Philosophies on How to Weigh Competing Stakeholder Desires Against One Another

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Abstract

Information Technology projects are often massive undertakings that can have a sizeable effect on an enterprise's viability depending on the outcome. Furthermore, for a project to be deemed successful, the project deliverables must realize the requirements set forth by project stakeholders. However, there is a lack of specificity regarding how to resolve an issue where different groups of stakeholders have competing sets of requirements that are not compatible with each other. The issue is exacerbated by overly simplistic methodologies used to determine the hierarchy of project stakeholders and a lack of a universal framework for resolving issues between stakeholders. This review will cover a sampling of project types varying in size and scope to facilitate a review of the different philosophies and methodologies for analyzing and resolving conflicts between stakeholders.

Introduction

The ensuing literature review will be prefaced by an overview of project management as a discipline including its importance, the role of requirements gathering in effective project execution, and how stakeholders relate to executing a project successfully. Next, a review of the research methodology used for determining what sources were selected for this literature review will be presented. Furthermore, the body of the review will contain a synthesis of selected sources' stakeholder analysis methodologies, and framework(s) (if any) for resolving conflicting project requirements originating from different project stakeholders. Lastly, conclusions and recommendations for future research are presented.

The purpose of project management as a discipline is to create a general framework that all projects can follow to consistently produce desired project outcomes (Marion, 2018). Without the discipline of project management, every project would start from complete scratch and there would not be any predictable consistency from one project to another (Marion, 2018). Moreover, without a project management framework excess time and energy would be spent on trying to determine the best way to manage a project as opposed to spending those resources on the actual product being developed (Marion, 2018).

Having established that utilizing a project management framework is a necessary part of a well-designed project, we may now begin to examine a crucial aspect of the project management framework, i.e., determining the requirements/specifications a finished product must meet (Olson, 2014). To that point, the determination of specific benchmarks detailing what a project must achieve is essential to a well-formulated project plan as it is how a project manager and client can determine the success or failure of a given project (Marion, 2019). Therefore, it is evident that determining the requirements of a project is a particularly important

part of the project management framework which begs further examination into who exactly determines these requirements.

To that point, project stakeholders are the group responsible for determining a project's requirements (Marion, 2018). Furthermore, as its name suggests, stakeholders include any person or group that is affected by the project outcome (Marion, 2018). Some of the most common "stakeholders include clients, sponsors, team members, and members of the organization that spawned the project team" (Marion, 2018, pg.13). Lastly, due to the number of people and/or groups that constitute the stakeholders for a given project, determining which group's desires should be given priority, otherwise known as stakeholder analysis is an essential aspect of successfully managing a project (Project Management Institute, 2021).

Research Methodology

The narrative approach was used to conduct the ensuing literature review as it was not feasible to review all literature relevant to the topics being reviewed (Snyder, 2019).

Furthermore, the research method for selecting sources for this review was to select authoritative literature produced from peer-reviewed journals, literature reviews, and published books relating to the practice of stakeholder analysis, stakeholder management, and/or stakeholder conflict resolution. Further criteria for source selection included that the sources selected were all in English and that recent sources (written/published within the last five years) were given selection priority to understand if any new developments in stakeholder analysis and stakeholder management methodologies have occurred recently. Moreover, the literature reviewed includes all different types of projects (IT, industrial, policy/political) and projects varying in size (enterprise to global).

Literature Review

The literature review is broken into four sections, after which a conclusion will be presented including any recommendations for future research based on the findings of the review.

Stakeholder Analysis

In stakeholder analysis, the relative priority each stakeholder is assigned by the project manager determines the level of input they have on a project's deliverables, as well as the amount of engagement they have with the project manager (Project Management Institute, 2021). However, what methodology is used to analyze stakeholders for a given project?

For starters, there are two distinct methodologies from which to conduct project stakeholder analysis (Zarghami & Dumrak, 2020). First, is a "project-centric approach" (Zarghami & Dumrak, 2020) which views each stakeholder's relationship with a project in a vacuum, describing only project stakeholders in relation to the project both in terms of power/influence and their interest in a given project (Zarghami & Dumrak, 2020). In addition, the other major theory of stakeholder analysis does the opposite and considers all project stakeholders in relation to one another, or as a web of interrelated stakeholders (Zarghami & Dumrak, 2020). The majority of the literature reviewed tended to use a blending of the two approaches, the specific mechanics of which are as follows (Marion, 2018; Marion, 2019; Olson, 2014; Project Management Institute, 2021; Watt, 2014; Zarghami & Dumrak, 2020).

The Project Management Institute (2021) along with Watt (2014) contends that several factors need to be weighed when performing stakeholder analysis, the first and foremost of which is stakeholders' power and interest relative to a given project. Next, auxiliary

characteristics should be evaluated including how the project will affect a given stakeholder, how a stakeholder views a project (positively or negatively), their beliefs/expectations about a project, and lastly the dynamics of their relationships with other stakeholders (Project Management Institute, 2021). Moreover, the ultimate purpose of stakeholder analysis is to help prioritize and understand the motivations of project stakeholders to be able to communicate more effectively with each person or group (Project Management Institute, 2021). Furthermore, another important aspect of stakeholder analysis relies on identifying a given stakeholder's readiness to change their position about the issue causing the conflict (Hu et al., 2019).

The Project Management Institute (2021) stresses that stakeholder analysis is a constant activity and that stakeholder positions are prone to change over time. To that point, Missonier (2014) further explored the dynamics of stakeholder relationships by presenting a case study illustrating how both the relationship between stakeholders and the project, as well as each other (stakeholder to stakeholder) was fundamentally altered every time a substantial conflict arose. Ultimately, Missonier (2014) found that stakeholder analysis for a given project had to be updated after every such incident. Moreover, Watt (2014) agrees with this position as they emphasize the importance of being aware of any major conflicts between stakeholder groups in the practice of stakeholder analysis. Lastly, after all the characteristics of stakeholders have been gathered, a ranking of project stakeholders is required (Marion, 2018; Marion, 2019; Project Management Institute, 2021; Schmeer, n.d.).

Stakeholder Hierarchy

The majority of sources reviewed used a two-factor, two or three-degree evaluation methodology to establish the relative hierarchy among stakeholders for a given project (Marion, 2018; Marion, 2019; Schmeer, n.d.; Watt, 2014). The two factors to be measured were a given

stakeholder's power, or ability to affect a project, and the stakeholder's interest in a project, or the likelihood the stakeholders would exercise their power (Project Management Institute, 2021). Furthermore, stakeholders' power and interest levels were often rated on a 1 out of 3 (3 being the highest) scale or using a simpler high/low determination (Marion, 2018; Marion, 2019; Schmeer, n.d.).

However, Zarghami & Dumrak (2020) contend that current methods for prioritizing stakeholders are sub-optimal and that a novel approach should be adopted that blends both siloed and network stakeholder analysis principles. Their proposed solution is a methodology that takes traditional methods (power/interest) and adds a network of additional stakeholder components that measures "the centrality of stakeholders using eigenvector centrality and (4) integrating stakeholder attributes and interactions using fuzzy set theory" (Zarghami & Dumrak, 2020). The result is a much more scientific approach to understanding the impact stakeholders have on a project, and each other (Zarghami & Dumrak, 2020). Furthermore, this advancement is demonstrated by the contrast between the two illustrations below as the first graph (figure 4) shows where stakeholders fall within the 9 squares of a traditional impact/involvement i.e., power/interest matrix (Zarghami & Dumrak, 2020). While the ensuing illustration (figure 10) shows the increased precision enabled by Zarghami & Dumrak's novel approach to the analysis of stakeholders (Zarghami & Dumrak, 2020).

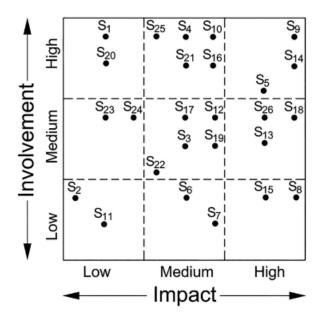


Figure 4.
Mapping the project
stakeholders on
impact/involvement
matrix

(Zarghami & Dumrak, 2020)

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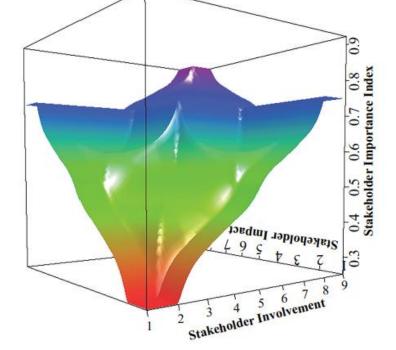


Figure 10. Surface view of "Stakeholder Impact" and "Stakeholder Involvement"

(Zarghami & Dumrak, 2020)

With that being said, the question of how project managers use stakeholder analysis to resolve an issue where two groups of stakeholders have competing sets of requirements that are not compatible with each other remains.

Philosophies for Resolving Stakeholder Conflict

The Project Management Institute (2021) along with Watt (2014) asserts that the best practice for resolving conflicting project requirements from stakeholders is to utilize the information gleaned from stakeholder analysis practices to proactively identify potential issues and resolve them through effective communication. Specifically, the project manager must use strong communication and interpersonal skills to resolve issues, keep stakeholders informed during the project lifecycle, and follow up with stakeholders to see if their concerns were adequately addressed (Project Management Institute, 2021). If that initial strategy is unsuccessful, the project manager should side with the stakeholder with the highest power/interest rating as determined by the stakeholder analysis methodology used (Marion, 2018; Marion, 2019; Schmeer, n.d.; Watt, 2014).

Furthermore, Watt (2014) offers boilerplate communication strategies for how to remediate conflicts based on where a stakeholder falls within a four-section matrix according to both their ability to influence a project and whether they are likely to work in partnership with other stakeholders. Additionally, Watt (2014), Williams et al. (2019), and Aaltonen & Kujala (2010) contended that the most effective communication tactic for engaging with stakeholders varies not only based on the stakeholders' standing and disposition but also on the project lifecycle phase. While Hu et al. (2019) posit that crafting effective strategies for engaging with

stakeholders requires understanding the beliefs that led to their current position. To that point, by understanding the beliefs that led to a stakeholder's position, one will be better equipped to develop effective remediation strategies for that unique person or group (Hu et al., 2019). Furthermore, according to Sudhakar (2015), the disposition (positive or negative) of the project manager that is engaging with stakeholders has a tangible effect on the outcome of conflict resolution efforts. Additionally, Sudhakar (2015) concludes that the style of conflict resolution tactics used also greatly impacts its outcome.

As a further matter, Bahadorestani et al. (2020) intimate that there are two basic frameworks for engaging with stakeholders, a proactive approach that anticipates and has premade strategic answers for issues, and a reactive approach that formulates ad hoc responses to issues. Furthermore, once a framework is chosen a stakeholder engagement plan must be chosen of which there are two available options (Bahadorestani et al., 2020). These options are either to address conflicts according to the power/interest rating of the stakeholders involved or to address conflicts in order of their relative urgency (Bahadorestani et al., 2020). Ultimately, Bahadorestani et al. (2020) recommend considering both approaches when crafting a strategy for resolving stakeholder conflict and offer a framework for doing so below (figure 4). Furthermore, other factors involved in the creation of this model are many of the stakeholder analysis components discussed earlier in this review such as the hierarchy of the stakeholders involved, the specific nature of the conflict, as well as when the conflict occurred and how it progressed relative to the project lifecycle (Bahadorestani et al., 2020).

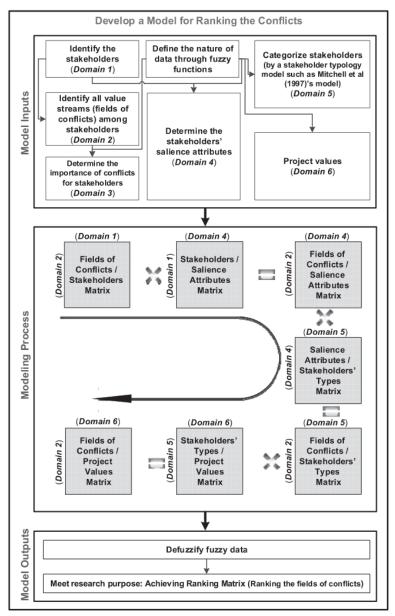


Fig. 4. Proposed model.

(Bahadorestani et al., 2020)

Ultimately, a stakeholder's power, interest, motivations, beliefs, and attitudes toward other stakeholders, converge with an enterprise's approach to resolving conflicts to determine what specific type of communication/engagement strategy should be employed to resolve a conflict between stakeholders (Bahadorestani et al., 2020).

Engagement Tactics for Resolving Stakeholder Conflict

Several styles of communication can be used by a project manager when engaging with a stakeholder, each of which correlates with an engagement strategy that is informed by the stakeholder analysis methodology employed (Watt, 2014). Nguyen et al. (2023) elaborate on the substance of engagement tactics by first defining whether engagement will be collaborative or non-collaborative in nature. To that point, engagement tactics that fall under the umbrella of collaboration include persuasive, manipulative, brokering, and litigious approaches (Nguyen et al., 2023). Moreover, engagement tactics that fall under the umbrella of non-collaborative include acquiescence, imposing, avoidance, and canceling (the project) approaches (Nguyen et al., 2023).

Furthermore, according to Sudhakar (2015), each conflict resolution style has inherent win-or-lose values for each party (stakeholder) involved. For example, when a collaborative approach is used both stakeholders are left with a positive feeling from the engagement, leading to more beneficial project outcomes (Sudhakar, 2015). Alternatively, when non-collaborative approaches are used to resolve conflicts the likelihood of positive project outcomes is decreased (Sudhakar, 2015).

Conclusion

In conclusion, there is a clear issue that needs to be studied further as technology-based projects have been found to have very high rates of failure, at great cost to the enterprises that initiated those projects (La Paz & López, 2023; Reggio & Astesiano, 2020). Moreover, the reason for these project failures was found to originate from deficiencies in project management processes rather than due to the complex nature of the projects (La Paz & López, 2023; Reggio

& Astesiano, 2020). With that being said, nearly all project management authoritative sources/bodies stress the importance of stakeholder management, including identifying the most influential stakeholders (stakeholder analysis) and attempting to meet their requirements/expectations. However, despite the importance of this task, the methodologies used for stakeholder analysis in IT projects often lack nuance. Moreover, the somewhat simplistic methods for determining stakeholder hierarchies lead to inadequate strategies for engaging and resolving conflicts between stakeholders. Additionally, there does not seem to be any framework for resolving situations where two stakeholders of equally high power/influence have competing sets of requirements that are not compatible with each other, as the tiebreaker of siding with the more powerful stakeholder is not viable in this situation.

Based on the literature reviewed, the most likely solution to this problem appears to lie in the frameworks developed for global projects as the size of those projects, and the increased number of stakeholders involved necessitate a much more complex evaluation of stakeholders including the strategies employed for resolving conflicts between stakeholders (Aaltonen & Kujala, 2010; Ahmad & Xu, 2021; Zarghami & Dumrak, 2020). Specifically, using stakeholder analysis methodologies that produce more detailed evaluations of stakeholders will lead to more accurate assessments of stakeholders (Ahmad & Xu, 2021; Sudhakar, 2015). This in turn will enable more effective engagement with stakeholders, which will be especially beneficial when stakeholders are in conflict over project requirements, as more effective stakeholder management will increase the probability of improving project outcomes (Ahmad & Xu, 2021). Therefore, additional research should be conducted on the feasibility of applying stakeholder analysis methodologies found in global projects to smaller IT projects.

References:

- Aaltonen, K., & Kujala, J. (2010). A project lifecycle perspective on stakeholder influence strategies in global projects. *Scandinavian Journal of Management*, 26(4), 381–397. https://doi.org/10.1016/j.scaman.2010.09.001
- Ahmad, S., & Xu, B. (2021). A cognitive mapping approach to analyse stakeholders' perspectives on sustainable aviation fuels. *Transportation Research Part D: Transport and Environment*, 100, 103076. https://doi.org/10.1016/j.trd.2021.103076
- Bahadorestani, A., Naderpajouh, N., & Sadiq, R. (2020). Planning for sustainable stakeholder engagement based on the assessment of conflicting interests in projects. *Journal of Cleaner Production*, 242(1), 118402. https://doi.org/10.1016/j.jclepro.2019.118402
- Hu, X., Chong, H.-Y., & Wang, X. (2019). Sustainability perceptions of off-site manufacturing stakeholders in Australia. *Journal of Cleaner Production*, 227, 346–354. https://doi.org/10.1016/j.jclepro.2019.03.258
- La Paz, A. I., & López, R. I. (2023). Recommendation method for customized IT project management. *Procedia Computer Science*, *219*, 1938–1945. https://doi.org/10.1016/j.procs.2023.01.493
- Marion, J. (2018). Project Management: A Common Sense Guide to the PMBOK, Part One-Framework and Schedule. Umgc.edu. https://eds-s-ebscohost-

com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE3MDMyNTFfX0FO0?sid =0944a961-4fcf-4d8c-9f7f-367c69d737a9%40redis&vid=0&format=EB&rid=1

- Marion, J. (2019). Project Management: A Common-Sense Guide to the PMBOK Program, Part

 Two-Plan and Execution. Umgc.edu. <a href="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/ebook/bmxlYmtfXzE5MTgwNTJfX0FO0?sid="https://eds-s-ebscohost-com.ezproxy.umgc.edu/eds/ebookviewer/eb
- Missonier, S. (2014). Stakeholder analysis and engagement in projects: From stakeholder relational perspective to stakeholder relational ontology. *International Journal of Project Management*, 32(7), 1108–1122. http://dx.doi.org/10.1016/j.ijproman.2014.02.010
- Nguyen, T. H. D., Chileshe, N., Rameezdeen, R., & Wood, A. (2023). Strategic responses to external stakeholder influences. *International Journal of Project Management*, 41(1), 102434. https://doi.org/10.1016/j.ijproman.2022.102434
- Olson, D. (2014). *Information Systems Project Management* (T. Kloppenborg, Ed.). Umgc.edu.

 Live&scope=site&profile=edsebook&ebv=EB&ppid=pp_Cover
- Project Management Institute. (2021). *Guide to the Project Management Body of Knowledge* (7th ed.). Project Management Institute. https://eds-p-ebscohost-

com.ezproxy.umgc.edu/eds/detail/detail?vid=1&sid=97dd492d-c42f-4404-bd30-06a433b8582c%40redis&bdata=JnNpdGU9ZWRzLWxpdmUmc2NvcGU9c2l0ZQ%3d %3d#db=nlebk&AN=2942429

- Reggio, G., & Astesiano, E. (2020, August 1). *Big-Data/Analytics Projects Failure: A Literature Review*. IEEE Xplore. https://doi.org/10.1109/SEAA51224.2020.00050
- Schmeer, K. (n.d.). Section 2 Stakeholder Analysis Guidelines Section 2. Retrieved June 15, 2023, from https://dev2.cnxus.org/wp-content/uploads/2022/04/Stakeholders_analysis_guidelines.pdf
- Schmidt, J. (2022). It Project Failure, Termination, and the Marginal Cost Trap. *Journal of Modern Project Management*, 10(2), 254–275. https://doi-org.ezproxy.umgc.edu/10.19255/JMPM03020
- Snyder, H. (2019). Literature Review as a Research methodology: an Overview and Guidelines.

 **Journal of Business Research, 104(1), 333–339. Science direct.

 https://doi.org/10.1016/j.jbusres.2019.07.039
- Sudhakar, G. P. (2015). A Review of Conflict Management Techniques in Projects. *Brazilian Journal of Operations & Production Management*, 12(2), 214. https://doi.org/10.14488/bjopm.2015.v12.n2.a3

Watt, A. (2014). Project management. BCcampus. https://opentextbc.ca/projectmanagement/

- Williams, T., Vo, H., Samset, K., & Edkins, A. (2019). The front-end of projects: a systematic literature review and structuring. *Production Planning & Control*, *30*(14), 1137–1169. https://doi.org/10.1080/09537287.2019.1594429
- Zarghami, S. A., & Dumrak, J. (2020). Reimaging stakeholder analysis in project management: network theory and fuzzy logic applications. *Engineering, Construction and Architectural Management, ahead-of-print*(ahead-of-print). https://doi.org/10.1108/ecam-06-2020-0391