IMPROVING ETHICAL DECISION MAKING

THROUGH THE LENS OF GRADUATE PROJECT MANAGEMENT STUDENTS

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Abstract: The purpose of this paper is to examine the practiced application of the Ethical Decision Making Framework (EDMF) by graduate project management students (as a proxy for practicing project leaders and managers). This research extends management practice by improving one of the tools available to project managers in decision-making. The methodology used a quasi-experimental setting by collecting and analyzing student papers that applied the EDMF. This approach identified what the participants did well, what they struggled with, and which questions were most and least used. This resulted in improvements to the EDMF toolset, from both a macro and micro perspective. Macro improvements focused on question structure to reduce complexity and increase understanding and combining specific steps. Micro improvements included adapting the framework beyond project management and adding a broader focus on stakeholders. This study provides a focused approach to ethical decision making by adding to the practitioner toolkit.

1. INTRODUCTION

Ethics and the need for ethical decision-making are at the forefront of business, utilized within a general conversation, and applied in daily practice. However, there is a disconnect between the use of ethical decision-making frameworks and the understanding of what knowledge is needed and what judgments will result.

The Ethical Decision Making Framework (EDMF) (O'Brochta, Meloni, Raghupathy, Pfeiffer & Taylor, 2012) is a product of the Project Management Institute (PMI) and is intended to be used as a guide for critical thinking throughout the ethical decision-making process. The EDMF was developed in 2011 and released in 2012, for use by project managers and other stakeholders. During the effort to baseline ethical decision-making models, twenty-nine organizations were examined. Ethical decision-making frameworks that encouraged users to 'think before acting' were found to have received more favorable reviews than frameworks, which attempted to prescribe specific actions for predefined situations.

The development team sought to establish a linear step process to operationalize an applied ethical decision-making tool. Steps were determined to exist through literature and through personal project management experience that guided the development of the EDMF. The tool structure is represented as a sequence of 5 questions and 17 sub-questions to stimulate the user to think before action. The sequence begins with the recognition and assessment of the issue and ends with a decision and action.

The focus of this paper is to examine practical experiences from using the EDMF in a controlled experiential quasi-experiment setting. The study utilized a population of graduate-level project management course participants all enrolled in a course that includes an emphasis on ethical decision-making. The project management course is part of a Master of Science in Project Management (MSPM) degree program at Embry-Riddle Aeronautical University. A total of 150 students participated in the research.

Participants were asked to identify a project management ethical dilemma and use the steps in the tool to evaluate the alternatives. The analysis includes what the participants did well and how they struggled with the questions. Recommendations for further use of the tool as a structured mechanism to stop and think before acting in a rash fashion are discussed, and steps for further investigation are offered.

The use of ethical decision-making frameworks is not new to the project management field, in theory, or application. Researchers have attempted to apply such frameworks to multiple fields within business and particularly management. However, most are bifurcated into two distinct categories: rationalist and non-rationalist. Commonly, project management focused research relies on trust as a measure of ethics (Müller et al., 2014; Müller et al., 2013). This research study endeavored to combine moral judgment and emotional responses and to contribute to the gap in management ethics literature. The PMI EDMF was selected because PMI is the leading not-for-profit professional membership association for the project management profession (PMI, 2020).

The research consists of two questions. The first question focused on the practicality and usability of the EDMF tool, while the second question focused on sustainability.

RQ1: How do student participants use the Ethical Decision Making Framework (EDMF) when faced with an ethical dilemma?

1. Which questions were most commonly answered?
2. Which questions were least commonly answered?
3. To what extent was the framework used iteratively?

The second research question addressed a necessary component of ethical reviews and transparency. Sustainability is necessary when offering constructs or frameworks for decision making, as there are many facets to ethics and adaptability is necessary for project managers.

RQ2: What changes are recommended to the EDMF to broaden the usefulness to project, program and portfolio managers?

2. LITERATURE REVIEW

Project management: "the means by which the work of the resources assigned to the temporary organization is planned, managed and controlled to deliver the beneficial change" (Turner, 2014). The concept of structure and use of frameworks is essential to the deliverance of benefit. This temporary, process-focused approach is described in detail in project management professional guides (such as APM, 2017; PMI, 2017). Decision making in project management is best constructed with a stage-gate process (Kerzner, 2017), whereby decisions are made systematically. Multi-criteria decision making is used frequently and to a large extent, as an integral component of successful project management (Samanta, 2017). Best practices have been studied, analyzed and forwarded to include numerous components with the project management (Kharat & Bhukya, 2018). In 2013, Hwang and Ng, determined that decision-making skills are the most critical managerial skill of managers. However, as these decisions are being enacted and thought about through the project management lens, there is a gap in the literature and a gap in understanding the full scope of a decision. Within project management and multi-criteria decision making, ethics is left untouched. Ethical decision making is not discussed to a large extent within decision making and is a particularly absent component from many academic research articles. In order to fully comprehend the enormity of ethics in decision-making, a fully-realized ethical construct and definitional parameters must be determined, setting a general understanding of ethics. However, this cannot be done when knowledge management canters have not included ethics as a best practice or selection criteria.

The study of ethics from a qualitative or quantitative perspective is continually changing and morphing into a non-linear concept. Ethics cannot be construed as a normative structure. Ethics in history is ethos, or the possible and the good. Ethos as ethics or vice verses, is the concept of 'what can a person do' verse 'what should a person do.' When ethics is taken into the decision-making process this statement could be restated as 'how can a decision be made?' versus 'how a decision should be made?' (Gabriele & Min, 2011).

However this is from the historical perspective and though it should be understood that history plays a role in the outcomes of tomorrow, it cannot completely be relied upon as a directive for today's decision. Particularly when decisions are being made in real-time, through crisis lensing, and through a competitive advantage angle (Kharat & Bhukya, 2018).

Ethics and ethical decision-making models run the gamut of being practitioner-based or theory aligned and can be grouped into two main categories: rationalist based and non-rational based. Most ethical decision-making models often conflict with each other and lack application and comprehensiveness. These two groupings of ethical decision-making models have very distinct differences. Rational based or rational reasoning founded on morals results in moral judgment. On the other hand, non-rationalist or emotionally based models rely on the decision maker's intuition and rationalization second (Haidt, 2001; Sonenshein, 2007). There is some literature that suggests both the rationalist and non-rationalist models can work together. This line of inquiry has found a two-step process whereby there is an interaction: reason (reflective) and intuition (impulsive) leading to a moral judgement outcome (Reynolds, 2006; Strack, Werth, & Deutsch, 2004) as well as a study that outlines an interaction between emotions and reasoning which also leads to a moral judgement (Greene et al., 2001). Additionally, a more recent (2016) study outlined integrated ethical decision-making (I-EDM) which sets up a two-component structure described as 1) the process and 2) the factors (Schwartz, 2016). Each of the two components contains multiple different steps in order to reach a decision and the model assumes that ethical behaviour is dependent on the individual and the situation. One change in the individual or the circumstances of the situation will inevitably change the outcome. Results from the 2016 study furthered the understanding that ethical infrastructure and moral consultation play an important role in ethical decision-making with elements such as training being more important than awareness or even judgment (Schwartz, 2016).

Empirical results of a study of business ethics (Elm & Radin, 2012), revealed that while there are inconsistencies and contradictions in the field of business ethics, there might not actually be a special or different situation when making ethical decisions. Ethical decision-making theories and research studies have sought to understand human decision-making and behavior. Why do people make the choices they do? What are the influences? How are people's decisions affected? Project managers face these (and many more) ethical dimensions in their tenure. However, there is a lack of emphasis on ethics in project management, from a practitioner point and an educational standpoint. Only recently have universities been implementing concepts of ethical thinking into the graduate-level curriculum (Helgadottir, 2008; Huehn, 2016; Ermasova, Wagner, & Nguyen, 2017). The integration of the EDMF into the Embry-Riddle Aeronautical University MSPM degree program is one such example. The ability to understand the worth of ethical dimensions to scenarios and the use of ethical frameworks is the intersection of this research study. This paper evaluates one solution for ethical decision making in project management by delving into the efficacy of the EDMF.

3. METHODOLOGY

A quasi-experimental setting was used to test the practical application of the EDMF framework by graduate-level students taking project management courses via an online platform. This method is similar to previous studies of ethics in education (Lawter, Rua, & Guo, 2014).

The EDMF five-step process guides the project manager in a structured thought process when confronted with an ethical dilemma(s). The process begins with the recognition and assessment of the issue and ends with a decision that is action-oriented, actionable. Through the creation of this step-process, there was not an intent for the EDMF to be prescriptive, rather a tool to assist the project manager. Each of the framework steps mirrors that of ethical decision-making research while combining both the rationalist and non-rational based categories. Within the EMDF five-step process, there are exploratory questions that are used to provide guidance and critical thought to the decision-maker.

The research methodology consists of four steps: 1- EDMF explanation and scenario identification, 2- application by students, 3-data gathering, and 4- qualitative analysis, coding, and characterization.

1-EDMF explanation and scenario identification. As part of the class assignment, students were introduced to the EDMF though a simple PMI-produced 2-page handout (PMI, 2012). It is significant to note two elements that are critical to this research. First, the handout states that the model is a logical linear sequence, but expects that users will use it iteratively. Researchers looked for evidence of that during this analysis. Second, the handout describes a number of stimulating questions to be used to support the decision-making process. As such, answering the questions is not a mandatory part of the process. Researchers looked for evidence of the question used during this analysis. As part of this research step, students were instructed to describe a situation (real or hypothetical) where they had been challenged with an ethical dilemma at work.

2-Application by students. In the second part, students were instructed to describe an approach to resolving this dilemma by addressing each of the five steps in the framework to discuss the situation and resolution. As noted in step one, students were not specifically instructed to answer each of the questions.

3-Data gathering. Student papers were downloaded by the researchers into a Microsoft Excel file for analysis. Collected data includes two parts: 1- description of an ethical issue, 2- description of how the student used the EDMF 5-step process. Future research opportunities include a detailed review of the ethical dilemmas to exploit case study development.

4-Qualitative analysis, coding, and characterization. In this research step, the researchers decomposed the data into the five framework steps (assessment, alternative, analysis, application, and action). Data was further decomposed and coded to the specific questions on the EDMF handout. Next, a qualitative point scale was applied to each step of the EDMF process, as shown in **figure 1**. This methodology allows for a rank ordering of student responses from the most complete and comprehensive to completely lacking. It also provides a mechanism to identify which questions were strongly addressed, and which were weakly addressed (or skipped).

4. RESULTS AND DISCUSSION

Results. Data was gathered starting in November 2017, yielding 263 responses. Of that, 185 were complete and analyzed further. This resulted in 1100 sections of data across the cases and 158,100 words, which were analyzed and coded. It is noted that even though the students were not instructed to answer each question, many demonstrated this methodical approach. As such, data results were grouped as 1-methodical focus on a question, or 2- general approach and analyzed separately. A methodical approach means that the student specifically answered some or all of the questions. The general approach means the student discussed each of the five steps, but in a descriptive fashion without addressing specific questions.

Table 1 summarizes the results of the analysis. Beginning with the far left, column one shows the question identification code (with the text shown in column six). It is noted that the number and complexity of the questions varied greatly from step to step. Column two represents the percentage of students who used a methodical approach for the specific question, while column four represents the percentage of all students who answered the specific question. Column three shows the rank ordering of responses from 100% (1st) to 40% (17th) for those who used a methodical approach. Column five does the same for all responses. Question coverage ranged from a high of 74% (2-alternatives), followed by 70% (1-assessment), 57% (5-action), 55% (4-application) to a low of 49% (3-analysis).

Further analysis of the questions answered yielded additional interesting results. For example, 2-alternatives have only two questions; therefore, it is expected we have a higher percentage answered questions--- and we do. While 3-analysis, there are five closed questions, but also compound (multi-dimensional), likely leading to the lowest percentage of answers that focused on the specific questions (49%) and the lowest percentage of completely answered questions (9%). Not surprisingly, 5-action was one of the least likely steps to be skipped.

Figure 1. Qualitative scale

Case	_____			
	20 pts (best)	**15 pts** (reasonable)	**10 pts** (not great)	**5 pts** (poor)
Dilemma Description	complete & comprehensive	good, but not great	just a title	absent
1- Assessment	answers ALL questions with detail	answers one or more questions with detail	generally discussion without focusing on questions	just a title or little explanation
2- Alternatives	answers ALL questions with detail	answers one or more questions with detail	generally discussion without focusing on questions	just a title or little explanation
3- Analysis	answers ALL questions with detail	answers one or more questions with detail	generally discussion without focusing on questions	just a title or little explanation
4- Application	answers ALL questions with detail	answers one or more questions with detail	generally discussion without focusing on questions	just a title or little explanation
5- Action	answers ALL questions with detail	answers one or more questions with detail	generally discussion without focusing on questions	just a title or little explanation

Discussion.

RQ1: Student use of the EDMF. The first research question was how do student participants use the Ethical Decision Making Framework (EDMF) when faced with an ethical dilemma? This includes three sub-questions that examine how the framework was used. While the study did not ask the students why questions were or were not answered, this can be surmised simply by the context of the question. The most and least commonly answered questions are shown on **table 2**.

The most commonly answered question was 2A (have you listed possible alternative choices?) with a 100% response rate from those who answered specific questions. This is the essence of the EDMF framework and thus, it is not surprising that this was the most answered question. However, most respondents did not necessarily give an exhaustive list of options. Instead of discussing all the alternatives, a few responded that the dilemma had an 'obvious choice'. Possibly some dilemmas were too simplistic. The least commonly answered question was B (does it align with the PMI code of

Table 1. Detailed findings by questions and step

ID	FOCUSED		% CASES		QUESTION
1- ASSESSMENT					
1A	82%	4	57%	2	Does it abide by the law?
1B	40%	17	28%	13	Does it align with the PMI Code of Ethics and Professional Conduct?
1C	54%	9	38%	5	Does it agree with your employer's and client's code of ethics and conduct?
1D	40%	16	28%	12	Does it align with your ethical values and those of the surrounding culture?
2- ALTERNATIVES					
2A	100%	1	74%	1	Have you listed possible alternative choices?
2B	47%	13	35%	8	Have you considered pros and cons for each possible choice?
3- ANALYSIS					
3A	66%	6	32%	9	Will your candidate decision have a positive impact or prevent harm to project managers, PMI staff or Volunteers, clients, your employer's organization, other stakeholders, the environment, or future generations?
3B	44%	14	22%	17	Does your candidate decision take cultural differences into account?
3C	52%	12	25%	15	Looking back, will this decision seem like a good idea a year from now?
3D	58%	8	28%	11	Are you free from external influence to make this decision?
3E	53%	10	26%	14	Are you in a calm and unstressed state of mind?
4-APPLICATION					
4A	87%	3	48%	4	Would your choice result in the greatest good?
4B	53%	11	29%	10	Would your choice to treat others as you would like to be treated?
4C	67%	5	37%	6	Would your choice be fair and beneficial to all concerned?
5-ACTION					
5A	90%	2	51%	3	Are you willing to accept responsibility for your decision?
5B	61%	7	35%	7	Could you make your decision public and feel good about it?
5C	44%	15	25%	16	Are you ready to act?

ID	FOCUSED	% CASES	QUESTION
Most Commonly Answered Questions			
2A	100%	74%	Have you listed possible alternative choices?
5A	90%	51%	Are you willing to accept responsibility for your decision?
4A	87%	48%	Would your choice result in the greatest good?
1A	82%	57%	Does it abide by the law?
Least Commonly Answered Questions			
1B	40%	28%	Does it align with the PMI Code of Ethics and Professional Conduct?
1D	40%	28%	Does it align with your ethical values and those of the surrounding culture?
5C	44%	25%	Are you ready to act?
3B	44%	22%	Does your candidate decision take cultural differences into account?

Table 2. Most commonly and least commonly answered questions

The most commonly answered question was 2A (have you listed possible alternative choices?) with a 100% response rate from those who answered specific questions. This is the essence of the EDMF framework and thus, it is not surprising that this was the most answered question. However, most respondents did not necessarily give an exhaustive list of options. Instead of discussing all the alternatives, a few responded that the dilemma had an 'obvious choice'. Possibly some dilemmas were too simplistic. The least commonly answered question was B (does it align with the PMI code of ethics and professional conduct?) had a 40% response rate. Possibly this is because the participants were students and not in a project manager role. However, every student responding to this assignment is a PMI member and is bound by the code of ethics (PMI, 2020). The final element of the research question dealt with the extent to which the framework was used in an iterative fashion. There is no evidence that any of the participants used the model in this manner.

RQ2: Changes to the EDMF. The second research question was what changes are recommended to the EDMF to broaden the usefulness to project, program and portfolio managers. The results are divided into macro and micro changes.

Macro recommendations for change. There are five macro recommendations. First, decompose the compound questions into simple questions, to offer a decrease in complexity, an increase in understanding, and an emphasis on the focus of the question. For example (capitalization added for emphasis):

• Your ethical values AND surrounding culture (Question 1D)

• Positive impact OR prevent harm to project managers, OR PMI staff OR Volunteers, OR clients, OR your organization, OR stakeholders, OR environment, OR future generations? (Question 3A)

Second, rewrite the closed questions, using higher-level Bloom's taxonomy verbs to open the questions encouraging more in-depth and detailed answering (Zapalska, McCarty, Young-McLear, & White, 2018). Third, clarify the overall use of the model for ethical dilemmas and not simply obvious (illegal) matters. Perhaps this is one of the reasons that student participants often glossed over the pros and cons since some of the scenarios were either illegal or clearly in violation of written policy. Fourth, consider combining the analysis and application steps. The researchers found that the distinction between the t wo was unclear to participants, as was the question categorization. Finally, fifth, clarify or remove the discussion about the model being used iteratively as there was no practical evidence of using the model in that manner.

Micro recommendations for change. There are five micro recommendations. First expand examples of how PMI and other codes are applicable to a larger population and more generalizable. Perhaps the framework can be applied to other areas of management and leadership. Second, expand the initial description explaining the culture in project management. Participants spoke of the 'government culture', 'Navy culture', 'Army culture', 'Air Force culture', or most surprisingly, 'culture is all US so [the question] doesn't apply'.

Third, remove or rework the question 'are you in a calm and unstressed state of mind?' (Question 3E). Many participants simply answered yes or no, but most skipped the question completely. There is a questionable benefit to using this question according to the results of this study. Fourth, revise the questions to add emphasis and focus on stakeholder(s) terminology. Instead of nondescript wording such as 'external influence,' specific audiences should be addressed. A second example is 'would your choice result in the greatest good' (question 4A). To whom? How does one determine the impact? A third example is 'would your choice be fair and beneficial to all concerned?' (Question 4C). To whom? More specificity would aid in the collection of more individual-level data points. Finally, fifth, combine similar and/or redundant questions to improve clarity. Two questions address disclosure and treatment (Application, question 4B; Action, question 5B) and two questions focus on culture (Assessment, question 1D; Analysis; question 3B).

5. CONCLUSION

The EDMF framework is an overall useable, applicable, and well-versed tool that allows the user to interplay rational and non-rationalist based ethics motives within a single scenario. From this research study, the researchers were able to deduce that the EDMF has broad applicability, is well understood, and flexible in use while also supporting the notion that ethics and critical ethical thought is a needed component within the course curriculum (Kretz, 2014). While many recommendations for revision were suggested and removal of the continuous iterative process, the results from this analysis were favorable for continued use of the framework. Once the recommended enhancements to the tool are complete, there will be an increased appeal and usefulness. Further, this paper extends management practice by improving one of the tools used by managers in ethical decision-making.

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