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Analyzing the Influence of Stakeholder Misalignment on Software Project Failures

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ABSTRACT: In this paper, stakeholder misalignment as a cause of failure in software projects is explored. Various parties such as clients, developers, project managers, and users have varying thoughts, objectives, and working styles when it comes to software projects. When two or more such parties are not on the same page or comprehending one another, the result is misalignment. This discrepancy can cause issues such as ill-defined project objectives, ill-defined or shifting requirements, inadequate communication, and inefficient utilization of time, funds, and other resources. These issues can lead to postponed projects, budget overruns, or even project failure. This research consolidates research articles on both Agile and conventional project management to identify why these issues occur and with what frequency. It demonstrates that obtaining stakeholder consensus on project objectives upfront, composing clear and complete requirements, maintaining frequent and open communication, and being capable of utilizing resources flexibly can prevent the majority of these issues. The article provides actionable guidance to project managers to minimize misalignment, enhance collaboration, and make projects more probable to be completed successfully, on schedule, and within budget.

KEYWORDS: Stakeholder Misalignment, Software Project Failures, Agile Methodology, Project Management, Communication Breakdowns.

I. INTRODUCTION

In software projects, various stakeholder groups—like clients, developers, project managers, and users—need to collaborate to deliver the project successfully and address the requirements of all stakeholders. Collaboration can be challenging, though. Each group has its own agenda, objectives, and working styles, which can result in conflict and misunderstandings.

As projects increase in size and scope, more stakeholders are added, and it is that much more difficult to get everyone on the same page. This misalignment among stakeholders is a frequent explanation for why so many projects finish late, exceed costs, or fail outright. Though some of these concerns have been addressed by prior studies, such as constrained resources or inadequate communication, few have discussed how all of these concerns interact with each other and create misalignment among stakeholders.

This study is interested in identifying the main reasons why stakeholders do not always agree or work well together in software projects. The study also suggests practical solutions to such problems. By closely examining issues such as conflicting priorities, ambiguous project requirements, poor communication, and differing attitudes toward risk, this study aims to help project managers in how to bring stakeholders together better.

The primary objective is to provide project managers with clear actions to enhance collaboration from the onset of a project. This can raise the chances of delivering projects on schedule, within budget, and to all parties' requirements. Our assumption is that the establishment of good communication and understanding at the project initiation is crucial to not encountering issues in the future.

II. LITERATURE SURVEY

Stakeholder misalignment is a core issue in software project management that typically results in serious disruptions and failures. This review synthesizes key findings to ascertain the dimensions and consequences of misalignment, as well as strategies for circumventing these issues.

Conflicting Aims and Misaligned Goals

Different stakeholder groups place varied emphasis on different outcomes, e.g., quality, budget, or timetables, which creates goal misalignment. What is noteworthy here is that the absence of a shared project vision is among the reasons for such disagreements (Nguyen & Mohamed, 2021). The establishment of joint goals at the outset of the project life cycle is essential for goal alignment, although larger projects may require adaptive styles of goal integration in order to manage complexity.

Inadequate Requirement Definition and Management

Misalignment is generally the result of unclear or contradictory requirements. Hussain, Mkpojiogu, and Kama (2016) emphasize systematic requirements engineering (RE) approaches, including prototyping and requirement traceability, in order to minimize ambiguities. It suggests utilizing agile methods, which encompass repetitive refinement of requirements so that they mirror stakeholders' changing needs (Mulla, M. F., 2023).

Yet, conventional project environments are not usually so flexible, and there are huge gaps in RE practices (K. Swathine & N. Sumathi, 2017).

Communication Breakdowns and Information Gaps

Successful stakeholder communication is central to maintaining ongoing alignment. Communication gaps as a primary cause of decreased productivity and increased failure rates are of specific concern in projects with a high degree of interdependencies (Cataldo & Herbsleb, 2013). Robust communication tools and regular check-ins are recommended to ensure stakeholder engagement, though smaller teams may struggle to implement these measures effectively (Robinson & Pawlowski, 1999).

Budget Constraints and Financial Misalignment

Budget conflicts tend to be a frequent cause of stakeholder misalignment. As a means of promoting transparency and avoiding conflicts concerning the use of resources, it is more appropriate to engage all major stakeholders in financial decisions (McManus & A. Trevor Wood-Harper, 2007). The adoption of real-time budget tools may also help in controlling financial alignment dynamically under multi-disciplinary project settings (Ullah et al., 2023).

Resource Allocation and Management Challenges

Proper resource management must support sustained alignment. Cross-functional teams, conflict-avoiding resource monitoring software, and continual monitoring can ensure the most effective use of resources (Massila Kamalrudin et al., 2010). Scalable resourcing models to enable the capacity to deal with diverse organizational sizes along with different organizational cultures are needed (McManus & A. Trevor Wood-Harper, 2007).

Diverging Risk Appetite and Stakeholder Involvement

Variability in risk tolerance among stakeholders has a tendency to throw decision-making off track. Active dialogue should be recommended to allow for the alignment of risk tolerance (Lehtinen et al., 2014), while it is recommended that diagnostic frameworks should be proposed to allow for managing resistance to risk management practices (Vrhovec et al., 2015). All these methods call for scalable risk management frameworks.

Feedback Inconsistency and Stakeholder Disengagement

Inconsistent or delayed feedback can upset project flow, resulting in repeated reworking and delays. To keep stakeholders updated, centralized tracking and scheduled feedback must be implemented (Kamalrudin & Sidek, 2015).

As iterative feedback mechanisms are advantageous in Agile projects, conventional projects need different mechanisms to assure alignment (Jarke, 1998).

Misalignment of Technical Expectations

Technological gap among the stakeholders has a tendency to introduce unrealistic expectations, misalignment, and miscommunication. To try and reduce miscommunication, create a shared project vision, and close the knowledge gaps, it is recommended that feasibility studies and technical workshops be conducted (Vrhovec et al., 2015).

Role Ambiguity and Overlapping Responsibilities

Unclear roles and responsibilities typically breed confusion and misalignment. The use of a RACI matrix demystifies the roles, with stakeholders being aware of their responsibilities. Periodic reviewing guarantees that dynamical projects are kept clear (McManus & A. Trevor Wood-Harper, 2007).

Cultural Differences and Misalignment

Cultural differences among stakeholders can lead to communication breakdown and unmet expectations. It is recommended that there be cultural awareness training at an initial phase and inclusive practices to counter the impact of these barriers, thereby fostering inclusivity and alignment despite the diversity in cultural backgrounds (Buchan et al., 2017).

Poor Change Management

Badly handled changes cause turbulence to project progress, generating resistance and uncertainty. Official change management strategies and identified change champions facilitate less risky changes with fewer possibilities of misalignment (Vrhovec et al., 2015).

Unreasonable Time Constraints and Pressures

There is a smaller chance of people delivering sub-standard work and rushing through tasks when unrealistic timelines are given. Incorporating buffer time in project timelines guarantees realistic planning and avoids misalignment caused by time (Ullah et al., 2023).

The literature covered recognizes a multifaceted set of reasons for stakeholder misalignment in software projects. Solutions such as Agile approaches, formal RE processes, communication frameworks, and cultural sensitivity interventions are available. These are, however, to be adapted to individual project contexts. Merging the gaps between Agile and plan-based frameworks with adaptive methodologies holds promise for greater alignment and successful project delivery.

III. RESEARCH METHODOLOGY

The research follows a sophisticated mixed methods design to exhaustively examine the drivers of stakeholder misalignment in software projects. The study aims to offer both theoretical insight and empirical confirmation, triangulating qualitative findings from a systematic literature review with quantitative findings based on focused surveys. The two-fold strategy enables stringent examination of misalignment drivers while maintaining pragmatic relevance and applicability.

Research Design

This research employs Mixed methods design in which qualitative and quantitative data are gathered and examined in tandem. This design allows for the integration of theoretical explanations from secondary literature with first-hand practitioner experiences in the sector, enabling a holistic view of misalignment dynamics.

1. Qualitative Component - Literature Review: Systematic review of academic literature, case studies, and industry reports was conducted to determine prevailing themes and theoretical perspectives of stakeholder misalignment in software development projects. Top quality, peer reviewed journals and reputable industry journals were targeted with



a specific focus on themes of goals in conflict, incongruent requirements, communication breakdown, and resource constraint.

2. Quantitative Component - Survey: A structured survey was developed and distributed among software industry professionals to gather empirical data on the frequency and impact of each of the misalignment factors discovered. The survey instrument had closed and open-ended questions to gather quantitative ratings and qualitative feedback, respectively, for facilitating detailed analysis of stakeholder perspectives.

Data Collection

1. Systematic Review: The PRISMA (Preferred Reporting Items for Systematic Reviews and MetaAnalyses) guideline has been adapted to be used on the literature review to ensure a transparent and reproducible selection process. All articles are screened and assessed based on relevance. knowledge regarding innovation (Published within the last 10 years) Software Mission Control and stakeholder alignment This system delivers a complicated educational dataset that offers fundamental insights into stakeholder discrepancy problems.

Inclusion Criteria: Research focusing on stakeholder issues in software development, alignment approaches, and the consequences of misalignment.

Exclusion Criteria: Studies lacking empirical data or relevance to stakeholder alignment in computer environments.

2. Survey Instrument: The survey comprised a combination of Likert Scale questions and open-ended questions that were designed to capture quantitative and qualitative information on misalignment issues. Questions were framed to measure both the frequency and perceived severity of problems associated with conflicting objectives, requirement mismatch, communication breakdowns, resource limitations, and risk tolerance.

Sample Size and Sampling Plan: The survey was aimed at 150 software professionals of various roles (e.g. project managers, developers, customers) with stratified sampling to have representation across stakeholders. The sample size was calculated to achieve a 95% confidence level according to the power analysis.

Survey Distribution: The surveys were sent out through professional networks, LinkedIn groups, and industry forums. The responses were gathered over a month to get a varied sample and minimize sampling bias.

Data Analysis

1. Qualitative Thematic Analysis: The findings from the literature review were coded and themed using NVivo software. Main themes - i.e., conflicting goals, communication breakdown, and budget constraints—were established through deductive coding, based on extant research, and supplemented with inductive coding to reveal emerging insights. Thematic analysis was used to bring out interdependencies between different factors, providing an overall view of the determinants of misalignment and how they related to each other.

2. Quantitative Statistical Analysis: The survey data were analyzed quantitatively using SPSS software to calculate descriptive and inferential statistics. The descriptive statistics, i.e., mean, standard deviation, and frequency distribution, summarized the frequency of each misalignment factor. Inferential tests, i.e., Pearson correlation and chi square analysis, were applied to examine correlations between misalignment factors and project outcomes.

Correlation Analysis: Compute Pearson's correlation coefficients to identify the direction and magnitude of the relationship between dissonant variables (goal conflict, budget constraints, etc.) and project performance measures (number of delays over budget, etc.).

Reliability Test: The internal consistency of the survey items was assessed with Cronbach's alpha. This serves to determine that the instrument is measuring the intended construct reliably.

Rationale for Methodological Choices

A hybrid approach was chosen because of its potential to balance theory and practice. It provides a comprehensive framework for resolving management paradoxes. A systematic literature review provides a solid theoretical foundation. While research data is empirically derived, this contributes to the findings' robustness. This approach has the potential



to provide general and context-specific insight. This is to ensure that the findings are academically rooted and applicable.

PRISMA Framework: Application of the PRISMA framework within the literature review allows methodological transparency, making it possible for future researchers to follow the selection process and further the findings.

Quantitative and Qualitative Integration: By integrating survey data with literature results, the study is capable of accruing the advantages of both quantitative generalizability along with qualitative depth of analysis, forming a balanced and evidence-based perspective regarding stakeholder misalignment.

Limitations and Mitigations

Whilst this method provides a sound foundation for the investigation of stakeholder misalignment, the potential limitations include:

1. Response Bias: Self-selection bias may occur in response to a survey in a way that individuals with stronger feelings are more likely to respond. In order to reduce the threat of this, an effort has been made to contact a diversified group of experts through various distribution channels.

2. Generalizability of the Sample: Although the sample size provides credible data, generalizability of the study may be constrained by professional demographics and geographical locations covered. Future studies may expand sampling to improve representativeness across industry sectors and sites.

This improved method ensures an in-depth investigation of the reasons for stakeholder misalignment, in favor of the study's objective to provide actionable results for improved alignment efforts in software project management.

IV. RESULTS AND FINDINGS

This chapter presents the main outcomes of the mixed-methods analysis, i.e., the main reasons for stakeholder misalignment in software projects. The findings are structured to provide both the frequency and impact of each reason, supported by evidence from the literature review and survey responses.

Results

1. Competing Priorities and Goals

Conflict in goals was ranked by 65% of respondents as a prime stakeholder misalignment factor. Stakeholder misalignment typically took place because clients, developers, and project managers differed on their project goals.

Stakeholder Groups	Percentage Reporting Conflicting Goals
Clients vs. Developers	45%
Clients vs. Project Managers	20%
Developers vs. Project Managers	25%
Other Stakeholder Conflicts	10%

Figure 1. Distribution of conflicting goals across stakeholder groups, showing the highest conflicts between clients and developers.

Interpretation: The rate of goal conflicts underscores the importance of timely goal congruence on project goals. Sources of literature, stress systematic setting of goals to prevent such conflicts and align the priority of stakeholders.

2. Inconsistent Requirements

Inconsistencies in requirements were referred to by 72% of the participants as a major misalignment influencer. It occurred more in classical project setups where there is limited room for adaptation.

Project Type	Percentage Reporting Inconsistent Requirements
Agile Projects	30%
Traditional Projects	42%
Hybrid Projects	28%

Figure 2. Impact of inconsistent requirements based on project type, with traditional projects facing higher challenges due to rigid structures.

Interpretation: Agile approaches facilitate a flexible approach to handle changing requirements, yet the implementation of the approaches in common frameworks remains difficult. Literature validates the utilization of iterative reviews of requirements for reducing misunderstandings and aligning expectations.

3. Communication Breakdowns

Poor communication was a significant driver, as indicated by 63% of the respondents who identified it as a cause of misalignment. It was most pronounced in large interdependent teams where lack of communication resulted in delayed projects and confusion.

Type of Communication Breakdown	Percentage of Projects Impacted
Lack of Real Time Updates	35%
Misinterpretation of Requirements	40%
Infrequent Meetings	25%

Figure 3. Types of communication breakdowns affect stakeholder alignment, with misinterpretation of requirements being the most common issue.

Interpretation: Studies that consistent communication habits and virtual collaboration tools (e.g., Slack, Teams, Zoom, Google-Meet) can increase real-time information sharing, particularly for large or geographically dispersed teams.

4. Budget and Resource Constraints

Budget constraints and lack of resources were cited as the reasons for misalignment by 54% of the respondents. The most common problem was mid-project budgetary changes, which resulted in misallocation and surplus cost.

Budget Misalignment Factors	Percentage of Projects Reporting Issues
Insufficient Initial Budget	30%
Mid-Project Budget Adjustments	40%
Misallocation of Resources	30%

Figure 4. Budget-related factors contribute to misalignment, with mid-project adjustments being the most frequent issue.

Interpretation: Transparent budget processes engaging all such key stakeholders remove the dangers of misalignment, the significance of stakeholder participation in budget planning, especially in projects with limited resources.

5. Different Risk Tolerances

48% of respondents indicated that varying risk tolerances, particularly by executive sponsors, were the cause of misalignment. Risk aversion by executive sponsors was significantly greater than by other stakeholders.

Stakeholder Role	Percentage Reporting Different Risk Tolerance
Clients	25%
Developers	15%
Project Managers	20%
Executive Sponsors	40%

Figure 5: Differences in risk tolerance among stakeholder roles, showing the highest risk aversion among executive sponsors.



Interpretation: Risk alignment at the onset can prevent conflict and misalignment down the road. Formalized discussion is highly encouraged to reach risk tolerance levels among all participants for more consensus-oriented decision-making.

V. DISCUSSION

The study affirms that a number of key factors account for stakeholder misalignment in software projects, each with applied implications for managing projects.

1. **Addressing Conflicting Goals:** The findings highlight the importance of early alignment through structured workshops or collaborative planning sessions. By establishing a shared understanding, project managers can minimize conflicting agendas that otherwise delay or derail projects. This finding aligns recommend early alignment practices to avoid later misalignment issues.
2. **Requirement Inconsistency Management:** Requirement inconsistency prevalence refers to the necessity of ongoing requirement reviews, especially in Agile contexts where ongoing refinement is feasible. Ongoing changes to requirements are reported to inform stakeholders about changes in projects and avoid issues commonly experienced in formal project environments.
3. **Enhancing Communication Practices:** Communication is particularly vital in large teams with high dependencies. Utilize digital tools, i.e., Slack and Microsoft Teams, and frequent check-ins to avoid miscommunication and ensure stakeholders are up to date. Tailor these tools according to team size and communication requirements, particularly in distributed project settings.
4. **Alignment of Budget and Resource Expectation:** The research stresses open budgeting as a way to avoid misalignment. Stakeholder participation in the budgeting process reduces miscommunications, resulting in improved resource allocation and reduced conflict on the budget. The requirement for budget transparency, although less complex tracking mechanisms can be required for small projects.
5. **Risk Tolerance Alignment:** Differing risk tolerances, particularly among executive stakeholders, must be managed carefully. Formal risk workshops at the start of the project establish acceptable risk levels, reduce conflict, and align decisions. This research validates this practice, as risk tolerance alignment allows aligned decision-making within stakeholder groups.

VI. IMPLICATIONS FOR PRACTICE

The research findings offer some practical recommendations to project managers for stakeholder alignment enhancement:

- **Goal Setting Workshops:** Initial alignment sessions streamline and align stakeholder goals, especially for complicated projects.
- **Iterative Requirement Reviews:** Hybrid and Agile methodologies are advised to adjust requirements to changing stakeholder demands.
- **Communication Protocols:** Computer-mediated communication tools with regular updates can help improve communication among large, dispersed teams.
- **Transparent Budgeting:** Stakeholder involvement in budgeting minimizes resource conflict and maximizes direction.
- **Risk Tolerance Discussions:** Sharing a common risk appreciation during the initial project life cycle can prevent misalignment due to varying risk orientations.

These findings and implications call for formal alignment practices to avoid stakeholder misalignment and enhance project success. By using these recommendations Project managers can promote a more aligned setting and propel

project results. This research adds to the project management literature by providing concrete steps to address stakeholder inconsistencies. and ultimately facilitate more successful project execution.

VII. CONCLUSION

This study investigated the central role of stakeholder misalignment in software project failure, highlighting principal drivers of misalignment, including conflicting goals, mismatched requirements, communication deficits, budget limitations, and differing risk tolerance. By highlighting these drivers, this study stresses the importance of upfront, systematic alignment processes—goal setting workshops, iterative requirement analysis, receptive communication models, open budgeting, and shared risk discussion - to facilitate more robust, cohesive collaboration between stakeholders.

The thematic analysis strategy proved successful in uncovering repeated misalignment patterns in different project settings, and it demonstrated the complexity in dealing with different stakeholder expectations. Although the strategy yielded valuable findings, it also demonstrated the need for adaptive alignment practices to suit particular project and stakeholder requirements.

Stakeholder alignment must be the foremost priority of a project manager early on in the project so that everyone involved shares the same objective and has unrestricted communication channels. Future research could give valuable information on how to maximize alignment methodologies for all projects by looking into how the long-term impact of alignment procedures in various development methods, including Agile and Waterfall, functions.

Finally, this research contributes to stakeholder alignment scholarship in software project management in that it presents actionable, evidence-based guidelines to mitigate misalignment risks. The results fill a critical gap in the literature and provide a foundation for future study and real-world innovation in stakeholder collaboration and project success.

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