ON STUPIDITY IN PROJECT MANAGEMENT

A CRITICAL REFLECTION OF PM IN A VUCA WORLD

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Abstract: The culprit for project failure is the complexity that is associated with a project. Unfortunately, project complexity will be part and parcel of a project especially in a VUCA world. This implies then that projects will continuously fail as the culprit is not disappearing. However, the purpose of this paper is to show how complexity at times appears like an opaque conundrum, which allows hiding whatever in it, even stupidity. The analysis of 1064 datasets from a questionnaire-based survey on stakeholder complexity reveals that project stakeholders do not treat project complexity with the necessary respect that sometimes borders stupidity. The article highlights that project stakeholders do not apply common sense when dealing with project complexity. Our journey in understanding project complexity became a learning journey into stupidity and a critical reflection on our frivolous liaison with the VUCA world.

1. INTRODUCTION

On a dark night, in the light of a streetlamp, a man was searching the ground for his keys. A bypassing man stopped to help. After a little while, the latter asked the former;

- *"Where exactly were you when you lost your keys?"*
- *"Over there," the man pointed to an area in the dark part of the street.*
- *"Oh, then why are we searching here?" the other man asked, surprised.*
- *The first man replied: "Because here, there is light."*

Much research has been done on the topic of project complexity (Klein, 2012; Cooke-Davies et al., 2007). However, in a structured review on project complexity (Geraldi, Maylor, & Williams, 2011, p. 986) argued for a paradigm shift that "moves the debate from defining complexity and its characteristics to developing responses to project complexities. Maybe then we can help practitioners and their organizations to manage complexity". This is a road less travel by, with some exemptions like Maylor, Turner, and Murray-Webster (2013). The quest was an investigation of practitioners' perceived project complexity. At the outset, we had the indication of 'multiple stakeholders' being perceived as the essential characteristics of project complexity among practitioners (Cooke-Davies, 2011), and we decided to investigate the reasons for the stakeholder complexity in a survey among practitioners of project management. The research opportunity was a recurring Danish survey among project managers and related roles in project management.
The retrieved empirical data from the survey did not seem to make sense at first. The streetlamps did not shed light on the keys. The process leading to this paper was rather abductive until we dared to look at the data through the lens of organizational stupidity (Alvesson & Spicer, 2012). The term stupidity is rarely used in the project management discourse. However, given the explanatory power of the concept of stupidity in our research, the topic might be like the proverbial elephant in the room. Research approaches it from different sides using different terms and keeps failing to address the whole thing. Common sense has always been there calling stupidity 'stupidity'. It is about time to talk about stupidity in project management and governance in an informed way and allow to address it in PM research. We need to prevent stupidity from hiding comfortably behind complexity.
Based on a structured review (Stingl and Geraldi, 2016) offer an understanding of the current theoretical pluralism of project decision making and identified opportunities for future research within and across theoretical foundations. This paper is (also) a response to their calls for more research on project decision making.
(Stingl and Geraldi, 2016) found three categories in the literature, hence the title of their paper Errors, lies, and misunderstandings". This paper argues that stupidity is not covered by any of the three categories. The actors are not (always) acting out of any kind of self-interest; they are not optimizing, nor politicalizing, nor sense-making. Instead, sometimes their action is based on plain stupidity.

Complexity is used as a token to excuse all kinds of messy behavior in PM, so are the other siblings from the VUCA acronym: volatility, uncertainty, and ambiguity. Future PM practice needs to find ways to address these fields systematically based on innovative research. PM research needs that emancipate from the reductionist and linear research settings and embark on the research innovations from social, cultural, and political studies (Klein, 2020; Boulton et al.; 2015).

With this paper, we present our prelaminar findings and conceptualization as a contribution to future research of more deductive nature. We set out to investigate stakeholder complexity and found stupidity. The initial question was: why is 'multiple stakeholders' seen as an essential characteristic of project complexity, and the final question investigated in this paper is: how can we make sense of stupidity in project management? This might be the keys we are looking for in the dark, away from the streetlights.
The remaining parts of this paper are organized in the following sections: 2. Initial research: a stakeholder complexity survey, 3. Findings on stakeholder complexity, 4. Extended Research: a discourse exploration on stupidity, 5. Discussion: complexity vs. stupidity and finally, 6. Conclusion

2. PROJECT COMPLEXITY THROUGH THE LENS OF COMPLEXITY

We are currently living in a VUCA world—an acronym for volatility, uncertainty, complexity, and ambiguity. According to Bennett and Lemoine (2014), complexity is any situation or environment that has many interconnected parts and variables. R. B. Mason (2007) adds to this, stating that the level of complexity is based on the heterogeneity or diversity in factors such as customers, suppliers, socio-politics, and technology. Within a complex environment, the ability to understand and use the information to plan and predict becomes more difficult Bennett and Lemoine (2014); (R. B. Mason, 2007). In other words, the more complex systems become, the more difficult it is to make sense of it and to manage it.
Two approaches exist in managing complexity, i.e., algorithmic and natural complexity (Vasconcelos & Ramirez, 2011). Algorithmic complexity concerns the difficulty of solving a given, well-defined problem. Solving these problems requires finding a solution through means stated in an algorithm and institutionalized as rules. Natural complexity concerns situations in which finality is not a priori known by the actor in question. Here complexity is a measure of absent information. Complexity is a function of the degree of the actor's ignorance about the reality's working principles.
In order to make sense of complexity, the notion of complexity theory should be applied. The underlying principle of complexity theory is that in these complex systems with heterogeneous or diverse factors, these factors tend to self-organize into systems. Thus, complexity theories are concerned with the emergence of order in dynamic non-linear systems (Burnes, 2005). R. B. Mason (2007) opines that the underlying idea of complexity theory is that all the parts eventually self-organize into systems.

One way to deal with complexity is through complex adaptive systems (CAS). Complex adaptive systems (CAS) examines how interactions between the various individual and autonomous parts of a system enable the system to adapt to its environment and yield higher-level emergent behavior (Sweetman & Conboy, 2018).
One of the most important insights of complexity theory is this notion of emergence which implies that, given a sufficient degree of complexity in a particular environment, new (and to some extent unexpected) properties and behaviors emerge in that environment (M. Mason, 2008).
Project managers' training focuses on an environment of certainty. This contradicts their real-life experiences where they operate in environments with increased volatility, uncertainty, complexity, and ambiguity. Organizations that are professing decentralized and self-organizing management are more successful in managing complexity. This implies that project managers are in the ideal position to deal with complexity. Project managers do have the authority to decentralize and self-organize components within the project. Thus, making projects the ideal solution to deal with complexity.

Project complexity

(Baccarini, 1996, p. 201) proclaims that 'complex projects demand an exceptional level of management, and that the application of conventional systems developed for ordinary projects have been found to be inappropriate for complex projects.' This is further reiterated by Levin and Ward (2011), arguing that projects should be managed as complex systems. Projects per se should be seen as complex adaptive systems and managed accordingly.
Project complexity has been researched much over the last decades, starting with a definition from Baccarini (1996, p. 202) "many varied interrelated parts". This definition was contested early on by Williams, stating that "project complexity can be characterized by two dimensions, each of which has two sub-dimensions: Structural uncertainty (number of elements and interdependence of elements) and Uncertainty (uncertainty in goals and uncertainty in methods)" (Williams, 1999, p. 271). This definition contests the often-used complexity-uncertainty grid (Bennett & Lemoine, 2014) and opened for an continuous expansion of dimensions in the concept of project complexity. Many scholars prefer the narrow definition, t.ex (Besner & Hobbs, 2012). Not surprisingly, literature review often concludes like (Zhu & Mostafavi, 2017, p. 3); "Despite the many existing studies on project complexity, there is no universal agreement on the definition of project complexity."
A systematic review, based on an including the approach to the research literature, concluded that the concept of project complexity had evolved to encompass five dimensions: Structural complexity, Uncertainty, Dynamic, Pace, and Socio-political (Geraldi et al. 2011). A similar review performed five years later indicated a further development of the concept and expanded the understanding to eight dimensions: Structural complexity, Uncertainty, Emergence, Autonomy, Connectivity, Diversity, Socio-political, and Element of context (Bakhshi et al. 2016). The stream seems never-ending; a recent example of the framework (de Rezende & Blackwell, 2019) has ten different, but similar dimensions.
From a meta perspective, Bakhshi et al. (2016) identified three schools of thought on project complexity: The PMI-view, the complexity and the system of a systems view. Building on this work, a resent paper identified five ideal types of research of project complexity, indicating that each type holds a different relation to the concept of project success. The ideal types are: 1) Positivistic modeling, 2) Complexity theory, 3) Ontological framework, 4) Managerial framework and 5) Emancipative investigation. (Mikkelsen, 2020), where the first three types deploy descriptive version, and the two latter include a perceived project complexity, where "For all practical purposes, a project manager deals with perceived complexity as he cannot understand and deal with the whole reality and complexity of the project" (Vidal & Marle, 2008). In the mind of the practitioner the multiple stakeholder is the most important characteristic of project complexity (Terry Cooke-Davies, 2013). "Variety of stakeholders' perspectives" is also found to be among the highest contributor to project complexity according to (Bosch-Rekveldt, Jongkind, Mooi, Bakker, & Verbraeck, 2011).

3. RESEARCH METHODOLOGY

This survey, which had previously been performed several times with an interval of 3-4 years, contains a large array of questions on the current state of project management. Each time, new themes have been investigated along with the longitudinal part of the survey.

A quantitative approach was adopted to determine the relationship between project complexity and stakeholders' perception of project complexity. The questions pertaining to stakeholder complexity formed part of a larger longitudinal survey focusing on the management of projects. The adoption of a quantitative approach allowed the researchers to quantify the problem through the generation of numerical data that quantify the opinions and behaviors. Because it is difficult to engage with organizations in its entirety, the survey was done at an individual level. Therefore, individuals involved in the broader discipline of project management were the units of analysis. Individuals were targeted using snowball sampling as a non-probability sampling technique. The aim of the non-probability sampling approach was to get a representative sample. The survey was sent out using SurveyMonkey to a selection of 9 619 potential respondents. A total of 1 064 respondents completed the survey, giving a response rate of 10%. Table 1 provides an overview of the respondents' role and the industries that they represent. Project management is the most prevalent role in the pharmaceutical industry. The purpose of the results in **Table 1** is (i) to understand the survey sample and their organizations, (ii) to show that they are representative, and (iii) to provide context to the results.

The first section of the survey covered demographic data about the respondents: role in the organization, industry sector, types of projects that they are involved in as well as project experience. The section focusing on project complexity had six questions resulting in 40 items. The aim was to investigate the perceived cause of "multiple stakeholders" being a characteristic of project complexity. The design of the questionnaire for this purpose was based on the selection of six plausible causes for the participants to priorities in a forced prioritization. Based on the literature on stakeholders and project complexity, the topics were disagreement, expectations, ambiguity, change of needs, resisting change, and lack of communication.

There are two criteria that data must meet for credible results to be produced: data must be both valid and reliable (Field, 2018). A further distinction can be made between internal validity and external validity (generalisability). There are several ways of assessing internal validity. Logical validity is based on the subjective judgment that the measurement items relate to the stated research questions. This was addressed through the design of the questionnaire. Content validity relates to the domains being measured, and whether the scale items measure those domains. For this research, all items of the questionnaire were drawn from literature and are believed to be valid. From an external validity point of view, the data is believed to be generalizable. However, the findings might not be generalizable outside of organizations not involved in technology implementations.

There are a number of criteria for data reliability. The data must be consistent, with the same method being used to gather it, and must exhibit independence among the respondents. It must be stable, meaning that gathering more data would produce similar results, and reproducible, meaning that if the research were repeated, it would also produce similar results.

A commonly accepted way of measuring reliability is by using Cronbach's alpha test, where an alpha of 0.7 or above is considered satisfactory (Argyrous, 2011). Of the 40 items, reliability testing could only be performed on eight items due to the nature of the questions. An overall alpha value of 0.383 (8 items) resulted from the analysis and indicated that there was cause for concern about the consistency of the data.

Another requirement for many types of statistical data analysis is that the data for each rating item are normally distributed. Normality is measured by skewness and kurtosis, which are calculated for each of the rated items. The parameters skewness / standard error of skewness, and kurtosis / standard error of kurtosis are used. Ratios above 2.58 indicate that the data may not be normal (Argyrous, 2011). Based on this ratio, and inspection, ratings for the items are normally distributed. Having done reasonable checks on the data, the conclusion is that the data can be used for analysis.

4. FINDINGS ON STAKEHOLDER COMPLEXITY

With regard to identifying complexity within a project, there is a correlation between the three identified steps. There is a weak significant correlation between the identification of complexity within a project and the understanding of identified complexities. There is a moderately significant correlation between the understanding of the complexities and acting on these complexities. This implies that once complexities are identified, it is not always understood, but once it is understood, the probability of acting on these complexities increases. This is evident from the weak correlation between identifying complexities and acting on complexities (r=0.190, p=0.000). This weak correlation is an indication that not all identified complexities are acted upon. (**figure 1**)

Table 1. Cross-tabulation between industry and role

	Project manager	Project coordinator	Head of Project Management	Line manager	Program manager	Program director	Project participant	Steering committee	Other	Total
Agriculture & Fisheries	5	0	0	0	0	0	2	0	0	**7**
Construction	51	2	13	2	0	2	3	2	4	**79**
Energy & Water Supply	67	4	1	4	1	0	12	2	2	**93**
Industry	95	12	5	2	4	3	22	3	4	**150**
Information & Technology	92	7	7	6	7	1	4	0	7	**131**
Pharmaceutical	110	12	11	3	2	4	26	2	2	**172**
Public administration	98	6	4	1	4	0	5	5	0	**123**
Trade, hotel and restaurants	11	1	0	0	0	1	2	0	1	**16**
Transport, mail and telecommunications	22	2	1	0	0	0	2	0	0	**27**
Other	181	10	14	5	6	4	31	3	12	**266**
Total	**732**	**56**	**56**	**23**	**24**	**15**	**109**	**17**	**32**	

Figure 1. Correlations between complexity steps.

The question that should be asked is how good stakeholders are performing these three activities. A weighted scoring average shows that stakeholders are not that good in performing these three activities.

Activity	Identifying complexity	Understanding complexity	Acting on complexity
Average	62%	64%	63%

Table 2. Weighted average – performing complexity activities.

There is not much difference in the performance of the activities. The activities are performed at a 63% average, implying that there is a major room for improvement. This average level of performance can be attributed to various factors such as a lack of training, lack of experience or not being part of the role as a stakeholder. This phenomenon can be further investigated at a later stage through in-depth interviews.

Identifying Complexity

The first step is to identify and determine the level of complexity within a project. As per Table 2, the respondents are not good at complexity identification. Part of complexity identification is to assess the level of complexity. The results in Table 3 support the results of Table 2. Only 41% are trying to do some form of formal assessment during the initiation phase of the project. An astounding 22% rely on some sort of gut feeling to determine the project's complexity. The reality is that 59% of the respondents are going the wrong way to determine the complexity of a project.

Variable	Rank	Percentage
Formal Assessment - Initiation Phase	1	41%
Part of Risk Assessment	2	33%
No attempt	3	26%
Gut Feeling - Initiation Phase	4	22%
Determined during the execution phase	5	19%
Disagreement	6	3%
Other	7	3%

Table 3. Determining the levels of complexity.

This wrong way of going about to determine the complexity of a project has a direct impact on the way that a project will be managed. The fact that the stakeholders cannot identify a complex project, implies that they might deal with a complex project as a simple or complicated project.

Understanding of complexity

With regard to the respondent's understanding of complexity within a project environment, **Figure 2** provides some insights. Sixty-three percent of the respondents believe that complexity can be defined as a project consisting of many varied inter-related elements. Complexity is also perceived as political aspects that influence the project and decisions made within the project (50%). A project manager with low experience (13%) and a low level of trust among parties in and around the project (16%) is not perceived as descriptors of complexity.

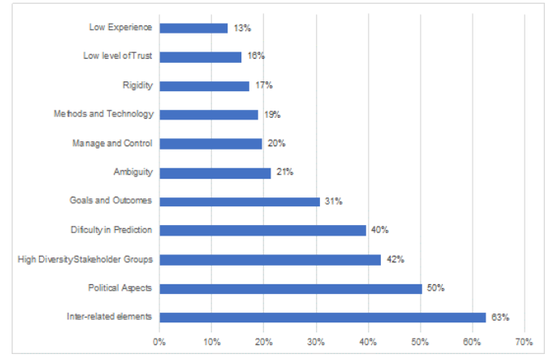

Figure 2. Ranking of complexity descriptors.

There is a moderately significant correlation between the understanding of the complexities and acting on these complexities. It is evident from Figure 2 that the respondents are using various descriptors to make sense of complexity. The spread of responses across the various descriptors indicates some confusion about what complexity is all about and how complexity should be defined. This speaks directly to the findings of Zhu and Mostafavi (2017), stating that there is no clear and succinct definition for project complexity. This confusion about what constitutes project complexity implies that the stakeholders would not necessarily recognize a complex project even when they are part of the project. They might be shining the light at the wrong place to determine whether a project is complex or nor.

Project Complexity Strategies

It is evident from the results in **Table 4** that the respondents are making use of various strategies to determine the complexity of a project. The two most popular strategies are engaging an experienced project manager (40%) and having increased meetings with the stakeholders (39%).

Engaging more frequently with project stakeholders does have its own challenges as per **Table 5**. According to the results in Table 5, stakeholders cannot be used as a reliable source of determining project complexity. The results are quite contradictory.
Some of the strategies to deal with complexity are Agile-oriented (MVP (21%) and interactive processes (17%)). Although there is evidence that Agile can reduce complexity, Agile is predominately applied in the IT industry. Engaging an experienced project manager sounds like a good strategy, but an experienced project manager does not necessarily have the experience in managing complex projects. The experienced project manager might realize sooner that a project is complex. The majority of the strategies are not that popular among the respondents. This might be an indication of their inability to manage complexity and that they are clutching at straws.

Stakeholders' influence on the complexity

Stakeholders per se, can significantly contribute to the project's complexity. According to T. Cooke-Davies (2013) 'multiple stakeholders' are the main course of project complexity. Decision-making stakeholders' unrealistic expectations of what is possible within the allocated budget and timeframe is ranked as the most important factor that contributes to project complexity One-third of survey participants give this statement the highest-ranking of the six options. **Table 5** provides the ranking order.
The results support T. Cooke-Davies (2013) findings in that the stakeholders themselves contribute to the complexity of the project. The results highlight that stakeholders disagree among themselves about the project goal and deliverables; there are ambiguity and a constant change with regards to their needs and demands. Although the stakeholders are the cause of change, they are also perceived as the ones who are not willing to change. One of the strategies to deal with complexity is the ability to adapt or change.

Stakeholder Influence	Ranking
Unrealistic expectations	1
Reaction to poor/insufficient communication	2
Ambiguity	3
Resistance to change	4
Change in needs/demands	5
Disagreement	6

Table 5. Ranking of Stakeholders' influence on the complexity.

Variable	Rank	Percentage
Engaging experienced project manager	1	40%
Increase of meetings with stakeholders	2	39%
Allocation of more PM time	3	26%
Prototyping/MVP	4	21%
Interactive processes	5	17%
Planning with extra Stage Gate	6	16%
Improvisation of process	7	15%
Other	8	6%
Learning on the project	9	5%

Table 4. Strategies to deal with project complexity.

Complicated versus Complex

Snowden and Boone (2007) created the Cynefin framework to assist leaders (project stakeholders) in determining the prevailing operative context so that they can make appropriate choices. The two most prevailing operative contexts within a project environment are that projects are either complicated or complex. The classification of a project as either complicated or complex, determines the way and manner the project will be managed. The results in **Table 6** highlight two important aspects. Firstly, the project stakeholders sometimes distinguish between a complicated and a complex project. This might be because of the fact that they do not know themselves how to differentiate between a complicated and a complex project. Secondly, it is often the expectation of the stakeholders to 'downgrade' a complex project to a complicated project. This might be the result that complicated projects are easier to manage than complex projects. Although projects often do have significant complex parts, projects are 'downgraded' too complicated projects. This has a significant impact on the final outcome of the project.
Whenever we reach the limits of classic PM common sense comes into play. The first aspect relates to successful project managers who insist that they are successful despite PM and call on intuition. The second aspect relates to what our research shows and could out of a perspective of common sense be bluntly called stupidity. There is something awkward in the realms of PM. However, if we take the effort and doublecheck on common sense we find yet another layer of social dynamics to be discovered. In the case of PM success and experienced managers research shows that e.g. improvisation is not the banality of muddling through or simple pragmatism. Improvisation is successful improvisation if it is informed improvisation, like in jazz music. You need to master your

	Median	Implication
Distinguish between complicated and complex part of a project	2	Sometimes
Project has significant complex parts	3	Often
Decision-making stakeholders acknowledge project complexity	3	Often
External stakeholders acknowledge project complexity	2	Sometimes
Stakeholder expectation: Reduce complexity to complicated	3	Often

Table 6. Ranking of Stakeholders' influence on the complexity.

instrument to improvise successfully. You need to master PM to be successfully pragmatic and improvise (Klein et al., 2015).
We learned that this holds true for stupidity as well. It is worth to have a second, scientific look at it and not plaster it with common sense. There is a lot of research on stupidity to shed light on the matter and devise ways to escape it.

5. EXTENDED RESEARCH: A DISCOURSE EXPLORATION ON STUPIDITY

There is a lot to know about stupidity. Hence, the encounters with stupidity marked for us rather a beginning than an end. What can we know about stupidity to avoid it? The further parts of the paper explore the existing discourses on the matter to discuss first ideas for remedy and indicate the need for further research on the topic. The research literature on stupidity in the context of projects is presented in three themes: (i) stupidity in the broader context, (ii) organizational stupidity and (iii) stupidity in project management.
Although stupidity occasionally emerged as yet another excuse for semi-professional practices and ignorant conduct, it is rarely fair to blame the person. Viewed through a systems' lens individual stupidity is allegedly promoted and facilitated on two levels. On an ontological level, goal setting, role descriptions and processes facilitate, up to the level of perverse incentives, specific behaviors which may be regarded as stupid (Caplow, 1994). On an epistemological level, we are confronted with the limits of project management in its preference for linearity and complexity reduction, which create fundamental problems meeting the VUCA world (Bredillet, 2010; Whitty & Maylor, 2009).

General stupidity

The Oxford dictionary gives the following definition of stupidity: "Behaviour that shows a lack of good sense or judgment".
These definitions, as well as our everyday understanding of stupidity, address the individual rather than taking the power of context into account. Stupidity is promoted as an individual property rather than a systemic co-creation. Systems and complexity theory would argue that any kind of behavior is context-dependent. Senge (1990) elaborates the argument that the structure of social systems would predetermine the behavior and, eventually, the results. Fighting stupidity on the level of behavior is a tedious endeavor if we acknowledge the systemic power of context. Preventing stupidity, hence, is rather an activity that changes the systemic context and the systemic social structures than training people to behave smarter.
However, stupidity – or better stupid behavior – seen from a neuroscientific point of view is grounded in cognitive biases and bounded rationality. In the bestseller Thinking fast and slow biases (Kahneman, 2011) many have been exemplified. Human beings trust their lived experience and the so-called human scale. We do not have antennas for the Earth being a sphere or its trajectory revolving around the sun. We have no feeling for exponential developments or probabilities. We need to measure and calculate these facts, or we remain ignorant. Stupid behavior is then just a consequence. A bias with specific relevance for decision-makers not only in organizations and project management is the Delusion of Success (Lovallo & Kahneman, 2003). We have a tendency to underestimate costs and overestimate benefits. Any project initiated based on this bias is bound to fail. We may want to call this stupidity; however, we may learn to double-check on the biases of our gut feeling.
Bounded Rationality, as a source of stupid behavior, builds on this. It addresses the actors' inability to make completely rational decisions due to lack of time, information and the according to processing capacity (Simon, 1972). If we know that we can counterbalance human biases, we should plan for the time and resources to do so. If we do not do it, we can call it stupidity or investigate what systemic conditions keep us from doing the right thing and promote stupid behavior.

Organizational stupidity

Alvesson and Spicer (2012) address the topic of stupidity in an organizational context, labeling it functional stupidity, which is "characterized by an unwillingness or inability to mobilize three aspects of cognitive capacity: reflexivity, justification and substantive reasoning" (Alvesson & Spicer, 2012, p. 13). In developing their theory of stupidity-based theory of organization, Alvesson & Spicer (2012) investigated the concept of stupidity as the deviations from smartness, which is neither semi-rational nor purely stupid. They proposed the concept of functional stupidity, and organizations are seen as generators of functional stupidity. The concept is captured in the quote: "For us, functional stupidity is the inability and/or unwillingness to use cognitive and reflective capacities in anything other than narrow and circumspect ways. It involves a lack of reflexivity, a disinclination to require or provide justification, and avoidance of substantive reasoning. It is related to the intertwined elements of cognition, motivation and emotion." (Alvesson & Spicer, 2012, p. 16).
Among the positive outcomes of functional stupidity is that it provides a sense of certainty and purposefulness around the organizations' activities, despite the questionable basis of many of them.
In this sense, stupidity allows masking organizational paradoxes, even for a long while. However, in the long run, those organizational paradoxes will take their toll. Growing stress and dissonance indicate the necessity to address the shortcomings of the 'stupid' solution to organizational challenges. The courage to acknowledge the shortcomings may be found internally; however, critical eyes from external stakeholders sometimes serve as valuable support. This may be, in turn, a reason why managing external stakeholders is so painful as they address the obvious and point at organizational stupidity; we are not ready and prepared to face.
The concept of stupidity has not often been investigated directly, but books on the topics are quite frequently encountered in the literature review. In the book The Power of

Stupidity, the author makes a profound statement: “One of the reasons stupidity is dangerous is that it is unpredictable (Livraghi, 2009, p. 23).” This statement is echoed in the book The Stupidity Paradox (Alvesson & Spicer, 2016). Being the cause of unpredictability is also said about project complexity: “Project complexity is the property of a project which makes it difficult to understand, foresee and keep under control its overall behavior, even when given complete information about the project system” (Marle & Vidal, 2016). Besides form complexity and stupidity are both the source of unpredictability, there exists a kind of reciprocity between complexity and stupidity: Where complexity is a property of the perceived behavior of the project, stupidity is a property of the behavior of the perceiver. In sum, the link to the VUCA world concept becomes more and more evident. Addressing stupidity then works as a token for the organizational inability to handle volatility, uncertainty, complexity, and ambiguity.

The Stupidity Paradox identifies five sources of functional stupidity: **Leadership, Structure, Imitation, Branding, and Culture**. Hence, functional stupidity is seen as a consequence of the organisation. “We see functional stupidity as being created not through intellectual deficits but through political expediency and the operation of power” (Alvesson & Spicer, 2012, p. 42). This highlights that members of an organization become functionally stupid through a series of cultural and institutional beliefs and arrangements salient in an economy of persuasion. The concept of social complexity shines through, and is reinforced by managerial (and self-managerial) interventions (such as encouraging a narrow action orientation, the celebration of leadership, attachment to structure, a strong belief in institutions). This will discourage reflexivity, substantive reasoning and justification.
A more ‘stupidity-appreciating’ book The Power of Stupidity (Livraghi, 2009), different laws are being presented as sources of stupidity, which includes: The law of Murphy, the law of Parkinson, and the Peters principle. The book The Vitality of Stupidity (Bos, 2007) emphasizes the importance of balance between stupidity and wisdom, and here the stupidity almost becomes almost a virtue. The Basic Laws of Human Stupidity (Cipolla, 1976), gives a set of laws of which the first seems most essential to our study: Always and inevitably everyone underestimates the number of stupid individuals in circulation. These books, though thoughtfully crafted with vivid examples, are lacking scientific rigour.

Stupidity in project management literature

It is very little on stupidity in decision making in the project management literature.
Stingl and Geraldi (2017) serve as a valuable starting point to elaborate on reasons for questionable decision making, however, stupidity is not addressed explicitly. Their systematic review on behavioural decision making in projects brings forward a conceptual framework rooted in three schools of thinking: reductionist (on cognitive limitations), pluralist (on political behaviour), and contextualist (on social and organizational sensemaking). Based on these three schools of thoughts, they identified three sources of bad decisions: Errors, lies and misunderstandings. The case of stupidity in project decision making does not fall into any of these three categories.

1. **Reductionist, decision making is rational:** The steady low rate of project performance is a documented fact know by most project decision-makers. The statistics have been discussed and shared among practitioners of project management for a very long time. The reductionist approach cannot account for the irrational decision making about the triple constrictions leading to the persisting low-performance rate. When a rational decision-maker realizes that he/she has made an error during the decision-making process, he/she will correct this going forward.
2. **Pluralist, decisions are negotiations:** The agreed-upon triple constraint (scope to be reached within an agreed deadline and budget) is a result of the negotiating process. In the case of delays and/or overrun of the projects promises there will be a looser among the negotiating parties. We must assume that the participant of the negotiation process is well information, including here; informed of the persisting low-performance rate of projects in general. The pluralist approach assumes self-serving parties, hence no part willing to suffer losses.
3. **Contextualist, decisions are sensemaking processes:** Having projects that are underestimated in time and/or resources do not make sense. The contextualist approach does, therefore not explain the persisting low-performance rate. “Decision-makers do not ‘make’ decisions, but are actors constructing narratives which will shape processes of attention, prioritization and ultimately decisions.” (Stingl and Geraldi, 2017 page 125). The narratives of the persisting low-performance rate should be a part of the sensemaking process according to the conceptualistic approach, hence improving the performance rate over time.

Adding to the discussion based on the paper from Stingl and Gerladi (2017), there has been a discussion on the overrun of time and budget was due to delusion or deception. On the face of the action, it might be different to distinguish between duplicity and stupidity, since one needs to know the true intention to do so. Under political circumstances – in public office or private firms – we often find hidden agendas. Those make some actions appear to be a result of stupidity, but in fact they are not. The often-seen relocation to close down a failing public known project close to the next election day, is a case in point (Flyvbjerg et al., 2009).
A paper arguing against Flyvbjerg et al. (2009) addresses the question well: “Given duplicitous or stupid projections, project managers will not infallibly fix them – they are, after all, human. Implicitly, arguments that see the failures of megaprojects as residing in a lack of realism that deliberately misleads stakeholders about the true costs and complexity of the projects assume a norm in which large-scale organizations are characterized by rational behaviors. In projects that are not as organizationally complex, ambiguous, ambitious, political and risky, the façades of rationality may be easier to maintain. The complexity and ambiguity of megaprojects can make the maintenance of these rationality façades much more difficult (Pollack et al., 2018, p. 382).”
The current research poses a dichotomy of bad intentions (lies, deception and hidden agendas) on the one hand or in-capacity (delusion and misunderstanding) on the other hand.
Thinking deeper on the problem, we find there is a third stance. Having the ability to make better decisions, but not applying this in the given situation, without doing this out of bad intention. This equal to the characteristic of stupidity of Alvesson & Spicer (2012), as an unwillingness or inability, to mobilize one’s cognitive capacity.
We find support for our third stance in PMI pulse of the profession (PMI, 2016) where a telling picture showing: The rate of staying within initial budget and deadline is a flat curve the period of 2012 to 2016. The numbers are based on the question: “In your estimation, what percentage of the projects completed within your organization in the past 12 months?” The reported numbers on “Completed within original budget” lies in the range of 53-55% and “completed on time in the range of 49-51%. The numbers from 2017 and 2018 is within the same intervals. The issue here, is not so much the low numbers, but the steadiness of them. When you year after year have reported such number, the overspend and overrun can hardly come as a surprise. Not taking this into account for the next projects, is a kind of stupidity. As stated earlier: Repeating mistakes based on our known mental biases, can be classified as a result of stupidity.

Finally, there is the so-called conspiracy of optimism (Chapman et al., 2006; Chapman & Ward, 2003; Hirt, 1996). Especially in the public arena concerning decisions about large and mega projects the best-case scenario will be brought forward for decision. Based on those parameters the project can only perform or underperform. The odds are with the project failure, whatever the project management is ready to do. The public opinion has a clear perspective on the project performance part: stupidity!

6. DISCUSSION: COMPLEXITY VS. STUPIDITY

The scientific frame of reference taps into systems research combining theories of social systems, complexity studies, and system dynamics (Edson, 2016). In order to tease out the drivers and consequences of complexity, the methodology of causal mapping has been deployed especially looking into the works on social complexity in PM provided insights on how to decompose complexity in social systems (Klein, 2016). Useful was the TPC model which offers a combination of three perspectives: a technological (T), a political (P) and a cultural (C) perspective, highlighting that complexity resides where (micro-) political interests and cultural worldviews meet (Tichy, 1983). Overall taking complexity seriously mobilizes research into structures of iteration. This is inevitable on all levels: on the level of the system in focus as well as on the level of research design and on the level of reasoning. “The pragmatic approach is to rely on a version of abductive reasoning that moves back and forth between induction and deduction” (Morgan, 2007, p. 71).

Causality mapping

Among others, Ackermann & Alexander (2016) have developed the concept of causal mapping, a way of conveying the perceived causal links. The map illustrated (**figure 3**) the essential causalities for stupidity in project decision making. There are detected several positive feedback loops, which might cause the stupidity to spiral out of control.
Here, we use the methodology to illustrated how stupidity could be seen in the context of project overrun and delays. If stupidicity can be defined as: “Doing the same thing again and expecting different outcome”, then our findings indicate a high degree of stupiditiy on the part of the decision-makers with the expectation on doing projects within timebound and budget. The participants of the survey indicated this to be the most characteristic among the stakeholder complexities.

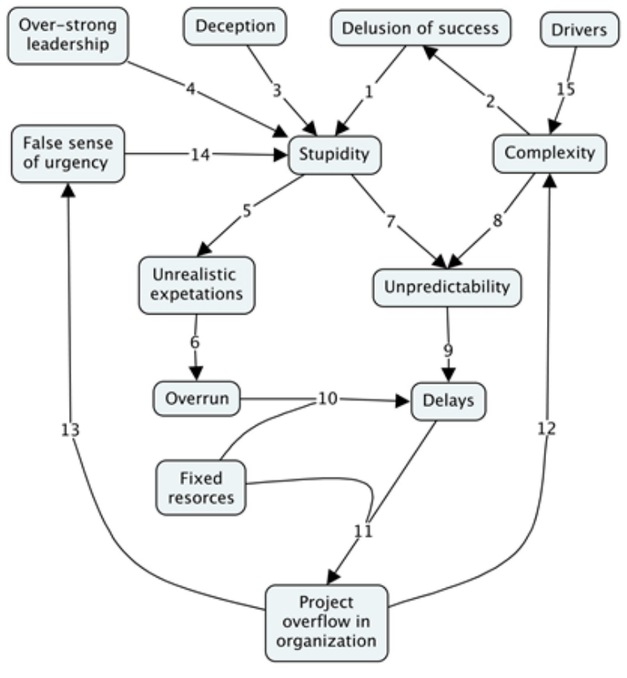

Figure 3. Ilustration causal mapping.

Arguments for the causal mapping is here presented in bullets:

1. A delusion of success (Lovallo & Kahneman, 2003) is stupidity is there is knowledge of the statistical project efficiency and effectiveness. Not countering one's own bias is an unwillingness to compensate for one's inability to mobilize aspects of cognitive capacity, and is, therefore, a part of the definition of functional stupidity in (Alvesson & Spicer, 2012)
2. The delusion of success is also the effect of the "attempt to come to grips with the complexities of a unique challenge (Lovallo & Kahneman, 2003, p. 7)",
3. Deception correspond to the unwillingness mobilize two of the three aspects of cognitive capacity: justification and substantive reasoning from the definition of functional stupidity in (Alvesson & Spicer, 2012)
4. Over-strong leadership leads to stupidity (Alvesson & Spicer, 2012)
5. The unrealistic expectation is a fact-based on our empirical finding. A consistency of this cannot be anything than stupidity.
6. Unrealistic expectations lead on average to overrun (otherwise, it would not be unrealistic).
7. Stupidity leads to unpredictability ((Alvesson & Spicer, 2016)
8. Complexity leads to unpredictability (Cooke-Davies et al., 2007) and many others
9. Unpredictability leads to delays, per definition
10. Overrun plus fixed resources lead to delays, logical
11. Delays plus fixed resources lead to project overflow in the organization, logical project overflow leads to complexity, based on the social-political dimension (and others) project overflow leads to a false sense of urgency, a false sense of urgency leads to stupidity, e.g., 'less-than-rational' decision-making approaches often appear in crisis environments (Parnell, 2017, p. 1)."
12. Give a short explanation of other drivers of complexity

Stupidity in the eye of the beholder

Absolute stupidity is probably less than perceived stupidity. It must be assumed that some actions might appear stupid when the intention of the decision-maker is not revealed. This could be the case of hidden agendas. Personal gain can produce decisions that might be perceived stupid, because of the unintended consequences for others. It must also be assumed that nobody deploy stupidity on purpose. Ex-ante stupidity of self is not a plausible phenomena. However, a sound self-reflection might include retrospective stupidity. The frequency of this depends on personality traits. Not all will do this, and those how do, might not publicly admit to this. The frequency can increase by feedback from others. Still, publicly announcing 'I screwed up' is mostly reserved for extreme cases, and the numbers do not reflect the many cases of screwing up.
Sensemaking is an affordance of being human, and stupidity is when it is not activated. Alvesson & Spicer (2012) point to the refrain activation of the human mental capacity of reflexivity, justification and substantive reasoning. Weick (1995) argues sensemaking in the same fashion yet arrives at 'mindfulness' which can in this context be regarded as the opposite of stupidity.
Instead of seeing the stupidity as something the stressed people accentually do - or powerful people do out of hubris - the affordance theory make us see stupidity as the default. The baseline from where we can deviate with an effort to deploy our mental capacity.
A gorilla in a suit. This picture is the caricature of an executive meeting the complexity of projects with over-simplified reaction. The project manager complains over lack of time and resources to handle the complexity of the project, and the executive order the project to be done anyway. This might be stupidity in the eyes of the project manager (and the bystanders) but it might simply be the natural reaction of the gorilla.
Using the theoretical foundation from critical realism: Reflexivity, justification and substantive reasoning are three generative mechanisms. There is a certain degree of randomness if these mechanisms are countered by other mechanisms or if they are simply not activated in the situation.

7. CONCLUSION

Our research can be seen as a classic approach to distill data from a sufficiently large survey. It came with all the limitations of quantitative research. Questionnaires and limited answering spaces depend on and re-generate a specific worldview. We can be satisfied with these limitations or, as in our case, feel challenged to reassess the results in the light of what we addressed as stupidity.
We see what we call a shift of scapegoating. Projects fail as it was often stated on the soft side, the people side. If people are stupid, we need to train them better to become smarter project managers and decision-makers, understanding soft issues and develop "soft" intelligence. If it is not our own people it is other people we like to blame, i.e., stakeholders who behave in funny ways. However, we like to call this difficult behavior complex. Complexity, however, does not only serve to describe difficulties with stakeholders, but it also became mainstream to address any large project complex to explain why it is so difficult to be successful and so likely for them to fail. So, the new scapegoat is complexity or better the entire VUCA world.
There has been a lot of research on complexity, and on uncertainty and even volatility occurred in the research papers. These have been the first steps in the right direction. The entire VUCA world needs to be readdressed and put under scrutiny. This should enlighten questions, not only project success and project manager performance. It will challenge our ideas of project management as a discipline. The days of linear and reductionist approaches are over. All areas where they work have been covered long ago. Now we see them deployed in areas that demand more than superb engineering and management by the book.
We may go as far as acknowledging PM being at home in social science. With this came ample opportunities to reassess success and performance and to finally understand the inevitability of a systemic perspective in research. Systems thinking builds on the assumption that the world is true, volatile, uncertain, complex, and ambiguous. Believing that the world was a LEGO box is the stupidity we need to overcome in PM research and practice. We need to learn from systems research more about adequate tools for systemic inquiry, linking quantitative and qualitative research in a more meaningful way. Projects are social systems, VUCA by nature, and should be met accordingly.
If stupidicity can be defined as: "Doing the same thing again and expecting a different outcome", then our findings indicate a high degree of stupiditiy on the part of the decision-makers with the expectation on doing projects within timebound and budget. The participants of the survey indicated this to be the most characteristic among the stakeholder complexities.

No further excuses accepted - stupid is as stupid does.

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ON STUPIDITY IN PROJECT MANAGEMENT

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