

# Understanding Different Perceptions of Client Involved Decision-making Amongst Clients and Consultants

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**Abstract**—This study aims to increase the understanding of client involved decision-making in the construction industry by employing Johari's Window to capture different perceptions related to client involved decision-making. A qualitative case study design was used, based on 24 semi-structured interviews conducted among practitioners at one client organization and one consultant organization. This took place in the Norwegian construction industry. The empirical material was analyzed using thematic analysis. The findings show that both clients and consultants perceive clients involved decision-making as frequently slow. However, the reasons behind the delays were interpreted differently. Participants at the client side often connect slow decision-making to stakeholder involvement, responsibility and approval processes. In contrast, consultant participants more frequently perceived the client as hesitant and less decisive. Both stakeholder groups also described fear of making mistakes as a factor influencing decision-making. Further, the findings indicate that differences in perception may influence collaboration, communication and workflow between project actors. The paper contributes to increased understanding of how client involved decision-making is perceived across both groups. In addition, the paper contributes to filling a knowledge gap related to perception differences between clients and consultants by applying Johari's Window to client involved decision-making.

**Keywords**—client involved decision-making, construction industry, perception differences, Johari's Window, qualitative case study, thematic analysis

## I. INTRODUCTION

Timely decision-making in construction industry is of paramount importance for project progress and success. The consequences of slow decision-making have been widely reported in literature. Slow decision-making has been found to contribute to project delays [1], impact quality and scope [2] and a common cause for disputes [3]. Decision-making environments in construction projects are often characterized by being complex, uncertain and with limited information [4]. In addition, there are many

criteria to balance, which usually results in a trade-off between different criteria [5].

These characterizations are what makes Simon's [6] theory of bound rationality relevant for our understanding of decision-making in the construction industry. The theory outlines limits to human rationality within information, knowledge and cognitive capacity [6]. The theory tries to describe real world rationality and argues that a decision-maker should rather settle for a satisfactory (satisficing) decision than an optimal decision, due to these constraints [6]. A similar theory has been used by [4] on his paper of fast and frugal heuristics in construction projects.

Although decision-making has been a topic of great interest in the research field, limited attention has been given to how client-decision-making is perceived by different stakeholders, particularly during the design phase. It is therefore the aim of this paper to understand client and consultants' perception of client involved decision-making. Hence, the research question in this paper is:

How do consultants and clients perceive clients involved decision-making processes?

By addressing this, this study contributes to increasing understanding about existing perception about client involved decision-making. More importantly, this study aims to capture differences in perception between the client and consultant which might manifest onto their collaboration. To equip us with a tool to capture different perceptions we are going to use Johari's window model.

Johari's window is a tool for self-awareness, by having a 2×2 matrix, as shown in Fig. 1. The first quadrant is the open area, represented by the shared perception of both parties. The second quadrant is the blind spot, which represent an insight only known for an outsider. The third quadrant is the hidden area, which is only known by oneself and unknown to others. We are going to use this model and elevate this from an individual perception to a company perception tool. It has been previously used in

construction literature to gain a deeper understanding of how to resolve construction disputes [7].

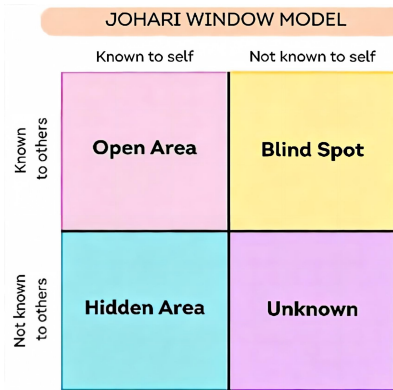


Fig. 1. The Johari Window Model.

## II. LITERATURE REVIEW

This section presents the previous research on client involved decision-making. Several studies have reported on the impact slow client involved decision-making has on the project triangle: cost, time and quality.

A study conducted amongst professionals in Norway found that slow decision-making is the second largest contributor to project delays, while internationally it is ranked at number 16th [1]. This points to a stark and interesting difference.

Another study conducted in Pakistan ranked the consequences of slow decision-making. Slow decision-making for cost-overrun was ranked at 70, quality at number 51 for quality and time-overrun at 32 [2]. Furthermore, another study conducted in the UAE found delays in client involved making decision-making to cause time overruns and was the third largest contributor to cost overruns [8]. The difference between these two studies can stem from different grouping strategies, weighing as well as local and political factors.

Another consequence apart from the project triangle is that slow decision-making has found to be a common cause for construction disputes amongst the client and the consultant [3]. This can be caused by different perceptions of client involved decision-making. In addition, the consultant works according to the project plan, and slow decision-making can make them hamper this progress, contributing to increase friction in collaboration with the client. This can again cause increased interface problems between different engineering disciplines [9].

When it comes to how decision-making is carried out by the client, their biases have been reported in the literature. Clients are found to use experience as normative belief and to turn to simplicity because the client lacks knowledge [10]. Moreover, the past is not a predictor of the future and therefore creates the need for an adaptive toolbox of smart heuristics, to cater for decisions in face of uncertainty [4]. These adaptational fast and frugal heuristics can sometimes be beneficial due to the inherent complex nature of construction projects and because the projects are coupled with uncertainty and ambiguity [4]. The act of

balancing a decision between accuracy and time can lead to sub-optimal decisions [5].

Most researchers focus on the consequences of decision-making and how decision-making is carried out in terms of biases and methods for decision-making. There is lacking research on how decision-making is perceived by different stakeholders, which might shed light on where the problems with client-involved decision-making lie.

## III. MATERIALS AND METHODS

This paper uses a qualitative case study design. The purpose was to explore perception differences in client involved decision-making. A semi-structured interview methodology was chosen, which consisted of 13 open-ended questions. This methodology is useful to better understand how decision-making is experienced and perceived by practitioners at both the client and consultant side.

The study was conducted in the Norwegian construction industry. It included mainly one large public client organization and one private and experienced consultant organization. These companies were selected because they were relevant to the research topic. The authors also had access to the organizations through their professional roles. Therefore, the study was conducted as insider research, where reflexivity, dual roles and bias reduction was of importance. The participants were selected through a combination of purposive and convenience sampling, as the participants were either acquainted with one of the authors or through mutual contacts. They were purposely selected based on their roles, experience and decision-making processes.

In total, 24 interviews were conducted. This included 12 participants from the client organization and 12 participants from the consultant organization. Apart from the questions, the interview captured their roles and years of experience in the field. The sample had different professional roles. These included project leaders, discipline leaders, consultants, engineers and design managers. Participants with different levels of experience were also included in the sample. Fig. 2 (level of experience) shows the distribution of level of experience among the participants.

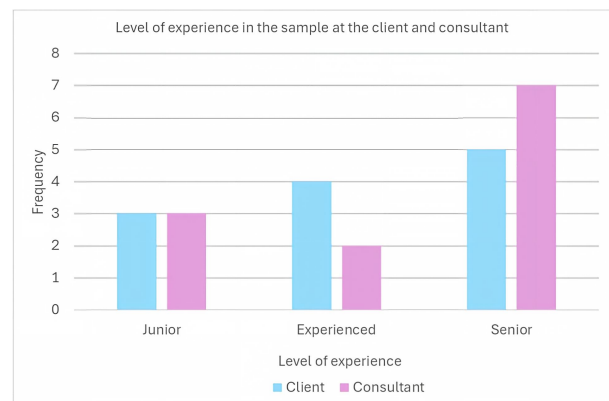


Fig. 2. Level of experience for the sample (n=24).

The exact number of years of experience is not disclosed due to anonymization purposes. Instead, the level of experience was divided into three categories: junior (0–6 years), experienced (6–15 years) and senior (15+years).

Table 1 (level of exp.) provides an overview of the sample through roles, experience level and frequency for the client and consultant.

TABLE I. OVERVIEW OF SAMPLE CHARACTERISTICS

| Client         |                  |           | Consultant        |                  |           |
|----------------|------------------|-----------|-------------------|------------------|-----------|
| Role           | Experience Level | Frequency | Role              | Experience Level | Frequency |
| Project leader | Senior           | 3         | Discipline leader | Senior           | 3         |
| Project leader | Experienced      | 1         | Project director  | Senior           | 1         |
| Design manager | Senior           | 1         | Design manager    | Experienced      | 1         |
| Design manager | Experienced      | 3         | Consultant        | Senior           | 3         |
| Design manager | Junior           | 1         | Consultant        | Experienced      | 1         |
| Engineer       | Senior           | 1         | Consultant        | Junior           | 3         |
| Engineer       | Junior           | 2         |                   |                  |           |
| Total          |                  | 12        |                   |                  | 12        |

The interview guide consisted of 13 open-ended questions. These questions focused on decision-making, communication and perception. The semi-structured format allowed the participants to elaborate on their own experiences and reflect on those in their own words, while simultaneously allowing for consistency across the interviews. The interview took place in person in a 1-1 setting at the interviewee's company's main office.

All interviews were conducted in Norwegian. The interviews were recorded, but only with informed consent from the participants. The interviews were then transcribed manually to adhere to company policy and participant preferences. The empirical material was analyzed using thematic analysis inspired by [11]. Initial codes were identified from the interview transcripts. After the initial coding, a cross-analysis was conducted by the authors. This helped reduce bias and improve consistency. The codes were then grouped into broader themes based on similarities and recurring patterns across the collected data.

Several methodological limitations should be acknowledged. The study relies partly on convenience sampling and insider access, which may introduce social desirability and confirmational bias. To reduce these biases, the participants were asked open-ended questions and were told that their anonymity would remain intact. In addition, most participants were recruited from the headquarters of the organizations. This reduced the geographical diversity in the sample. Therefore, the findings are not statistically generalized. However, the study may still provide relevant insight into similar project environments.

#### IV. RESULT AND DISCUSSION

This chapter outlines the results from the 24 interviews carried out amongst clients and consultants' practitioners. Our interviews captured perceptions within client decision-making speed and decisiveness. The interview excerpts used in the results and discussion can be found in

Table A1 in the appendix. Decision-making speed refers to how much time is needed before decisions are made. Decisiveness refers to how firm decisions are. The Johari window model will be used to place empirical perceptions in the suitable quadrants in the model. The quadrants consist of an open area, where shared perception among

clients and consultants' fits. A hidden area where only client's self-perception fits. Finally, a blind spot which represents empirical evidence that is only reported by the consultant.

##### A. Decision-Making Speed

A central finding across both groups is that client involved decision-making is frequently slow. Both the client and the consultant practitioners described slow client involved decision-making as a common challenge in various projects. Our finding therefore supports the finding that slow decision is a persistent challenge in the Norwegian construction industry [1]. This can be caused by the inherent nature of decision-making in a complex and ambiguous environment that can lead to inaction in decisions [4], or by high perceived personal risk by client practitioners [10]. In addition, it can be understood under the lens of bounded rationality. The amount of information available that needs to be processed before a decision is made can cause cognitive burden. The search for the optimal decision might even slow the decision process down. Some practitioners might consciously or subconsciously disregard imperfections on their rationality and still seek optimal decisions which then will be consuming.

Moreover, another shared perception was related to decisions that incur additional costs were perceived to be slow. This can be expected as additional approval of funding might be required, which creates decisional hierarchy which might require political engagement. In contrast to a study [10], that found that consultants reported on friction in collaboration, because the client escalated easy decisions up in the hierarchy. Our study suggests this happens when there is a decision that requires increase investment. One consultant practitioner offered his view on this **"The higher the cost of a decision is, the higher the degree of involvement"**. This can then result in a slow decision-making process. Since slow decision-making is a shared perception by both groups, it fits well in the open area of the Johari window.

##### B. Decisiveness

Another finding revealed differences in how decisiveness was perceived between the client and consultant side. Several practitioners at the client's side

described decision-making as demanding due to the number of stakeholders' opinions in their projects. Since they represent a public client, they need to ensure extensive and documented stakeholder involvement. One practitioner elaborated on this fact by stating: **“A drawback with an organization like ours is that there are many stakeholders, many actors, who all want to have an opinion to comment on things”**. Literature has expected stakeholder involvement to increase as more information is readily available to external stakeholders [5], which might increase the difficulty in reaching a consensus with them. In addition, increased stakeholder consideration might increase the cognitive workload for the client, making it difficult to find an optimal decision or even a satisfactory decision. A satisfactory decision in this regard means finding a balance or trade-off between stakeholder requirements. Although, there are situations where heuristics could be applied [4], this situation makes it difficult. This is because it can be more challenging for a public client to provide evidence on how decisions are made if they are made using heuristics.

However, an interesting recurrent stakeholder was the internal safety auditor. Their role is to check if the project is adhering to safety and operational considerations. This stakeholder was reported to hold high power, illustrating the focus on safety.

The client's self-perception on stakeholder involvement was only reported by the client, which makes it an excellent fit for the hidden quadrant of the Johari window.

One client practitioner explained that “often there is a lot of decision-making reluctance in the project”. At the same time, some client participants emphasized the importance of making decisions, even when all information is not available, relevant to the bounded rationality. One client practitioner stated that **“the most important thing is to decide. It is not always that the decision is correct, but there is always the opportunity to rectify it”**. This was supported by a colleague at the client who said **“Often 80% of the decision-basis is good enough, and things can be corrected later in order to secure progress and reduce costs”**. Several client practitioners connected decision-making reluctance to fear of making mistakes. One of them stated that **“many people are afraid of making a mistake”**, suggesting that perceived personal risk is still evident amongst client practitioners [10]. Consultant participants more frequently described the client as hesitant and less decisive. One consultant practitioner explained that **“(…) but from our point of view [the client] is the one with decision reluctance”**. At the same time, another consultant practitioner stated that **“the client was more decisive before and has become less decisive now”**. This might be a direct consequence of increased informational availability for the stakeholders, prolonging discussions on client involved decisions. Furthermore, increased documentational requirements might also make the decisiveness a descending trend. This was only reported by the consultant and therefore falls under the hidden area of the Johari window model.

Interestingly, both the client and the consultant side described elements of decision reluctance. This may

indicate that decision reluctance is not only perceived externally by consultants but also recognized internally at the client side. However, both groups appeared to interpret the causes differently. While the client side often connected decision-making reluctance to safety and stakeholder involvement, consultants more frequently perceived it as reduced decisiveness. Several consultant practitioners also connected reduced decisiveness to fear of making mistakes and increased quality assurance. One consultant practitioner expressed that **“people are beginning not to dare to make decisions, because they want their backs free and they are never to make a mistake. The fear of making a mistake has become great”**. Interestingly, fear of making mistakes was not only described by consultant practitioners but also acknowledged by participants at the client side. One client practitioner stated that **“(…) I am afraid of committing a mistake that endangers people or lives”**. This may indicate that reduced decisiveness is partly connected to responsibility and fear of consequences, rather than unwillingness to make decisions alone. A probable explanation can be that traceability has increased over the years, making it easier to trace decisions to an individual. This was also reported by a study, which found that client practitioners perceived risk more personally, and were more likely to be risk averse [10]. The findings therefore suggest that reduced decisiveness may not be related to unwillingness to make decisions, but also to responsibility and fear of consequences. Since this is a shared perception, it will also fit under the open area of the Johari window model.

The completed Johari's Window model can be seen in Fig. 3, where all findings perceptions found in this study is presented.

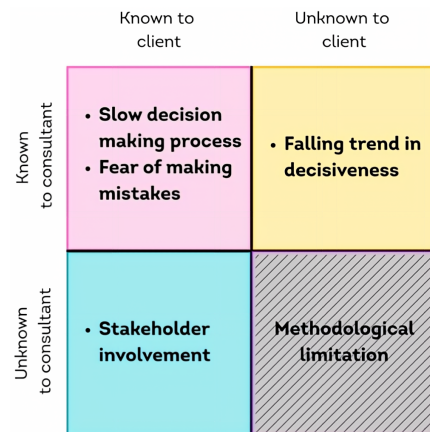


Fig. 3. Client and consultant perception of decision-making speed placed in the Johari Window.

## V. CONCLUSION

This paper explored differences in perception on client involved decision-making. The findings show that both clients and consultants experience delayed decision-making as a common challenge. However, they often perceive the causes and necessity of delayed decisions differently.

Participants on the client side frequently justified delayed decision-making through safety considerations, uncertainty and stakeholder involvement. In contrast, consultants more often perceived delayed decisions as inefficiency and lack of decisiveness. This suggests that decision-making challenges are not only related to project complexity, but also to differences in perception between clients and consultants.

The findings also indicate that unclear responsibility structures and variation in communication quality may strengthen these perception differences. This may negatively affect collaboration, workflow and trust between stakeholders. This paper therefore highlights the importance of clearer communication, better alignment and earlier involvement between project actors.

From a theoretical perspective, the findings support the relevance of bounded rationality and Johari's Window in understanding client involved decision-making. While

bounded rationality helps explain cautious decision-making under uncertainty, Johari's Window helps explain how differences in perception may create blind spots between clients and consultants.

The contribution of this paper is that it offers increased understanding of perception differences in decision-making speed and decisiveness in client involved decision-making between the client and consultant. The practical implication is that this can potentially help the client and consultant become more aware of these differences in perception. This can potentially foster better collaboration in the design phase between the client and consultant in decision-making.

Future research could further explore how perception differences influence collaboration and project performance across different project types and projects environments.

## APPENDIX

TABLE A1. EXCERPTS FROM THE INTERVIEWS

|                              | Client                                                                                                                                                                                                                                                                                                                                                                 | Consultant                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Decision-making speed</b> | "From my point of view, I hope they perceive [our decisions] as quick. But I think if they are dependent on decisions that require a significant cost involved the process at us can be strict since it needs to be elevated a notch for approval." - (Senior Design manager)                                                                                          | "There is a lot of variation in how decisions are reached. Costly decisions require higher degree of involvement. We have ICE-sessions where [client decisions] have long lead time. (...) When it comes to the construction phase decisions are often more concrete, because the concrete is hardening, and decisions are made quicker" (Experienced Consultant)                                                                                 |
|                              | "[We] spend too long time making those decisions, maybe too long for many." (Senior Engineer)"                                                                                                                                                                                                                                                                         | "... So I think that [the client] are really slow at decision-making, but I don't think that we are [slow], but when we have made a decision about something and try to get the clients approval, then my experience is that takes very long time." (Senior Discipline Leader)                                                                                                                                                                    |
|                              | "Yes, there are many laws and regulations that [we] need to comply to, which is not necessarily difficult, but it takes time. And the process is quite extensive, and it needs to be executed in the correct order." - (Senior Engineer)                                                                                                                               | "I think that the client can think that we can a bit slow and at times rigid." - (Senior Consultant)                                                                                                                                                                                                                                                                                                                                              |
|                              | [Client decisions are] cumbersome and time consuming" (Senior Project leader)                                                                                                                                                                                                                                                                                          | "There have been situations where the client has made very quick decisions on minor issues, and that has been very effective" - (Experienced Design Manager)                                                                                                                                                                                                                                                                                      |
| <b>Decisiveness</b>          | "Often there is a lot of decision-making reluctance in the project" - (Senior Project Leader)                                                                                                                                                                                                                                                                          | "(...) but from our point of view [the client] is the one with decision reluctance" - (Senior Discipline Leader)                                                                                                                                                                                                                                                                                                                                  |
|                              | "My experience with projects is that the most important thing is to make a decision. It is not always that the decision is correct, but there is always the opportunity to rectify it. It is costly to sit and wait for all information. Most decisions are correct, and it is rare that you make a decision that is completely wrong." - (Experienced Design Manager) | "I feel that the client was more decisive before and has become less decisive now." - (Experienced Consultant)                                                                                                                                                                                                                                                                                                                                    |
|                              | "Because I believe many people are afraid of making a mistake. Me too, I am afraid of committing a mistake that endangers people or lives. But when it comes to money - the higher the amount, the scarier it feels in a way, but that is my job." - (Experienced Design Manager)                                                                                      | "[The client] knows very precisely what they don't want, they don't want any more things to maintain, they don't want things to get in the way. Similarly, things have happened in other projects where they are very clear what they do not want (...) At times it can feel a bit like that in some projects, that [the client] knows what they don't want, but not so many [clients] know what they [actually] want" - (Experienced Consultant) |
|                              | "A drawback with an organization like ours is that there are many stakeholders, many actors, who all want to have an opinion to comment on things" - (Senior Project Leader)                                                                                                                                                                                           | "I can tell you there has been a lot of development in the last 40 years, because now it is always quality assurance, quality assurance, and people are beginning not to dare to make decisions, because they want their backs free and they are never to make a mistake. The fear of making a mistake has become greater." - (Senior Discipline Leader)                                                                                          |
|                              | "There are many stakeholders who have an opinion on the matter, and the uncertainty surrounding about who the decision-makers are (...) but an uncertainty about making a mistake" - (Senior Project Leader)                                                                                                                                                           | "I think [the client] is often too passive, like they listen to us, but leans back and just trust that we are going to deliver best outcome for them" - (Junior Consultant)                                                                                                                                                                                                                                                                       |
|                              | "After a while [here] I started noticing that it was more demanding to get things through because more people have a say." - (Experienced Project Leader)                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

#### AUTHOR CONTRIBUTIONS

CBI conducted interviews at the consultant organization, while SAS conducted interviews at the client organization. Both authors contributed to the data analysis and writing of the paper. The authors also participated together in the coding and cross-coding process, discussed the findings and approved the final version of the paper.

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