularly relevant for this study, which aims to investigate the impact of trust on project management efficiency in Brazilian organizations.

Finally, quantitative research is known for its ability to provide objective and precise data that can be analyzed using statistical methods. This can help to minimize bias and subjectivity in the research process, and increase the validity and reliability of the findings. As noted by Denzin and Lincoln (2011), quantitative research can provide "rigorous, systematic, and precise data that can be subjected to statistical analysis and generalization.". The selection of a quantitative research approach for this study was based on the positivistic research philosophy, the need to quantify the phenomenon of trust in project management, the complexity of the macro system in Brazilian organizations, the ability to generalize findings to larger populations, and the objective and precise data that can be obtained through statistical analysis.

There are various approaches to research, and each has its advantages and disadvantages. Although the quantitative research approach was chosen for this study, other research methods could have been used to explore the phenomenon of Compelled-Based Trust regarding Project Management in Brazilian organizations. One alternative approach is the

qualitative research method, which involves collecting non-numerical data to gain an in-depth understanding of the research problem. Qualitative research can be useful in exploring complex issues, such as trust, where the experiences and perspectives of the participants need to be understood in detail. However, one of the drawbacks of qualitative research is that the findings may not be generalizable to larger populations, as the sample size is often smaller.

Another methodological option would be a mixed-methods approach, which integrates both qualitative and quantitative techniques. This approach allows for a more comprehensive understanding of the research problem by triangulating data from multiple sources. It also helps offset the limitations inherent to each method, such as the limited generalizability of qualitative studies and the reduced depth of quantitative analyses. Nevertheless, mixed-methods research is more time-intensive and costly because it requires the collection and analysis of both qualitative and quantitative datasets.

A third alternative is the case study method, which involves an in-depth examination of a single case or a small number of cases. Case studies are valuable for exploring complex phenomena in real-world contexts and for understanding how a given phenomenon functions within a specific setting. However, they offer limited generalizability, and the results may not readily apply to other contexts. Additionally, case studies tend to be time-consuming and resource-intensive due to the need for detailed, context-specific analysis.

Regarding methodological choices, it was performed a cross-sectional study (Kalat, 2011, p.159) and nomothetic approach, which "seeks general laws about various aspects of the personality" (Kalat, 2011, p.514), in opposition to the idiographic approach.

SEM is a multivariate statistical technique used to examine direct and indirect relationships between one or more independent variables and one or more dependent variables. SEM is also termed causal modeling, causal analysis, simultaneous equation modeling, analysis of covariance (ANCOVA) structures, path analysis, dependence analysis, or confirmatory factor analysis (CFA) (Kline, 1998). Theoretically, a structural equation model comprises two types of models, a measurement model and a structural model. The measurement model is concerned with how well the variables measure the latent variables, addressing reliability and validity issues. The structural model is concerned with modeling the relationships between the latent variables by describing the amount of explained and unexplained variance, which is akin to a system of simultaneous regression models (Molenaar et al., 2000). Reliability and validity are important aspects of a quantitative research inquiry. The reliability of constructs permits measurement of a set of factors that are internally consistent in their measurement and,

therefore, are repeatable for other researchers to measure (Hair et al., 2006). Cronbach's alpha is a measure of the intercorrelation and reliability of items. It measures how well a set of items measures a single unidimensional latent construct. Theoretically, alpha varies from zero to 1, because it is the ratio of two variances. Higher values of alpha are more desirable. A Cronbach's alpha coefficient of at least 0.70 is normally considered to indicate a reliable set of items (De Vaus, 2002).

George and Mallery (2003) provide the following rules of thumb: alpha >0.90 is excellent; alpha >0.80 is good; alpha >0.70 is acceptable; alpha >0.60 is questionable; alpha >0.50 is poor; and alpha >0.50 is unacceptable. Although high reliability is a necessary condition for reliable constructs, it is not a sufficient condition without validity. The average variances extracted measures the variance captured by the indicators relative to measurement error, and it should be greater than 0.50 to justify using a construct (Barclay et al., 1995). However, composite reliability is the reliability of a summated scale, and should be above the 0.70 threshold.

3.3 The study design

This Section presents the quantitative research structure and design used.

3.3.1- The multi-methods approach

The primary data were collected through a survey based on an electronic questionnaire through Google Forms from March to September 2020. The invitations were sent to 1,000 candidates from WhatsApp groups of Brazilian Startups and companies, including the LinkedIn database of project managers and executives.

The number of valid respondents was N= 253. Therefore, 25.3 percent of the response rate. The data set was statistically analyzed through the IBM SPSS version 23 and SmartPLS 3.2. Nevertheless, the disadvantages of the methods used are quantitative, non-probabilistic, where the responses apply to the sample, being an empirical study.

According to Hair et al. (2019), Structural Equation Modeling (SEM) is an advanced statistical technique that allows the analysis of causal relationships between variables in a theoretical model. This technique is widely used in social sciences, psychology, business, education, and other areas to test hypotheses about the relationships between variables.

The process begins with the formulation of a theoretical model, which is a graphical representation of the relationships between the variables of interest. According to Kline (2016), data are then collected for the variables, and the analysis is performed using sophisticated statistical techniques to estimate the parameters of the model. The analysis allows testing the validity of the theoretical model and examining the relationships between the variables.

SEM allows the analysis of complex models with many variables and relationships between them. Additionally, the technique allows the inclusion of latent variables, which cannot be directly measured but are inferred from other observable variables. As stated by Byrne (2016), the theoretical model should include exogenous (causal) and endogenous (caused) variables. Exogenous variables are independent variables in a theoretical model that are considered causes of variations in dependent variables, also known as endogenous variables.

Exogenous variables are important in SEM because they help explain the relationships between dependent and independent variables. According to Schumacker and Lomax (2016), the theoretical model in SEM includes exogenous variables to better understand how they affect endogenous variables and to examine hypotheses about the relationships between them. An example of an exogenous variable would be an individual's level of education in an analysis of salaries, as pointed out by Joreskog and Sorbom (2015).

After formulating the theoretical model, data for the variables included in the model should be collected using appropriate and precise scales, as recommended by Brown (2015). Then, a software for analysis should be selected. According to Hair et al. (2019), there are several SEM analysis software available in the market, such as AMOS, LISREL, Mplus, among others. In the present study, Smart PLS version 3.3 software was used.

In this software, the theoretical analysis model was specified, which involved the creation of a path diagram that describes the relationships between the variables. In addition, hypotheses about the relationships between the variables were specified, as suggested by Hair et al. (2019).

Before estimating the parameters of the model, it is important to check the adequacy of the model to the data. This can be done through various statistics, such as the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). After checking the adequacy of the model, it is necessary to estimate the parameters

of the model using estimation techniques, such as Ordinary Least Squares (OLS) or Maximum Likelihood (ML), as explained by Byrne (2016).

After estimating the parameters of the model, it is important to evaluate the results. This involves the analysis of path coefficients, the R-squared of each endogenous variable, and the statistical significance of the parameters. Finally, interpreting the results involves examining the patterns of relationship between the variables, as discussed by Kline (2016). This can help confirm or refute the initial hypotheses about the relationships between the variables and help develop new hypotheses and theories.

3.4 Chapter Summary

Chapter 3 of the thesis provides a detailed explanation of the research methodology used in the study, including the research design, research philosophy, and the quantitative approach adopted. A multi-methods approach was chosen, involving deductive reasoning, positivistic approach, nomothetic, and cross-sectional study, to understand the complex phenomenon of trust in project management.

A quantitative research approach was selected based on the positivistic research philosophy, which assumes that reality can be observed and measured. The use of a quantitative approach was motivated by the need to deal with large samples and establish cause-and-effect relationships between variables.

The study was conducted as a cross-sectional study and nomothetic approach, which seeks general laws about various aspects of personality. Smart PLS 3.3 software was used for statistical analysis of primary data collected through electronic questionnaires. The validity and reliability of the measures were evaluated using Cronbach's alpha and average variance extracted.

In summary, the chapter provides a detailed explanation of the research design and methodology, including the process of primary and secondary data collection, approaches to data analysis, ethical considerations, and a summary of the chapter's key points.

CHAPTER 4 : DATA ANALYSIS AND RESULTS

4.1 Introduction

Chapter Four is the culmination of the research conducted, as it presents the results obtained from the data collected and analyzed. This chapter aims to provide a detailed analysis of the research findings, including statistical results, tables, and charts that illustrate the key aspects of the study. The focus is on the interpretation and discussion of the results, providing insights into the impact of Compelled-Based Trust on Project Management in Brazilian organizations.

Section 4.4 of the chapter presents the results obtained from the survey, which was conducted to investigate the phenomenon of Compelled-Based Trust regarding Project Management.

The data collected from participants were analyzed using statistical techniques such as Structural Equation Modeling (SEM) in SmartPLS 3.2. This section presents the study's main results, including the relationships among the variables, the reliability and validity of the constructs, and the hypotheses tested.

In addition to reporting the results, Section 4.5 expands the analysis by moving beyond descriptive statistics and examining the relationships among variables in greater detail. It interprets the key findings, outlines their implications for project management within Brazilian organizations, and identifies avenues for future research. The section also offers recommendations aimed at improving project management practices in Brazilian companies.

Chapter Four's summary, Section 4.6, provides a brief overview of the chapter's contents and the key findings of the study. The section serves as a reminder of the critical points discussed in the chapter, ensuring that the reader grasps the research's essence and its contribution to the academic field. The section concludes with a note on the importance of the research and its potential implications for project management practices in Brazilian organizations.

The chapter's results can contribute to improving project management practices in Brazilian organizations, and the research findings have implications for other contexts as well. This chapter is an essential part of the thesis, and its findings set the stage for the conclusions and recommendations presented in the following chapter.

4.2 Data Analysis and Results

First, the study's sample, the data collection instrument, the structural model, and the theoretical model will be evaluated (see Appendix). Thus, this unit is separated into four blocks. According to the data collection instrument and the primary model, the sample is considered, then the adjusted model. Finally, the real effect of the Compelled Trust (TR) construct on the model is disclosed.

4.2.1. Sample and Descriptive Statistics

To ensure the validity of the study, specific inclusion criteria were established. The individuals included in the research were selected based on their relevance to the topic under study, as previously mentioned in this study, including professionals working in startups in Brazil, as well as project managers and executives from the LinkedIn database. This selection was made to ensure that the sample adequately represented the research context.

We collected data from the study from March to September, 2020. Thus, employing an electrical form with 32 models indicating and seven questions related to the sample profile. A total of 151 valid answers were collected out from 253 questionnaires answered. Among the most common failures of the respondents is the full completion of the questionnaires answered.

When evaluating the sample composition, it is observed that 44% of the respondents hold a lato sensu postgraduate degree (specialization), 26% hold a master’s degree, 16% have an undergraduate degree, and 14% hold a doctoral degree. Accordingly, 84% of the sample has academic training at the postgraduate level, either stricto sensu or lato sensu, indicating a group with advanced academic qualifications. This distribution is illustrated in Figure 01.

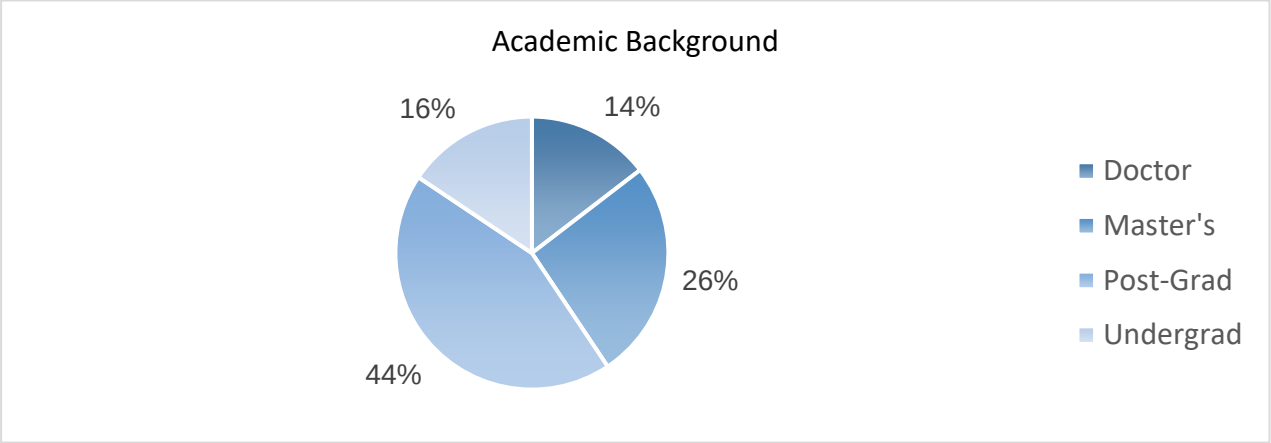

Figure 1 Respondents' academic background

When evaluating the level of project management certification, it is observed that 61% of the sample does not hold any project management certification, while 39% is certified. This distribution is illustrated in Figure 02.

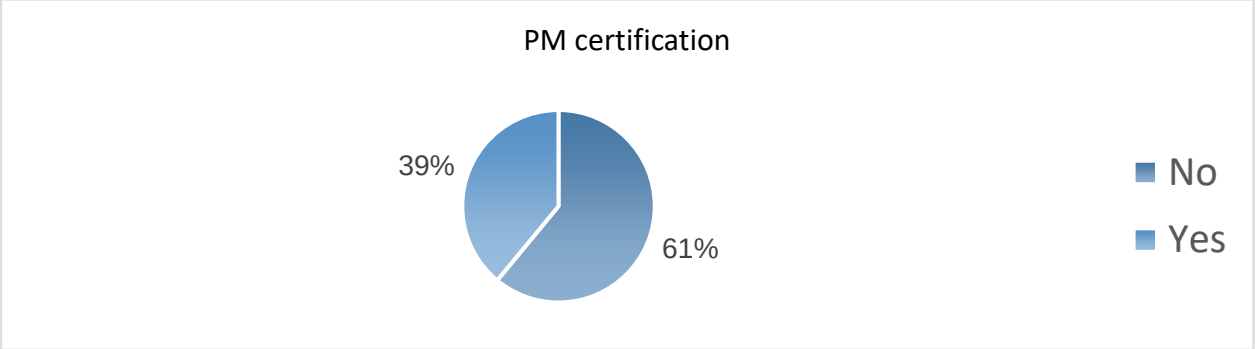

Figure 2 Respondents' Project Management Certification

Figure 03 presents the professional experience of the research respondents, measured in years. The data indicate that 34% of the sample has more than 20 years of professional experience, followed by 19% with between 11 and 20 years, and 13% with 5 to 10 years of experience. Additionally, 14% of the respondents report between 3 and 5 years of experience, while 20% have up to 2 years of professional experience. This distribution demonstrates the predominance of respondents with extensive professional trajectories, alongside the presence of participants at earlier stages of their careers.

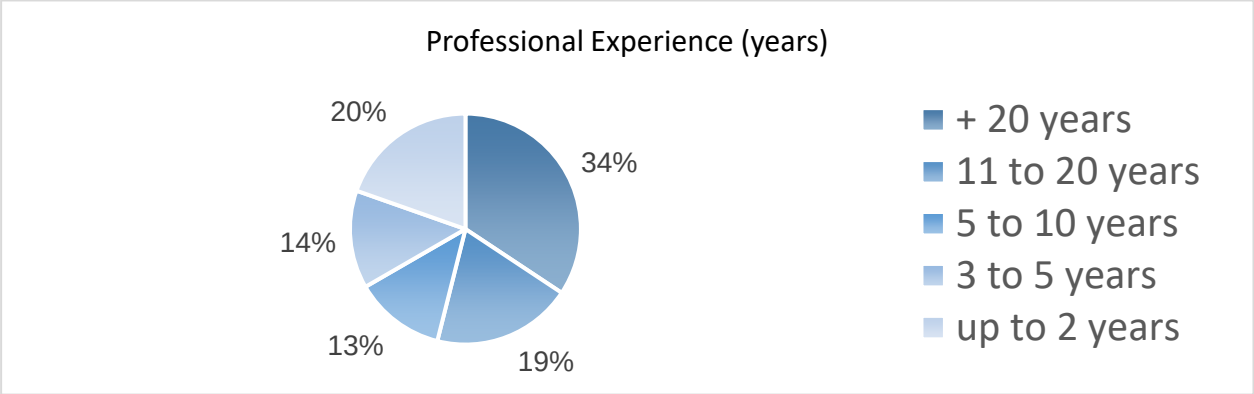

Figure 3 Professional experience

Next, Figure 04 illustrates the sample age distribution, as follows:

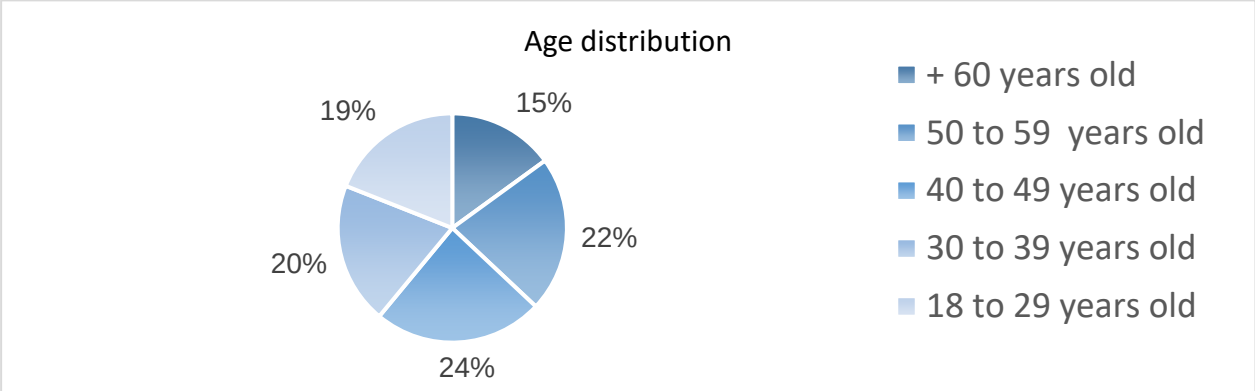

Figure 4 Age distribution

Figure 04 illustrates the age distribution of the research sample. The results show that 24% of the respondents are between 40 and 49 years old, 22% are between 50 and 59 years old, and 15% are 60 years old or older. In contrast, 20% of the participants are between 30 and 39 years old, while 19% are between 18 and 29 years old. Accordingly, 61% of the sample is over 40 years of age, whereas 39% is under 40. This distribution indicates a predominance of respondents in more advanced age groups. In the subsequent section, the results of the descriptive analysis are presented.

4.2.2. Structural Assessment

Due to the results presented in the previous model, items that presented low factorial load related to their constructs were removed from the sample, thus items that did not present statistical significance. Thus, observations TR5, TR6, TR7, UTE1, UTE3, UTE5, POB1, PCB3,

PCB5, PCB6, PCB7 and SME1 were removed from the proposed model, thus the adjusted model is presented as shown in Figure 05:

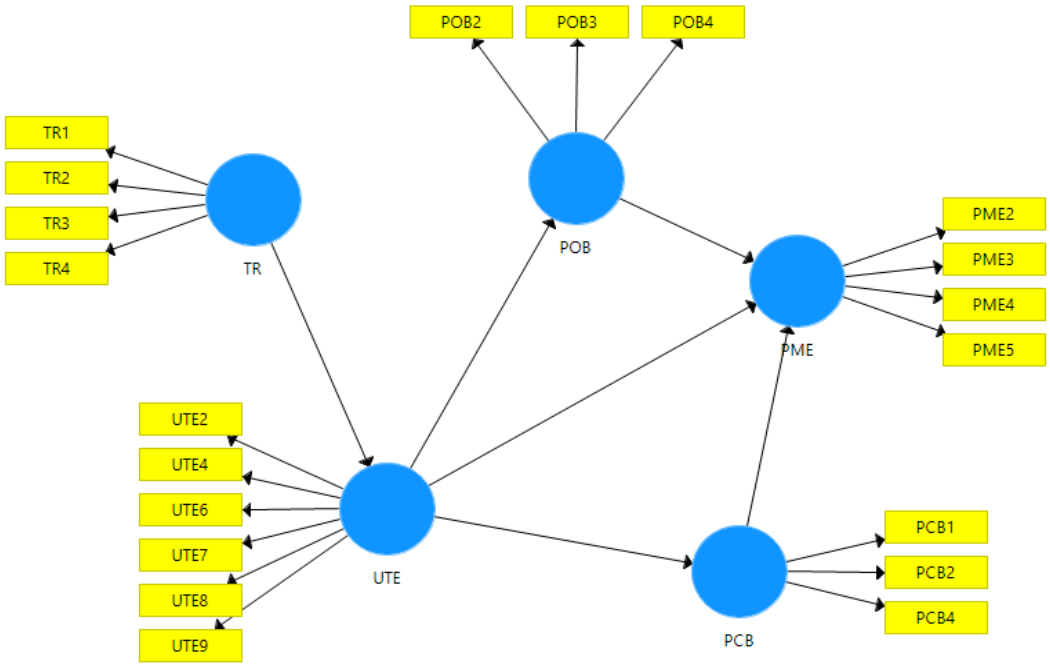

Figure 5 Adjusted Model

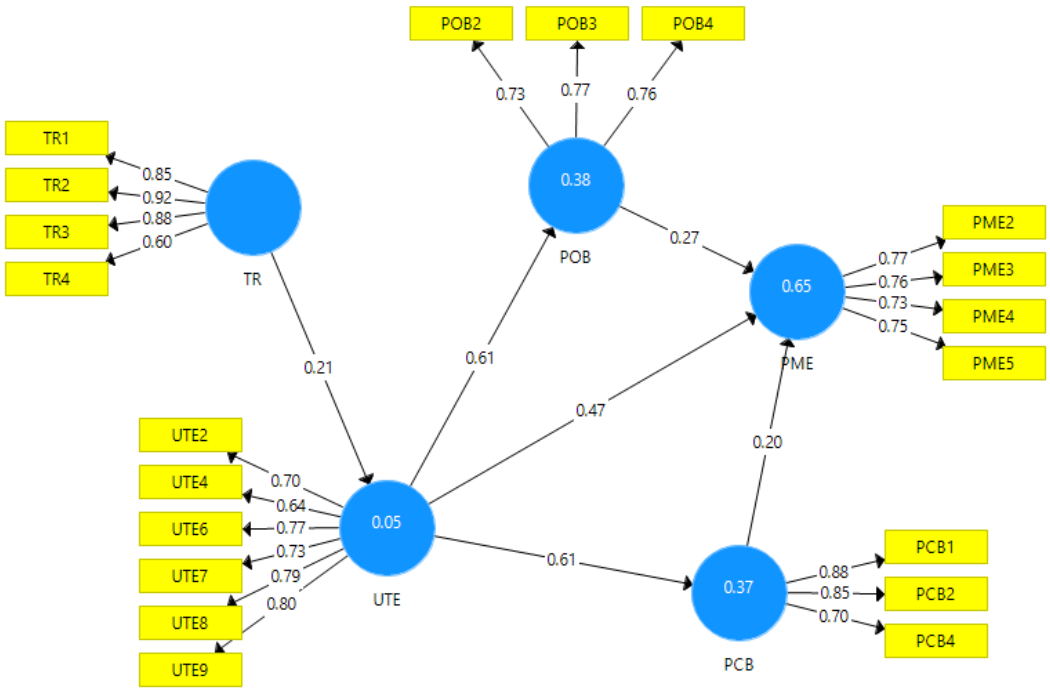

Figure 6 Adjusted Model with factor loadings

A very acceptable factorial load can be observed between the constructs' relationships and between the items and their respective constructs. Thus, we will continue to evaluate the model.

Thus, the Adjusted Model works with the same hypotheses as to the proposed model.

When observing the direction of the factorial forces, it can be observed that there is no opposite direction of the hypotheses. Thus, it is not possible to reject any of the hypotheses for now.

The Bootstrap method was used to verify the significance at the level of 5 percent, wave the hypotheses for the technique are:

H_0: coefficient>0.05

H_1: coefficient<0.05

Figure 7 below shows the results of the theoretical model significance test through P-Value.

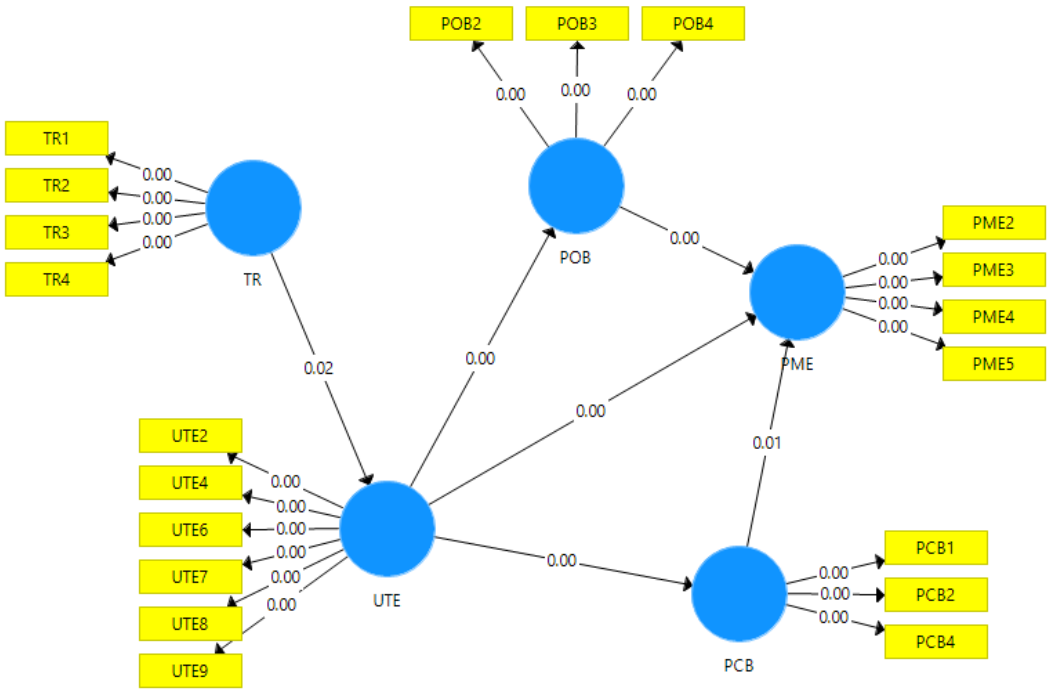

Figure 7 P-Value test

The adjusted model presented a significant result for all relations, i.e., the p-Value product is less than 0.05 in all items. Thus, we can assume that with the observed variables' adjustments, the non-significance existing between the CONSTRUCT TR and UTE was corrected.

The same was concerning the observations of RT that had not presented meaning previously. Now, with the adjustment in the model, the significance was reached.

For the validation of the measurement model, internal consistency and convergent validity were used, using composite reliability and extracted mean-variance (AVE), respectively. Subsequently, they evaluated discriminant validity, using the Crossroad method and HTMT, following Henseler, Ringle, and Sinkovics (2009) and applied it in the proposed model.

Thus, the validation of the model can be continued without questioning its statistical significance, as shown in Table 4, as follows:

Table 4 - Observations of the Adjusted Model

Items	Affirmative	Mean	Median	Min	Max	Standard Deviation	Observeds used	P-Value
PCB1	Maintaining good relationships with subcontractors can positively affect the overall performance of the contractor.	4.152	4.000	1.000	5.000	0.904	151	0.000
PCB2	Good relationships with previous clients can increase cooperation and trust between owners and contractors, and create stability in contractor behavior.	4.026	4.000	1.000	5.000	0.913	151	0.000
PCB4	Frequent material replacement can cause claims, fluctuations in product costs, and higher transaction costs. Claims can be resolved in a friendly manner, but some may degenerate into unnecessary conflicts and disputes.	4.179	4.000	1.000	5.000	0.870	151	0.000
SME2	Transaction costs are inevitably incurred in the decision-making process, but proper decision-making reduces the amount of time spent on unexpected problems, minimizes divergences, and helps keep a project on schedule and on budget.	4.272	4.000	2.000	5.000	0.763	151	0.000
SME3	Effective and efficient communication will ensure that all team members are aware of the decisions, thus leaving no room for uncertainty in terms of individual responsibilities and objectives.	4.377	4.000	1.000	5.000	0.735	151	0.000
SME4	The potentially unpleasant consequences of conflict often include filing claims that sometimes end up in disputes, which in turn reduce the efficiency of project management.	4.079	4.000	1.000	5.000	0.953	151	0.000
SME5	The existence of technical competence, i.e. the appropriate qualifications and experience, is the driving room for quick decisions, smooth operations and ease of communication.	4.252	4.000	1.000	5.000	0.900	151	0.000
POB2	Organizational learning can be effective if lessons learned from completed projects are kept in organizational memory and used in future projects, thereby promoting stability in owner behavior.	4.424	5.000	2.000	5.000	0.750	151	0.000
POB3	Punctuality of payments by the owner eliminates uncertainty and may be favorable to the lower number of complaints by the contractor, and can minimize the frequency and magnitude of disputes.	4.040	4.000	1.000	5.000	0.989	151	0.000
POB4	Transferring any risks to the contractor or withretaining any risks may cause an increase in the owner's costs.	3.894	4.000	1.000	5.000	0.964	151	0.000
TR1	There are cases where, even without knowing the other party, you have to trust her.	3.649	4.000	1.000	5.000	1.037	151	0.000
TR2	Trust can arise in unexpected circumstances, even with strangers.	3.808	4.000	1.000	5.000	1.090	151	0.000
TR3	If the circumstances require, I can trust a complete stranger.	3.437	4.000	1.000	5.000	1.148	151	0.000
TR4	You can trust a stranger in extreme cases.	3.159	3.000	1.000	5.000	1.235	151	0.001
UTE2	A poorly defined scope, as well as incomplete plans and specifications can increase the number of post-contract changes by owners, thus increasing uncertainty in owner behavior.	4.589	5.000	2.000	5.000	0.774	151	0.000
UTE4	Competent contractors can operate efficiently and can promote a problem-free environment, thus contributing to a more stable environment.	4.205	4.000	2.000	5.000	0.731	151	0.000
UTE6	When the scope of a project is not well defined, initial drawings and specifications are likely to change, leading to many complaints and change requests.	4.490	5.000	1.000	5.000	0.845	151	0.000
UTE7	Incomplete plans and specifications can increase the number of disagreements and disputes.	4.510	5.000	1.000	5.000	0.788	151	0.000
UTE8	Disabled bid agents can create a less competitive procurement process.	4.364	5.000	2.000	5.000	0.759	151	0.000
UTE9	Better integration, collaboration, and communication in the interface between desing and construction can reduce uncertainty in the transaction environment.	4.358	5.000	2.000	5.000	0.808	151	0.000

Table 5 presents the results of internal consistency and convergent validity of the model, as follows:

Table 5 Results of internal consistency and convergent validity of the model

	Cronbach's Alpha	rho_A	Composite Reliability	Average Extracted Variance (AVE)
Pcb	0.743	0.734	0.854	0.663
PME	0.748	0.753	0.840	0.568
POB	0.659	0.637	0.796	0.565
Tr	0.856	0.992	0.890	0.674
Ute	0.835	0.838	0.880	0.551

Table 5 presents the reliability and validity indicators of the measurement model. Composite reliability values range from 0.796 to 0.890, remaining within the recommended interval between 0.70 and 0.95 suggested by Diamantopoulos et al. (2012), which indicates satisfactory internal consistency of the constructs.

Regarding internal consistency, Cronbach's Alpha values vary between 0.659 and 0.856, exceeding the minimum acceptable threshold of 0.60, which is considered adequate for exploratory and applied research contexts. Additionally, rho_A values range from 0.637 to 0.992. Although most constructs present rho_A values within the recommended range, the value observed for the construct *Tr* slightly exceeds the upper threshold of 0.95, suggesting a potential redundancy among its indicators and warranting further examination.

Convergent validity was assessed using the Average Variance Extracted (AVE). All constructs present AVE values above the minimum criterion of 0.50, indicating that each construct explains more than 50% of the variance of its indicators.

After assessing internal consistency and convergent validity, discriminant validity was evaluated using the cross-loadings criterion, following the procedure proposed by Henseler, Ringle, and Sinkovics (2009). This approach examines whether the indicators load more strongly on their associated constructs than on other constructs in the model.

Therefore, to be considered valid, the item must present a higher load factor in its respective construct than in any other construct, as presented in Table 6, as follows:

Table 6 – Higher load factor in its respective construct than in any other construct

	Pcb	PME	POB	Tr
PCB1	0.882	0.482	0.394	-0.059
PCB2	0.847	0.460	0.317	-0.134
PCB4	0.704	0.507	0.345	0.227
SME2	0.463	0.773	0.571	0.217
SME3	0.468	0.758	0.568	0.097

Table 7 depicts the model respects the cross-load criterion, indicating that it is acceptable. The Heterotrait-monotrait ratio (HTMT) test of the correlations (Voorhees et al., 2016), to continue the discriminant analysis,

To be considered valid by HTMT, the result must be less than 0.90. Values up to 0.95 are considered acceptable in constructs that have similar conceptual constructs or of the same origin, according to Henseler et al. (2015). Table 7, therefore, presents the HTMT as follows:

Table 7 - Discriminant Validity - HTMT

	Pcb	**Smes**	**POB**	**Tr**
Smes	0.795			
POB	0.538	0.796		
Tr	0.243	0.183	0.119	
Ute	0.740	0.938	0.738	0.216

	Pcb	Smes	POB	Tr
Smes	0.795			
POB	0.538	0.796		
Tr	0.243	0.183	0.119	
Ute	0.740	0.938	0.738	0.216

Observe in Table 7, the constructs present discriminant validity within the expected, and thus possible to continue the evaluation.

4.2.3 Measure Assessment

The structural model is composed of basically the following stages, the verification of collinearities by VIF value, the confirmation of the coefficient of determination (R2), the F value, and the P-value for significance and the residuals.

The first stage of validation of the structural model is the verification of collinearities. For this, it is used the VIF (variance inflation value). To evaluate the VIF, Mason & Perreault (1991) and Becker et al. (2015) suggest lower results 5, with the ideal lower results 3. As can be seen in table 8, as follows:

Table 8 -VIF

VAR	VIF
PCB1	4.849
PCB2	4.646
PCB4	1.125
PME2	1.381
PME3	1.412
PME4	1.447
PME5	1.551
POB2	1.022

POB3	4.971
POB4	4.955
TR1	2.179
TR2	2.159
TR3	2.740
TR4	1.567
UTE2	1.638
UTE4	1.354
UTE6	2.099
UTE7	1.976
UTE8	4.426
UTE9	4.599

Observe in Table 8 the VIF of the Model shows that the result for constructs and their relationships is considered acceptable, in the majority, frequently presenting results below 5. Thus, being given the questions problems with Collinearities can be examined the R2 of endogenous constructs, as illustrated in Table 9, as follows:

Table 9 - R2 and R2 adjusted

	R^2 Square	R^2 Adjusted
PCB	0.367	0.363
PME	0.647	0.640
POB	0.377	0.373
UTE	0.046	0.039

A coefficient of determination for the SMEs greater than 60 percent can be observed, which is quite interesting for the model, according to the parameters of Hair et al. (2012). Therefore, the model has explanatory power from moderate to high.

After checking the coefficient of termination (R2), observing the path coefficient's size is essential to inform the model's predictive power. Thus, one can observe the results of the path coefficients in table 10. These results present a strong influence of the UTE construct on POB and PCB constructs, in addition to a moderate impact directly on SMEs, as illustrated in the following:

Table 10 - Path Coefficients

	PCB	PME	POB	TR	UTE
PCB		0.203			
PME					
POB		0.267			
TR					0.214
UTE	0.606	0.467	0.614		

The residue presented by the sample was verified to complete the study of the theoretical model. For this purpose, the SRMR (the standardized root of the average residue) is used. The expected value for the MRS should always be very close to zero, with any very high value indicating a lot of rubble in the sample, which shows severe measurement problems. For the model, an SRMR of 0 was found. 11, considered reasonably appropriate, however, not ideal. This volume of residues can be explained by the sample size, which tends to the propositions of pls models, according to HAIR et al. (2012). However, it is considered small by several statistical parameters.

4.3 Chapter Summary

Chapter 4 of this thesis has presented a comprehensive analysis of the empirical data collected to investigate the role of coercion in the construction of trust in Brazilian project management. This chapter has discussed the research questions and hypotheses of the study, the

methodology adopted, the results obtained, and the limitations and implications of the research.

Overall, the findings suggest that Compelled-Based Trust negatively affects Project Management within Brazilian organizations. The data analysis shows that coercive mechanisms restrict the development of trust and diminish commitment and collaboration among project team members. These results emphasize the importance of fostering trust relationships grounded in factors such as mutual respect and transparency to support effective project execution.

The limitations of the study must also be acknowledged. The sample consisted solely of Brazilian organizations, which may constrain the generalizability of the findings to other cultural and organizational settings. Although appropriate for quantitative analysis, the methodological approach does not allow for an in-depth exploration of participants' experiences and perceptions. Furthermore, the study examined coercion as the primary factor inhibiting trust, even though other elements may also contribute to reduced trust in project environments.

Despite these limitations, this study contributes to the literature by providing insights into the negative effects of Compelled-Based Trust on Project Management in Brazilian organizations. The findings suggest that project managers need to be aware of the negative effects of coercion and should focus on building relationships of trust based on other factors to ensure project success. Future research could replicate this study in different cultural and organizational contexts and explore the influence of other factors on the construction of trust in projects.

CHAPTER 5: DISCUSSION

In the discussion chapter, we will address hypotheses H1, H2, H3, H4, H5, and H6. These hypotheses explore the relationship between Transaction Environment Uncertainty (UTE), Contractor Behavior (PCB), Predictability of Owner Behavior (POB), Project Management Efficiency (PME), and Compelled Trust (TR). We will analyze the results obtained for each of these hypotheses and discuss their implications for project management in Brazilian organizations.

5.7.1 H1 - UTE positively influences PME supported (p-value (0,00) < 0,05)

As the hypothesis that Transaction Environment Uncertainty (UTE) positively influences Project Management Efficiency (PME) has been confirmed, this can have several important consequences for organizations and for project management in general.

First, the results indicate that organizations must recognize the impact of Task Environment Uncertainty (UTE) on Project Management Efficiency (PME) and invest in strategies and resources to manage uncertainty appropriately. This includes adopting risk management tools and techniques, improving forecasting and planning capabilities, and strengthening project managers' skills and competencies to operate effectively under high-uncertainty conditions.

Furthermore, the finding that UTE can positively influence PME suggests that organizations may benefit from adopting a more proactive and flexible approach to project management. Rather than avoiding projects characterized by high uncertainty, organizations can choose to engage with them, leveraging the learning and innovation opportunities that uncertain environments may offer.

Finally, the hypothesis that the UTE positively influences the PME can lead to a greater appreciation and recognition of the role of project management in situations of high uncertainty. Project managers who can effectively deal with environmental uncertainty can be seen as valuable resources for organizations, capable of generating positive results in challenging conditions.

5.7.2 H2 - UTE positively influences PCB supported (p-value (0,00) < 0,05)

As the hypothesis that Transaction Environment Uncertainty (UTE) positively influences Contractor Behavior (PCB) has been confirmed, this can have several important consequences for organizations and for contract management in general.

Firstly, this means that organizations must be aware of the impact of UTE on the PCB and therefore must adopt strategies and practices to manage the uncertainty of the environment appropriately. This may include implementing monitoring and control mechanisms, using more flexible and adaptable contracts, and developing the skills and competencies of contract managers to deal with situations of high uncertainty.

In addition, the finding that the UTE can positively influence the PCB can lead organizations to adopt a more collaborative posture and partnership with their contractors. Instead of adopting a defensive or adversarial posture in relation to contractors, organizations can seek to establish relationships of trust and cooperation that allow them to deal with the uncertainty of the environment more effectively.

Finally, the hypothesis that the UTE positively influences the PCB can lead to a greater appreciation and recognition of the role of contract management in situations of high uncertainty. Contract managers who can effectively deal with the uncertainty of the environment can be seen as valuable resources for organizations, able to generate positive results in challenging conditions. This can lead to a greater professionalization of the contract management area and a greater demand for professionals specialized in this area.

5.7.3 H3 - UTE positively influences POB supported (p-value (0,00) < 0,05)

As the hypothesis that Transaction Environment Uncertainty (UTE) positively influences Contractor Behavior Predictability (POB) has been confirmed, this can have several important consequences for organizations and for contract management in general.

Firstly, this means that organizations must be aware of the impact of UTE on POB and therefore must adopt strategies and practices to manage the uncertainty of the environment

appropriately. This may include using more detailed and specific contracts, implementing more rigorous monitoring and control mechanisms, and adopting clearer and more transparent communication processes.

5.7.4 H4 - PCB positively influences PME supported (p-value (0,01) < 0,05)

As the hypothesis that Contractor Behavior (PCB) positively influences Project Management Efficiency (PME) has been confirmed, this can have several important consequences for organizations and for project management in general.

First, the findings indicate that effective collaboration and communication between contractors and project managers are essential for project success. Project managers need to work closely with contractors to understand their needs and expectations, while contractors must provide information and resources in a timely and appropriate manner to enable managers to perform their duties efficiently.

Additionally, the evidence that Contractor Bargaining Power (PCB) can positively affect Project Management Efficiency (PME) suggests that organizations may benefit from adopting a more collaborative and partnership-oriented stance toward contractors. Rather than maintaining defensive or adversarial positions, organizations can foster relationships grounded in trust and cooperation, enabling more effective responses to project management challenges.

Finally, the hypothesis that PCB positively influences PME reinforces the strategic importance of contractors in promoting project efficiency. Contractors who supply information and resources promptly and appropriately, and who collaborate closely with project managers, can be regarded as valuable organizational assets capable of generating positive outcomes in complex and demanding projects. This dynamic may encourage further professionalization in the project management field and increase the demand for specialized professionals.

5.7.5 H5 - POB positively influences PME supported (p-value (0,00) < 0,05)

If the hypothesis that the Predictability of Contractor Behavior (POB) positively influences Project Management Efficiency (PME) is confirmed, this could have several important consequences for organizations and for project management in general.

Firstly, this means that organizations must dedicate efforts to establishing clear and well-defined contracts with their contractors, which clearly establish expectations, responsibilities and deadlines for both parties. This will allow project managers to work more efficiently as they will have a clear understanding of what is expected of contractors.

In addition, the finding that the POB can positively influence the SME can lead organizations to adopt a more selective posture in choosing their contractors, giving preference to those who have a history of predictable and reliable behavior. This can help reduce the uncertainty and risks associated with project management, increasing the chances of success.

Finally, the hypothesis that the POB positively influences the SME may lead to a greater emphasis on risk management and performance evaluation of contractors. Organizations can seek to implement monitoring and evaluation systems that allow detecting any deviations or problems in the behavior of contractors, and taking preventive or corrective measures to guarantee the efficiency of project management.

In summary, confirmation of the hypothesis that POB positively influences SMEs can lead to greater professionalization and efficiency in project management, with more selective organizations in choosing their contractors, clearer and well-defined contracts, and monitoring and more effective assessment.

5.7.6 TR positively influences UTE supported p-value (0,02) < 0,05)

As the hypothesis that Compelled Trust (TR) positively influences Transaction Environment Uncertainty (UTE) was supported, this can have several important consequences for organizations and for project management in general.

The hypothesis that compelled trust positively influences transaction environment uncertainty has important implications for organizational and project management practices. This result suggests that situations where forced trust is prevalent can increase the level of uncertainty in transactional environments, which can have negative effects on the efficiency and effectiveness of market exchange. Organizations and project managers must be aware of

these implications and take measures to manage compelled trust and reduce its negative effects.

One of the primary consequences of compelled trust is the increase in transaction costs associated with market exchanges. When one party is forced to trust another due to limited alternatives, it often incurs additional resources in monitoring, negotiating, and enforcing contractual obligations. These elevated costs reduce the efficiency and effectiveness of transactions. Consequently, organizations and project managers must identify contexts in which compelled trust is likely to occur and adopt strategies to mitigate its adverse effects.

Another significant consequence of compelled trust is the heightened risk of opportunistic behavior. Circumstances in which trust is imposed may create openings for moral hazard, hold-up issues, or shirking, all of which undermine exchange efficiency and diminish the perceived trustworthiness of the parties involved. To manage this risk, organizations and project managers must maintain vigilant oversight and implement safeguards. Such measures include establishing clear contractual structures, investing in long-term trust-based relationships, and promoting transparency, accountability, and fairness in organizational and project management practices.

In summary, the hypothesis that compelled trust positively influences transaction environment uncertainty underscores the need to understand and manage power dynamics within transactional settings. Organizations and project managers must recognize when compelled trust is present and take proactive steps to address the risks it entails. This involves reducing transaction costs, managing opportunistic tendencies, reinforcing transparency and fairness, and cultivating long-term trust-based relationships. These efforts enhance the efficiency and effectiveness of market exchanges and contribute to greater value creation for stakeholders.

The Table 11 present the result of the hypotheses of the adjusted model proposed and point out the coefficient of the path, as follows:

Table 11 - Outcome of hypotheses

Chance	Result

H1 - UTE positively influences PME	Supported
H2 - UTE positively influences PCB	Supported
H3 - UTE positively influences POB	Supported
H4 - PCB positively influences PME	Supported
H5 - POB positively influences PME	Supported
H6 - TR positively influences UTE	Supported

5.8 Summary of Results

Based on the results obtained, it can be concluded that the studied variables are interconnected in several ways and that these interconnections can significantly influence project management performance in environments of uncertainty.

Specifically, it was observed that Transaction Environment Uncertainty and Contractor Behavior Predictability have a significant positive effect on Project Management Efficiency. This suggests that organizations should be aware of the uncertainty of the environment and the behavior of contractors when planning and managing projects in order to improve overall performance.

Furthermore, it was observed that Contractor Behavior also has a significant positive effect on Project Management Efficiency, indicating that organizations should carefully consider the performance history and behavior of contractors when establishing trust relationships.

The hypothesis that Compelled Trust positively influences Transaction Environment Uncertainty was supported by the analysis (p-value < 0.05). This finding indicates that compelled trust contributes to shaping perceptions of environmental uncertainty within

project contexts. In practical terms, when trust arises from obligation or dependency rather than from voluntary relational mechanisms, it may reinforce the perception of uncertainty in the transaction environment. This result highlights the relevance of compelled trust in understanding how organizations interpret and manage uncertainty in project settings.

In summary, the results of the hypotheses highlight the importance of careful consideration of environmental uncertainty, contractor behavior, and trust relationships when planning and managing projects under uncertain conditions, in order to improve the overall performance of project management.

CHAPTER 6 : RESEARCH LIMITATIONS AND IMPLICATIONS

Project failure is a complicated phenomenon that occurs all too often. Politics, money limits, planning roadblocks, and unforeseen danger are often listed as contributing factors. However, one of the true deal breakers, which is often hidden behind the explanations, is a loss of confidence.

The concept of trust is a complicated one. It's difficult to get and easy to lose. To attain it, we must first comprehend what constitutes trust; how we obtain it – or devise strategies to achieve it; why it matters; and how it underlies effective project participation.

Horsager's trust pillars are consistency, clarity, compassion, character, contribution, connection, commitment, and competence (8 Cs). And Francis Frei's components of trust are neatly arranged on the three points of a triangle: empathy, logical rigour, and authenticity. "If any one of these three aspects 'wobbles,' then they need to be addressed," Frei says when working with organizations to resolve trust problems.

Brené Brown's 'Power of Vulnerability,' although not particularly regarding trust, also explores the concepts of compassion, connection, and vulnerability, as well as their influence on communication failures. We numb, we make everything definite, we perfect, we pretend that what we do has no influence on others without sensitivity and connection. Projects that fail often exhibit three characteristics: emotion is removed from communication, very little is stated since nothing is definite or flawless, and the project's influence on others is seldom acknowledged.

When these three principles are combined, we get a new triangle that is both a theory for developing trust and also includes all of the components that determine whether a project succeeds or fails:

- Consistency and clearness is concerning how we convey the rationale
- Sympathy and association is about compassion
- Character, commitment, capability and responsibility is tied in with being our true self. Thus as well, is accepting weakness.

To accomplish effective commitment, and fruitful activities, assuming one of these focuses wobbles, it should be fixed.

Hypothesis is a certain something. Practice is frequently a completely unique ball game. Albeit these speculations let us know what the fundamental parts of trust are, it tends to be trying to apply this understanding in reality on significant foundation projects. Truly, now and again there is a lot of spotlights on one place of the triangle, and insufficient concentrate somewhere else. Without one of the component's, building trust is in danger.

We might dial one component up, or down, however we can't eliminate any of all together. An equilibrium should be accomplished across each of the three. Realness, compassion and rationale should be adjusted all through the entire interaction – in the commitment technique as well as in how the 'specialists' carrying out the system work. On effective undertakings, commitment trained professionals (like Aurecon) construct a customer's trust, have a joining forces approach, comprehend the venture, act truly with authentic goal, receptiveness and trustworthiness. They likewise comprehend the venture has an effect past the undertaking group and regularly apply client focused plan standards when working with individuals to limit any adverse consequences and amplify the best results for all.

With validness, sympathy and rationale installed across the whole interaction, including how those executing the cycle behave, it is feasible to accomplish incredible results.

As one of the administration arms for an enormous new border street being implicit touchy regular bushland – among a local area of surfers, winery proprietors, natural ranchers, schools, etc – I regulated an interaction where from early arranging stages there was coherence and consistency of conversations with a wide range of local area. The drawn-out communications and paying attention to needs prompted a drew in local area that helped co-plan the spaces of greatest concern. It had an equilibrium of rationale, realness, sympathy.

The rationale was surely known: this street eliminated enormous trucks and further developed wellbeing. Legitimacy was set from arranging, individuals were locked in and involved well prior to financing was a reality. Frequently these conversations start subsequent to subsidizing is declared and this task reaffirmed that having a valid interaction before financing is critical. Sympathy was obvious by understanding the undertaking's effect, yet in addition asking what should be possible to lessen it and working with local area to limit land accept and keep the climate as normal as conceivable through tree planting with neighborhood schools and different procedures.

Another example of overcoming adversity was an enormous street what removed admittance to an elementary school. The people group was insulted on the grounds that understudies

couldn't go across a thruway to get to school (rationale) and the proposed underpass was seen as dangerous and a magnet for hostile to social conduct (sympathy). Through a legitimate commitment process, paying attention to the necessities of the clients, the brief was co-composed and a definitive plan changed into an open, vaporous, more secure underpass with clear perceivability for the solace of understudies. The school was content with the result and the way to deal with commitment made a tremendous feeling of trust inside the local area.

Commitment can be untidy, with various partners, different fragments of crowds to be locked in with, legislative issues, etc. Be that as it may, assuming tasks are not believed they will cost more, take additional time or even risk being dropped. It's fundamental that commitment experts get what trust is and plan commitment procedures that form it by adjusting every one of the part parts. They should likewise have a voice at the top table when choices are being made to guarantee trust is cultivated directly through the lifecycle of the undertaking.

Trust assumes a profoundly basic part in guaranteeing a venture's conveyance; subsequently, everybody – from the individuals from the group to the high-level leaders – ought to comprehend and accept its significance. Studies, property condition reports, and city centers can just get you up to this point – yet a methodology based on trust ensures a strong establishment for progress.

CHAPTER 7: GENERAL CONCLUSION

7.1 Conclusion

This thesis aimed to investigate the role of compelled trust in project management in Brazilian organizations. Through the analysis of collected data and obtained results, significant interconnections were identified among the studied variables, highlighting the importance of transaction environment, contractor behavior, and trust in project management efficiency.

The following key findings were highlighted:

Hypothesis H1: Transaction Environment Uncertainty (UTE) positively influences Project Management Efficiency (PME), and this hypothesis was supported by the analysis (p-value = 0.00 < 0.05).

Hypothesis H2: Transaction Environment Uncertainty (UTE) has a positive influence on Contractor Behavior (PCB), and this hypothesis was supported by the analysis.

Hypothesis H3: UTE positively influences Contractor Behavior Predictability (POB), and this hypothesis was also supported by the analysis.

Hypothesis H4: Contractor Behavior (PCB) has a positive influence on Project Management Efficiency (PME), and this hypothesis was supported with a p-value below the significance level.

Hypothesis H5: Contractor Behavior Predictability (POB) positively influences Project Management Efficiency (PME), and this hypothesis was also supported by the analysis.

Hypothesis H6: Compelled Trust (TR) positively influences Transaction Environment Uncertainty (UTE), and this hypothesis was supported with a p-value below the significance level.

The results confirmed that transaction environment uncertainty and contractor behavior predictability have a positive impact on project management efficiency. This emphasizes the importance for organizations to consider the uncertainty of the environment and select contractors based on their performance history and reliable behavior, as these aspects can contribute to overall project performance improvement.

However, the hypothesis that Compelled Trust (TR) positively influences Transaction Environment Uncertainty (UTE) was rejected, indicating that this form of trust does not significantly affect perceptions of environmental uncertainty. This suggests that factors other than compelled trust—such as formalized risk management practices, transparent communication, or governance mechanisms—may play a more decisive role in addressing uncertainty within project environments.

Based on the obtained results, several recommendations can be made for organizations aiming to enhance project management in uncertain environments. These recommendations include investing in risk management strategies, promoting transparency and collaboration among all project stakeholders, and developing strong trust relationships with contractors.

7.2 Future Research Suggestions

Based on the results and limitations of this research, some suggestions for future studies can be highlighted:

Investigate the impact of other variables on project management efficiency in uncertain environments, such as leadership, organizational culture, or institutional support.

Conduct comparative studies across different sectors or countries to understand how specific contextual characteristics influence project management in uncertain environments.

Explore qualitative approaches, such as case studies or interviews, to gain deeper insights into the perceptions and experiences of professionals involved in project management in uncertain environments.

Investigate specific risk management strategies that can be effective in addressing transaction environment uncertainty and improving project management efficiency.

Conduct longitudinal studies to understand how trust relationships evolve over time in uncertain environments and how it affects project management.

These future research suggestions can contribute to a better understanding and enhancement of project management in uncertain environments, providing valuable insights for both practice and academia.

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Annexes

Descriptive Analysis Results

The next step is to evaluate the indicators—the form as a whole consists of 32 items. The maximum value, minimum value, mean, median, standard deviation and P-Value were verified. The 95 percent confidence interval was considered for the evaluation, which causes the P-Value to be significant is less than 0.05. Table 01 illustrates the results.

It can be observed in the following Table 01 that the items have a score of 1 to 5 on the Likert scale. It is also observed that Compelled Trust (TR) items do not have statistical significance, according to the p-value.

Regarding the concern with the sample's normality, it is worth mentioning that it is unnecessary to verify it because the study is all elaborated in PLS, which is a flexible technique within the techniques of structural equations and does not require the analysis of multivariate normality.

In the next unit will be treated the validation of the proposed model.

Table 12 -Constructs Descriptive Analysis Results

Items	Affirmative	Mean	Median	Min	Max	Standard Deviation	Observeds used	P-Value
PCB1	Maintaining good relationships with subcontractors can positively affect the overall performance of the contractor.	4.152	4.000	1.000	5.000	0.904	151	0.000
PCB2	Good relationships with previous clients can increase cooperation and trust between owners and contractors, and create stability in contractor behavior.	4.026	4.000	1.000	5.000	0.913	151	0.000
PCB3	From a company that performed well in previous projects with regard to schedule, budget and quality can be expected to do equally well.	4.046	4.000	1.000	5.000	0.864	151	0.000
PCB4	Frequent material replacement can cause claims, fluctuations in product costs, and higher transaction costs. Claims can be resolved in a friendly manner, but some may degenerate into unnecessary conflicts and disputes.	4.179	4.000	1.000	5.000	0.870	151	0.000
PCB5	Facilitating the contributions of contractors at the design stage can establish a trust-based cooperation relationship.	4.212	4.000	1.000	5.000	0.811	151	0.000
PCB6	Connection requirements may discourage opportunistic behaviour on the part of the contractor.	3.947	4.000	1.000	5.000	0.828	151	0.003
PCB7	Incentive/disincentive clauses can motivate the contractor to minimize the duration of the project.	3.735	4.000	2.000	5.000	0.835	151	0.030
SME1	Good leaders have a broad view of the project and know how to align people with their goals, inspire their team to take cooperative actions themselves to achieve project objectives in reducing shift transaction costs.	4.344	5.000	1.000	5.000	0.798	151	0.000
SME2	Transaction costs are inevitably incurred in the decision-making process, but proper decision-making reduces the amount of time spent on unexpected problems, minimizes divergences, and helps keep a project on schedule and on budget.	4.272	4.000	2.000	5.000	0.763	151	0.000
SME3	Effective and efficient communication will ensure that all team members are aware of the decisions, thus leaving no room for uncertainty in terms of individual responsibilities and objectives.	4.377	4.000	1.000	5.000	0.735	151	0.000
SME4	The potentially unpleasant consequences of conflict often include filing claims that sometimes end up in disputes, which in turn reduce the efficiency of project management.	4.079	4.000	1.000	5.000	0.953	151	0.000
SME5	The existence of technical competence, i.e. the appropriate qualifications and experience, is the driving room for quick decisions, smooth operations and ease of communication.	4.252	4.000	1.000	5.000	0.900	151	0.000
POB1	A good relationship between the parties can strengthen cooperation, reduce divergences, and allow easy conflict resolution, create stability in the owner's behavior.	4.536	5.000	2.000	5.000	0.688	151	0.000
POB2	Organizational learning can be effective if lessons learned from completed projects are kept in organizational memory and used in future projects, thereby promoting stability in owner behavior.	4.424	5.000	2.000	5.000	0.750	151	0.000
POB3	Punctuality of payments by the owner eliminates uncertainty, and may be favorable to the lower number of complaints by the contractor, and can minimize the frequency and magnitude of disputes.	4.040	4.000	1.000	5.000	0.989	151	0.000
POB4	Transferring any risks to the contractor or withretaining any risks may cause an increase in the owner's costs.	3.894	4.000	1.000	5.000	0.964	151	0.000
TR1	There are cases where, even without knowing the other party, you have to trust her.	3.649	4.000	1.000	5.000	1.037	151	**0.080**
TR2	Trust can arise in unexpected circumstances, even with strangers.	3.808	4.000	1.000	5.000	1.090	151	**0.088**
TR3	If the circumstances require, I can trust a complete stranger.	3.437	4.000	1.000	5.000	1.148	151	**0.055**
TR4	You can trust a stranger in extreme cases.	3.159	3.000	1.000	5.000	1.235	151	**0.768**
TR5	Strangers can be trusted if the case involves risk of death.	3.152	3.000	1.000	5.000	1.326	151	**0.710**
TR6	I can trust a stranger if it's too important to me.	2.993	3.000	1.000	5.000	1.165	151	**0.695**
TR7	I can trust a stranger if the matter is extremely important to me.	3.026	3.000	1.000	5.000	1.190	151	**0.901**
UTE1	The ability to produce at maximum power given a set of inputs, or the ability to minimize input given a set of required outputs can allow smooth operation and a more stable environment.	4.013	4.000	2.000	5.000	0.737	151	0.000
UTE2	A poorly defined scope, as well as incomplete plans and specifications can increase the number of post-contract changes by owners, thus increasing uncertainty in owner behavior.	4.589	5.000	2.000	5.000	0.774	151	0.000
UTE3	Suspected unbalanced, misleading trading, and collusion can cause uncertainty in the environment, can cause an increase in the overall cost of the project.	4.642	5.000	3.000	5.000	0.623	151	0.001
UTE4	Competent contractors can operate efficiently and can promote a problem-free environment, thus contributing to a more stable environment.	4.205	4.000	2.000	5.000	0.731	151	0.000
UTE5	High project complexity increases uncertainty in the operating environment.	3.695	4.000	1.000	5.000	1.048	151	0.004
UTE6	When the scope of a project is not well defined, initial drawings and specifications are likely to change, leading to many complaints and change requests.	4.490	5.000	1.000	5.000	0.845	151	0.000
UTE7	Incomplete plans and specifications can increase the number of disagreements and disputes.	4.510	5.000	1.000	5.000	0.788	151	0.000
UTE8	Disabled bid agents can create a less competitive procurement process.	4.364	5.000	2.000	5.000	0.759	151	0.000
UTE9	Better integration, collaboration, and communication in the interface between desing and construction can reduce uncertainty in the transaction environment.	4.358	5.000	2.000	5.000	0.808	151	0.000

Structural Assesment

The construction of the p-opposite model has as its primary objective to understand the dependent variable PME (Project Management Efficiency).

For this purpose, as a focus on behavior prediction issues, the predictability of the owner's behavior (POB) and the contractor's behavior (PCB) and the uncertainty of the transaction environment (UTE) and as the predecessor of the UTE is being considered as the compelled trust (TR). The proposed model presents the following variables: PME, PCB, POB, UTE, and TR, as illustrated in the next Figure 08:

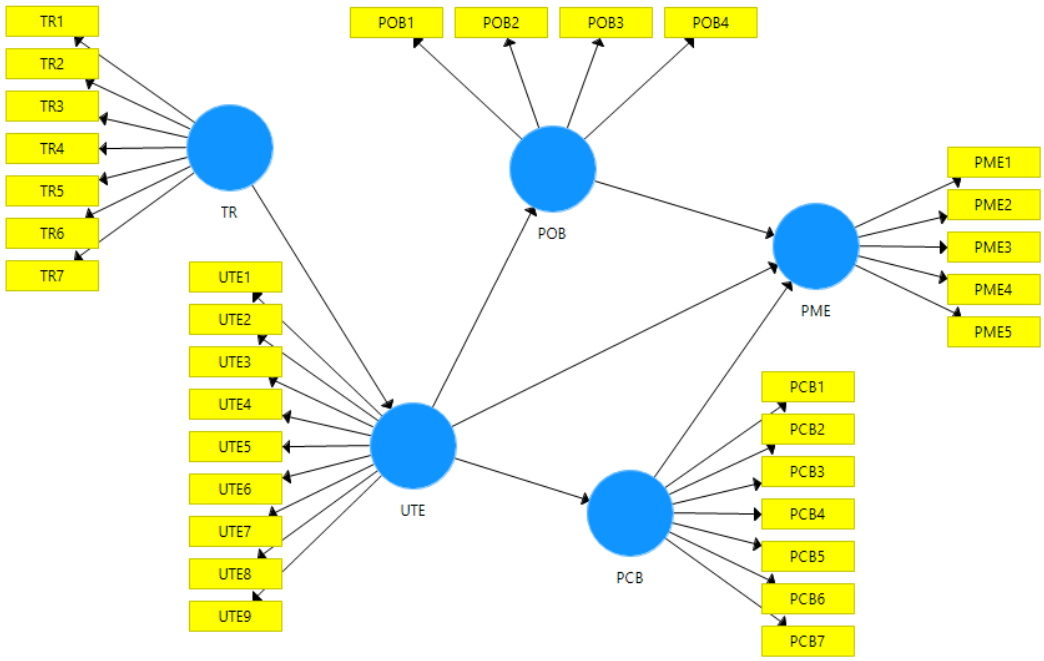

Figure 8 Proposed Model

It is not possible to observe a strong relationship between all items with the respective constructs in the theoretical model. It has been demonstrated by the value of the factorial loads presented together with the constructs do not always present results above 0.60, as shown in Figure 09:

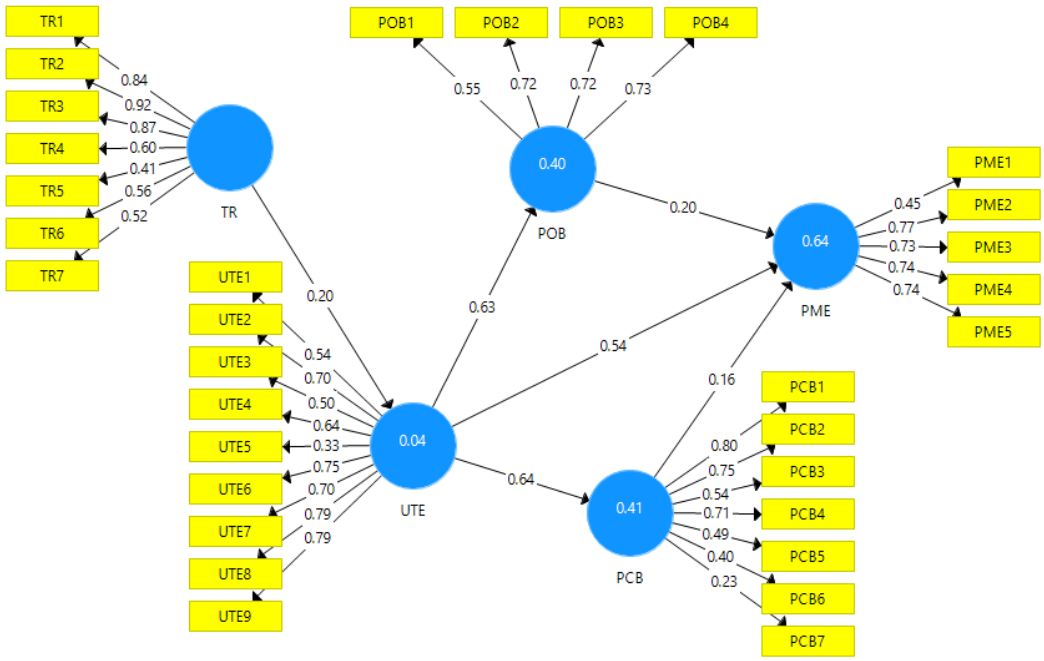

Figure 9 Theoretical Model with factorial forces

When observing the direction of the factorial forces, it can be observed that there is no opposite direction of the hypotheses. Thus, it is not possible to reject any of the Hypotheses described in the previous Figure 08.

The Bootstrap on the method was used to verify the significance at the level of five percent, and the hypotheses for the method are:H_0: coefficient>0.05

H_1: coefficient<0.05

Figure 10 presents the results of the theoretical model significance test using P-Value:

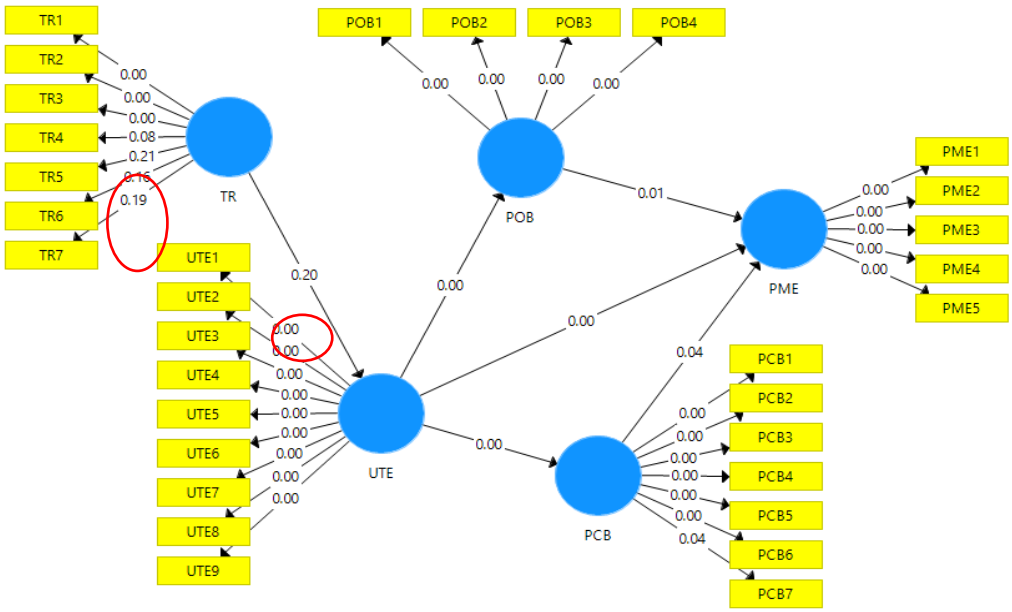

Figure 10 Proposed Model - P-Value

For the model validation of the measurement model, internal consistency and convergent validity were used, using composite reliability (CR) and extracted mean-variance (EMV), respectively, and subsequently evaluated discriminant validity, using the Crossroad method and heterotraind-monotrait ratio (HTMT), following Henseler, Ringle, and Sinkovics (2009). Table 13 presents the results of internal consistency and convergent validity of the model, as follows:

Table 13 Composite Reliability, Cronbach'sAlpha, rho_A and AVE

Var	Cronbach's Alpha	rho_A	Composite Reliability	Average Extracted Variance (AVE)
Pcb	0.662	0.739	0.771	0.349
Smes	0.731	0.765	0.821	0.485
POB	0.642	0.663	0.776	0.467
Tr	0.895	0.892	0.862	0.491
Ute	0.822	0.851	0.864	0.427

The results present good levels of reliability, respecting the limits between 0,70 and 0.95 for composite reliability suggested by Diamantopoulos et al. (2012), thus presenting no index higher than 0.95, which guarantees the validity of constructs.

Still, on the internal consistency, it is possible to observe that Cronbach's Alpha presents results within the considered as acceptance of 0,60. And the rho_A, which is considered by Dijkstra and Henseler (2015) as an approximately accurate average of the reliability of the construct, presents results within the desired to between 0,60 and 0.95, providing a good reliability to the model.

The method of mean extracted variance (AVE) was used to verify convergent validity, which presented acceptable results higher than 0.50, indicating that the constructs explain at least 50 percent of the variation of their items, which cannot be observed in the model proposed in any of the constructs.

After the convergent validation tests and the study of the internal consistency of the model, it is necessary to evaluate the discriminant validity of the model, which empirically explains how much one construct is distinct from the other. For this work, the cross-load criterion was used, where validity is observed by verifying loads of the items of their constructs in comparison to loads of the other constructs, this method is proposed by Henseler, Ringle, and Sinkovics (2009), so to be considered valid it is necessary that the item presents a higher load in its respective construct than in any other construct.

As displayed in table 14, the model respects the criterion of cross loads, indicating that it is acceptable. The Heterotrait-monotrait ratio (HTMT) was employed to continue the discriminant analysis test of the correlations (Voorhees et al, 2016) was performed.

To be considered valid by HTMT the result must be less than 0.90. Values up to 0.95 are considered acceptable in constructs that have similar conceptual constructs or of the same origin according to Henseler, Ringle, and Sinkovics (2009)

Table 14 Discriminant Validity - Cross-Charges

	Pcb	Smes	POB	Tr	Ute
PCB1	0.801	0.462	0.401	-0.058	0.459
PCB2	0.748	0.438	0.339	-0.132	0.413
PCB3	0.538	0.310	0.280	-0.014	0.274
PCB4	0.706	0.508	0.351	0.236	0.578
PCB5	0.495	0.299	0.222	0.174	0.329
PCB6	0.398	0.187	0.175	0.152	0.228
PCB7	0.233	0.069	0.225	0.089	0.219
PME1	0.158	0.448	0.166	0.207	0.320
PME2	0.480	0.771	0.572	0.221	0.666
PME3	0.493	0.729	0.556	0.091	0.593
PME4	0.481	0.742	0.333	0.120	0.541

PME5	0.399	0.742	0.415	0.060	0.482
POB1	0.289	0.250	0.549	-0.018	0.332
POB2	0.474	0.624	0.721	0.193	0.587
POB3	0.250	0.357	0.720	-0.009	0.359
POB4	0.239	0.314	0.727	-0.019	0.338
TR1	0.048	0.162	0.031	0.843	0.131
TR2	0.143	0.190	0.107	0.921	0.221
TR3	0.007	0.153	0.078	0.872	0.130
TR4	-0.012	0.026	-0.027	0.603	0.020
TR5	0.105	-0.026	0.059	0.413	0.027
TR6	0.036	0.011	-0.030	0.557	-0.045
TR7	0.078	0.027	-0.002	0.519	0.010
UTE1	0.365	0.470	0.395	-0.010	0.540
UTE2	0.398	0.460	0.397	0.157	0.700
UTE3	0.178	0.302	0.339	-0.067	0.501
UTE4	0.508	0.588	0.529	0.053	0.636
UTE5	0.287	0.213	0.098	0.207	0.329
UTE6	0.429	0.606	0.466	0.166	0.747
UTE7	0.356	0.534	0.338	0.197	0.701
UTE8	0.560	0.580	0.504	0.176	0.787
UTE9	0.545	0.598	0.491	0.249	0.792

As displayed in the next Table 15, constructs present discriminant validity within the expected theory, as follows:

Table 15 Discriminating Validity - HTMT

	Pcb	Smes	POB	Tr	Ute
PCB					
Smes	0.808				
POB	0.705	0.769			
Tr	0.287	0.187	0.129		
Ute	0.824	0.943	0.781	0.223	

Measure Assessment

The structural model is basically composed of basically in the following stages, the verification of collinearities by VIF value, the verification of the coefficient of determination (R2), the F value, and the P-value for significance and the residuals.

The first stage of validation of the structural model is the verification of collinearities. For this, it is used the VIF (variance inflation value). To evaluate the VIF, Mason and Perreault (1991) and Becker et al. (2015) suggest lower results 5, with the ideal lower results 3. As can be seen in table 16, it is possible to verify the results, as shown:

Table 16 - VIF

Items	Vif	Items	Vif	Items	Vif	Items	Vif	Items	Vif
PCB1	5.023	SME1	1.228	POB1	1.149	TR1	2.254	UTE1	1.271
PCB2	4.715	SME2	1.431	POB2	1.107	TR2	2.213	UTE2	1.740
PCB3	1.194	SME3	1.444	POB3	5.029	TR3	2.814	UTE3	1.312
PCB4	1.313	SME4	1.587	POB4	5.128	TR4	2.812	UTE4	1.430
PCB5	1.154	SME5	1.554			TR5	1.941	UTE5	1.154
PCB6	1.201					TR6	5.488	UTE6	2.263

PCB7	1.088			TR7	4.997	UTE7	2.089
						UTE8	4.653
						UTE9	4.608

Observe the result for constructs and their relationships is considered acceptable, in the majority, frequently presenting results below 5. Thus, being presented the issues with Collinearities can be examined the R2 of endogenous constructs, as presented in table 17, as follows:

Table 17 - R^2 and R^2 adjusted

	R^2	R^2 Adjusted
Pcb	0.413	0.409
Smes	0.639	0.632
POB	0.401	0.397
Ute	0.040	0.034

Moderate determination with results below, following Hair et al. (2012). Therefore, it is not possible to say the model has moderate explanatory power. After checking the coefficient of termination (R2), observing the size of the path coefficient is important to inform the predictive power of the model. Thus, one can observe the results of the path coefficients in table 18, as follows:

Table 18 - Path coefficients

	PCB	SME
PCB		0.158
PME		
POB		0.204
TR		

A very low coefficient of the path of several constructs is observed, which points to the low power of determination. In order to complete the study of the theoretical model, the residue presented by the sample in the model should be verified. For this purpose, the SRMR (the standardized root of the average residue) is used. The expected value for the MRS should always be very close to zero, with any very high value indicating a lot of residue in the sample, which indicates severe measurement problems. For the model, an SRMR of 0 was found 11, considered to be inappropriate.

As the model does not present a good adjustment in its structures, it is essential to perform an adjusted model seeking the explanation of the proposed. Thus, we can evaluate the hypotheses of the proposed model with the following results, according to the next Table 19:

Table 19 Results of Hypothesis Testing in the Adjusted Structural Model

Chance	Result	Reason
H1 - UTE positively influences SMEs	Confirmed	Meets the significance and the model
H2 - UTE positively influences PCB	Confirmed	Meets the significance and the model
H3 - UTE positively influences POB	Confirmed	Meets the significance and the model
H4 - PCB positively influences SMEs	Confirmed	Meets the significance and the model
H5 - POB positively influences SMEs	Confirmed	Meets the significance and the model
H6 - TR positively influences UTE	Rejected	It has no statistical significance