

2-2017

Innovation through Agile Project Management

Raju Kona

Harrisburg University of Science and Technology

Follow this and additional works at: http://digitalcommons.harrisburgu.edu/pmgt_dandt

 Part of the [Management Information Systems Commons](#), and the [Management Sciences and Quantitative Methods Commons](#)

Recommended Citation

Kona, R. (2017). *Innovation through Agile Project Management*. Retrieved from http://digitalcommons.harrisburgu.edu/pmgt_dandt/
24

This Thesis is brought to you for free and open access by the Project Management (PMGT) at Digital Commons at Harrisburg University. It has been accepted for inclusion in Dissertations and Theses by an authorized administrator of Digital Commons at Harrisburg University. For more information, please contact drunyon@harrisburgu.edu, ereed@harrisburgu.edu.

Innovation through Agile Project Management

Student Name: Raju Kona

Professor Name: Dr. Thomas Sheives PMP, CSM

Harrisburg University

Date: 02/07/2017

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Abstract

The traditional, waterfall, project management processes were at a certain moment the latest versions creating a competitive advantage for the business using them. But, the development of technology within business, finds the waterfall methodology confining the implementation of innovation through its requirements. Conversely, the earlier used in agile methods satisfactorily proofed to re-energize project management in huge organizations that do not develop the application.

The researcher focused on finding the ways innovations are possible under agile project management through the following research question. First, how agile project management methodology enable to big organizations to succeed in their life settings by quickening modifications? Secondly, how does the big organization positioning benefit from unending modern opportunities brought by the changes in agile project management? Thirdly, does the big organization embrace a rigorous innovation procedure associated with the agile project management? Finally, how can the big businesses consider sufficiently agile to succeed and survive the modern life changes?

The conclusion that will be derived from this research will be used to make inferences that will enable seamless agile project management in big organization and companies. This will accelerate the productivity of these organizations. If the modern trends and analysis can be obtained, then the big organizations can benefit by learning of the opportunities that will be brought about by the agile project management.

Keywords: traditional, waterfall, agile project management, innovation

Table of Contents

Abstract	2
Table of Contents	1
Preface	Error! Bookmark not defined.
Introduction	2
Literature Review	9
Methodology	14
Results and Findings	14
Conclusion and Future work	32
References	32
Appendix	34

Introduction

The present world business increasing and becomes complex from technological drivers, other participants, increasing research, and development facilities, with globalization, increasing demand for better requirements, increasing demands, fast turnaround budgets, and checks on a budget (Leybourne, 2009). Resources scarcity increase resulting in businesses attempting to accomplish giant activities with ant-size abilities such as limited money, lowered workforce, and restricted operations (Nerur, Mahapatra, & Mangalaraj, 2005). Such results in the need to optimize each procedure, resource, and activity in business respect especially the project management. Individualized outcome and performance expectations remain in individual minds whereby they occupy private and public as well as government and non-government organizations (Fernandez & Fernandez, 2008). Such a developed the need for movement and shifting from the traditional project management to the agile methodology that remains greater and proficient. The new agile technology application in the business industry will not only revolutionize the sector, but it will also ensure that the companies get higher profits while using minimal resources as opposed to the traditional methods.

The agile and traditional project management represent similar practices. These practices aiming at delivering measurable outcomes. The traditional approach, better described as waterfall procedure, presume the expectations, durations, outcomes, requirements, and activities from project remain predictable within accurate measures as planning done is in series before real growth actions happen (Leybourne, 2009). The traditional approach significant limitation includes clients commonly having difficulty articulating total project requirements in the front end (Chin, 2004). The approach also comprises of the ultimate goal of the approach being producing comprehensive document requirements signed off by consumers and user's prior occurrence of development (Augustine, 2005). However, agile project development solves such issues.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

As suggested by (Alves, Marques, Saur, & Marques, 2007), agile project management consists of the process to manage projects according to consumer value through adaptive planning, intensive human collaboration, and interaction with continuous improvement at rapid feedback. The central trait of the agile project management is delivering customer value because the agile project delivery accomplishment happens through small co-located groups' collaboration that comprises of the end user or consumer, business analysts, specialists, and a project manager (Highsmith & Cockburn, 2001). The specialists comprise of system developers, information technology architect, subject matter experts, an individual person having certain knowledge and the person comprehending the way project segments fits in the jigsaw.

As among agile manifesto originator, Highsmith Jim, with recognized expertise in agile methodologies, the agile definition entails the capacity to develop and respond to modifications in the business atmosphere such that the enterprise benefits from turbulent enterprise surroundings (Conforto & Amaral, 2010). Such notes the agile project management as the capability to balance between stability and flexibility. According to (Conforto & Amaral, 2010), the new project management methodologies emphasize on the quality of the deliverance as opposed to the quantity that was emphasized in the past methodologies in project management. Unlike the traditional project management, the agile procedures emphasize on incremental deliverance of prototypes and working products for customer optimization and evaluation (Highsmith & Cockburn, 2001). As the predictive approach consider predicting the activities and requirements before embracing the project, the agile delivery a mass product development element like testing, development, design, analysis, and requirements within short constant iterations (Nerur, Mahapatra, & Mangalaraj, 2005). Every iteration supplies a prototype and working product where the response to the prototype and product remain crucial input towards prototype success.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

The agile development theory presumes the changes, additional features, and improvement incorporates within the product development cycle. The change, instead of viewing it as process failing, appear an opportunity that improve products by making them more fitting to users as well as business activities.

Problem Statement

Large organization appear unwilling to innovate, so they rank lower in innovation than the small and medium enterprises. These SME's are concerning that why large organization do not hold innovation. The main nature of large organizations is discouraging and hardens the continuous culture innovation. Resulting, the majority of large firms have been struggling to meet the requirements. The belief in the large firms needs changing but the significances, though promising benefits, and other disagreeable significances will accompany.

Making innovation will be required the involved firms and individuals invoke and lead real revolution according to organization operations. This kind of processes are not that easy, but is can be accomplished by agile methodology. The research on agile methodology has an innovation assistance with a special consideration that innovation process lacks best alternative and doesn't have a substitute.

Huge corporations appear reluctant to innovate such that they rank lower in innovation than the majority of SMEs prompting the concern on why they do not embrace innovation. The nature in big corporation discourages and hardens continuous culture innovations. Results in the majority of huge corporations struggling to meet the requirements in practices; a kind of inevitable non-essential activities. The belief in the big corporations needs changing, but the consequences, though promising benefits, other unpleasant consequences will accompany.

Scope, Aims, and Objectives

Innovation mastery remains the art and science bringing changes. Innovations happen within varied forms such as customers through new services and products become evangelists, market dominant sales channels, wonders inspired through novel technologies, stakeholders, and innovators, confound competitors, delighted and amazed consumers by the accelerated product development (Leybourne, 2009). The researcher will utilize the agile project development to

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

characterize ways that attain the outputs not only once, but continuous and consistently. The researcher will be studying ways the market continuously becomes brutally competitive. Like wars where organization's survival remains paramount, the researcher will show how agile project management enables organizations to become proficient innovators. The researcher will identify agile project development as innovation tool powerful enough to increase the change rates for the corporation. Hence, organizations embracing agile project development cannot bear any other option but innovations.

Research Questions and Hypothesis

According to Darwin Charles, the humankind history characterizes individuals with learned collaboration to improvise more efficiently in prevailing. Hence, improvisation, collaboration, and innovation remain indeed significant power shaping organizations with their present life. Currently, such become important for society, organization, and individual vitalities. The importance three elements importance and closer relationships with adaptations brought the researcher to the three research questions as follows.

- i. How better does an agile project management process enable big organizations to prevail in their present life settings by accelerating modifications?
- ii. How does the big organization positioning benefit from unending modern opportunities brought by the changes in agile project management?
- iii. Does the big organization embrace a rigorous innovation procedure associated with the agile project management?
- iv. How can the big businesses consider sufficiently agile to succeed and survive the modern life changes?

The considered questions matter significantly, as the challenging scope within each organization faces now are no less than huge. Threats and challenges remain everywhere and

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

innovation accelerates marginalizing success to special organizations bearing the abilities beyond changing to thriving within the changes while developing them (Highsmith & Cockburn, 2001). Such accomplishment only becomes possible under organizations with the abilities to disrupt industries using agile project management that reshape complete market ecosystem (Leybourne, 2009). Consequently, the following research hypothesis will ease the innovation mastery that ensures organizations become adaptive, winning, and agile on embracing agile project development.

- i. An agile project management process enables big organizations to prevail in their present life settings by accelerating modifications.
- ii. The big organization positioning can benefit from unending modern opportunities brought by the changes in agile project management.
- iii. The big organization embraces a rigorous innovation procedure associated with the agile project management.
- iv. The big businesses consider sufficiently agile to succeed and survive the modern life changes.

Justification

The agile project management principles comprise of agile innovation as the technology development great advances blend (agile software development), innovation management principles, and leading-edge practices. The principles consist of the requirements needed in agile, winning, and adaptive organizations. The principles enable the organization to develop correct business procedures enabling the concerned enterprise to innovate more to the competitors through combining speed and quality do (Leybourne, 2009).

The principles proposed by this paper will allow to minimize and solve the innovation associated risks. But still allow making the right decision based on modern ideas (Augustine, 2005). The principles allow generation of ideas superior to other organizations through efficiently

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

involving the bigger scope of employee and other stakeholders within the corporation (Alves, Marques, Saur, & Marques, 2007).

The innovative ideas not only emerge from organization-wide ecosystem but also efficiently co-ideate with other enterprises. The principles enable demonstration and creation of exceptional leadership abilities (Nerur, Mahapatra, & Mangalaraj, 2005).

Because making the innovation happen will require the involved organization and individuals invoke and lead real revolution according to organization operations. Such processes are not easy, but they are accomplishable and rewarding through agile project management. The research accomplishes the agile project development as innovation assistance with the special consideration that the innovation process lacks best alternative and does not have a substitute now (Chin, 2004).

Literature Review

Agile project management assists the planning, decision making, and design procedures during organization learning for innovation and success. Such enable the organizations to quickly progress into action from the procedure of making decisions together with innovations (Leybourne, 2009). Traditionally, organizations engaged the agile development process and principles during the software development especially the customization activities as well as implementing the internal projects (Augustine, 2005). However, the application of agile project management as organization DNA bears outcomes proofing that agile mindset enables businesses to respond efficiently and effectively at a quick pace to match complexities with the uncertainties defining current business necessities (Conforto & Amaral, 2010).

The agile define iterative incremental design and development managing procedure on engineering, information technology and other business segments aiming at offering new services and products development in an interactive manner that is highly flexible (Fernandez & Fernandez, 2008). The best instance of agile project management entails agile software development original form called scrum application (Highsmith & Cockburn, 2001).

Research presented by various researchers (Alves, Marques, Saur, & Marques, 2007) (Conforto & Amaral, 2010) (Leybourne, 2009) show that agile requirements comprise of able persons emerging from applicable enterprises, non-hierarchical leadership, and management consistent with openness customer inputs (Augustine, 2005). The agile appears principles generalization and broadening of scrum earlier techniques and concepts successful array that increase enterprise diversification (Highsmith & Cockburn, 2001). The agile creation traces to agile manifesto publication as its consensus event with lean techniques, kaizen, and conceptual links together with the six-sigma enterprise-wide ideas (Alves, Marques, Saur, & Marques, 2007). The agile manifesto depended on four principles such as increased collaboration with the clients,

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

openness to change then work scope freezing, the focus at perfection in work delivery while reducing the documentation and party's communication impacts organization more than stipulated tools or procedures (Conforto & Amaral, 2010).

The extreme agile procedure known as agile X bears iterative life cycle at variant presenting deliverables in stages. The significant difference between the iterative and agile development entails that the agile procedures engage at completing work within defined and relevant sections of deliverables defined by individual life cycles (Chin, 2004). The iterative processes revolutionize the complete deliverable sets with time whereby they finish at end simultaneously. The development of iterative and agile procedures happened from some reaction towards numerous obstacles developers met sequentially during the organization projects (Augustine, 2005). The project development initially embraced iterative project management at adequately fulfilled their requirements. However, the innovations complexity continues to increase whereby the consumers cannot define specifically their future intentions and requirements of the project without referring on prototypes describing the present progression (Alves, Marques, Saur, & Marques, 2007). Agile projects grow in iterations that ensure it continuously gathers outcomes that assist in refining the project requirements.

The agile process can efficiently be leveraged for non-software items including the project management generality particularly covering uncertainty and innovation fields. The outcomes of utilizing agile into non-application development platforms entail a project meeting present consumer needs while its delivery happens within reduced costs, time efficient and lowered wastes (Nerur, Mahapatra, & Mangalaraj, 2005). The agile methods for innovations present as a core in the current observable technological revolution. The success observable within the past 30 years in software development success rate increase enhance market speed, improve quality, increase IT team productivity and boost their motivation (Nerur, Mahapatra, & Mangalaraj, 2005). The agile approach ensures the non-software project attains bottom lines attraction earlier than the use of conventional

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

methods. The agile project management presents a reduced framework that promotes past work reflection and communication between team players and other teams (Nerur, Mahapatra, & Mangalaraj, 2005). However, the change from traditional, waterfall planning, to inherit agile planning undergoes challenging moments. The team embraces the transformational stage that sometimes requires the assistance of the agile coaches to direct the present team through smooth transition (Leybourne, 2009).

Agile coaching involves two important styles known as pull-oriented and push oriented agile coaching. The adaptive life cycle, a form of an agile method called change driven, facilitates the changes on projects (Nerur, Mahapatra, & Mangalaraj, 2005). Such require a huge degree of continuous involvement of stakeholders. The adaptive lifecycle also comprises of incremental and iterative procedures that differ by iterations being rapid, while being duration, and resources inflexible (Nerur, Mahapatra, & Mangalaraj, 2005).

The agile with new practices, benefits, principles, and values at the radical option to the management of the command-and-control-style spreading across wider industries range together with functions into the C-suite. (Leybourne, 2009) For instance, the present mass media comprising of radios and television such as National Radio utilizes the agile processes when devising their programs (Rigby, Jeff, & Takeuchi, 2016). Saab utilizes agile when creating fighting jets as John Dere involve them in new machine creation (Rigby, Jeff, & Takeuchi, 2016). A cloud backup leader, Intronis, employs agile procedures in doing marketing and global logistic third-party provider, C.H. Robinson, utilizes the agile activities in managing the human resources (Rigby, Jeff, & Takeuchi, 2016). The wine producing, Mission Bell Winery, use of agile presents everywhere incorporation activities such as wine production, warehousing, and managing the senior leadership team (Rigby, Jeff, & Takeuchi, 2016). The General Electric use of agile saw them fasten the highly publicized switch to present century digital industrial organization from the past century conglomerate business.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Such achievements of the organization in the application of agile associate to the ability of the agile to being individuals from their comfort functional silos into engaging them in consumer-oriented at self-management multiple discipline groups (Rigby, Jeff, & Takeuchi, 2016). The agile approach assists the organizations applying them increase the rate of generating profit and guide the development of skilled general managers' new generation.

The increasing agile project management promises intriguing probabilities. The agile capabilities may ensure the organization positive returns associate with more than 50 percent of new products introduction (Chin, 2004). The agile processes can also cause the marketing project create more than 40 percent consumer inquiries (Fernandez & Fernandez, 2008). The agile procedures applied within human resources scope might result in more than 60 percent recruits from the corporation targets of high priorities (Nerur, Mahapatra, & Mangalaraj, 2005). The agile processes could also increase the emotional engagement of workers in their duties. As agile present the success levels it had in improving the information technology, the organizations acquire the chance in the company as substantial.

Nevertheless, serious impediments persist in the agile process adoption. For instance, the majority of the executives responds their knowledge of agile project management is enough to be dangerous (Nerur, Mahapatra, & Mangalaraj, 2005). Some executives can throw agile-connected terms such as time boxes and sprints as they attempt supporting the claim of their business increasingly becoming nimble (Rigby, Jeff, & Takeuchi, 2016). The lack of training and guidance on their shifting from traditional approaches, the executives' comprehension of the agile approach remain subtle. Despite their suggested knowledge, they lack the confidence to manage organizations into ways countering agile practices and principles that undermine the agile team efficiency and their input reporting units (Leybourne, 2009).

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

The executives initiate infinite initiatives bearing urgent deadlines to avoid using the highest priority while assigning (Fernandez & Fernandez, 2008). Such make the executive stretch their capacity across different projects together with different employees. Their scheduled meeting with agile team utilizes the time needed for working and trying substitutes (Leybourne, 2009). Most of the executives excessively involve in certain work from a team and increases their talking to listening. They reduce creativity resulting in promotion of marginalized suggestions considered previously by a team. Such results in constantly refused team decisions added layers of reviews, and controls that ensure mistakes are not recoverable. Although their harbors best intentions for the organization, they destroy the benefits deliverable under agile innovation (Conforto & Amaral, 2010).

Methodology

In this paper I would like to conduct a survey and interview and literature reviews, and comparing existing methods along with results, conclusions, and carrying this steps to further work in entire thesis work.

Any research relies on some underlying philosophical ideas as the supposition that describe what makes the research valid as well as the methods that serve the creation of information in the provided survey (Hennink, Hutter, & Bailey, 2010). The study used an interpretative and descriptive case study that follows qualitative methods to analyze information. The study can use questionnaires to evaluate the features of the waterfall, and agile software development approaches especially the ways they impress and serve their users before contrasting them for their differences and similarities. Whereas a descriptive statistical can be applied to determine the ways the methods cause efficiency (Lazar, Feng, & Hochheiser, 2010), the analysis will reveal the ease to use and serve the organization right by measuring user's satisfaction levels make agile the correct methods than waterfall in the application. Participants' observation, interview, and members checking were other procedures used to collect information. The correct qualitative measures in qualitative exploration such as triangulation, crystallization, peer reviews, and members checking can be used to ensure the worthiness of resultant information.

The research method refers to the path that inquiry process follows to unearth the underneath research design and data collection (Hennink, Hutter, & Bailey, 2010). Even with the varying distinction of varying research methods, the research will use qualitative and quantitative methods after considering the kind of knowledge, final reasons of research, and individual comprehension of the universe. The qualitative and varying quantitative differences made them be applied in the survey in the form of interview and questionnaire respectively. Conversely, the discourse levels are the

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

research methods like data collection and analysis that include generalization, and representation from the collected information (Hennink, Hutter, & Bailey, 2010).

Researcher such as Lazar, Feng, and Hochheiser (2010) argued that the use of qualitative surveys is effective when dealing with the human learning process. Gratton and Jones (2010) noted that when dealing with technology research, it is important to follow the paradigm that best suits the investigation. The qualitative research concentrates on processes than outcomes as the responder uses the understanding of something to respond his/her perceptions and processes descriptions (Hennink, Hutter, & Bailey, 2010). Hence, the use of qualitative analysis to evaluate the participant's duties to the study as well as their perceived experience. Moreover, developed understanding cannot be real by remaining constant but persist at given perspectives and contexts, which ensure that the truth emerging under a certain context may not be in another (Cook, Heath, & Thompson, 2000). That make the use of quantitative research not the central in the research process.

The research design gives the master plan of conducting a certain survey as it uses logics to explain the process followed to complete the survey Gratton and Jones (2010). Hence, it displays the way the various parts of the survey like measures, samples/groups, and programs/treatment among others combine when solving the research problems. The research design offers direction to the assumptions and methods of collecting information. A meta-analysis study by Cook, Heath, and Thompson (2000) revealed that the most significant research method when dealing with the technological survey is the use of case studies. Hence, the researcher will collect secondary information needed during the study through case studies. The use of case study reveals how the relation between elements under study and evaluate the actions of the group.

The participants in the primary data collection are 25 masters and Ph.D. students as well as five staffs in schools of information and technology at 50 percent gender parity. The researcher will have all random selection where respondents' population will receive an email each, and the willing to

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

participants will fill the attached consent paper and send it back. The researcher will post questionnaire as Google document and send the link to the participants with request message for them to take their time to participate. The resultant information will be used to discriminate the participants in the data analysis and nonparticipants through purposeful sampling. Purposeful sampling describes the process that users chose to work with the information rich questionnaires. Besides, three of the students and two of staffs will participate in the interview through phone, online, and one-on-one depending on respondents chosen method.

Moreover, the process of conducting research is describable as systematic collection of information from the participants in a way that determine their experiences and opinions. As a result, the primary source of the information will comprise of the students who are enrolled in this course at masters and Ph.D. from their high level of knowledge together with the faculty members (tutor of the course and other tutors in the course) who has experience in the field. The main method that the researcher will use to collect information include questionnaire and interview that are supported by observation and discussion directly or indirectly.

Interview as data collection method uses oral questions that follows as pre-arranged core of questions. As per Hennink, Hutter, and Bailey (2010), the use of questionnaire is productive considering their use follow a certain issue of concern that cause constructive and focused suggestions. The advantages of using interview as the method of data collection include the direct contact with the respondents that enhance the constructive suggestions, good in digging information, and uses a reduced sample to gather information. Depending on the requirement of the survey, the interviews used were unstructured whereby the researcher presented open-ended questions that allowed the respondents to express their opinions. The researcher used various techniques such as general description, funny introduction, and short story giving to ease the tension with the respondent. The researcher conducted each interview with similar framework of questions but it was

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

difficult to assess the process of interview before the ordeal and standardize the interview as each interview assumed different format. Nevertheless, the researcher used with to generate information, ide, and data by using level of questioning within the research that suited context in varying ways while the researcher asked the respondent deep questions when the point of inference is more of interest. However, the process conducting the interview as well as analyzing the data was time intensive.

On the other hand, questionnaires were drafted sets of question, lead and open-ended, that were sent through email to the respondents after their consent to participate in the survey. Questionnaire had advantage of using wider audience than the interviews even though it could not individualize the process of data collection (Gratton, & Jones, 2010). During the research, the survey could observe the respondents in the interview, and used their response to get more information. Moreover, the researcher used the field as the best experiment of guiding during conducting the survey even though questionnaire and interview represented the main source of information. The advantages of using observatory method is that a person learns a lot about something form observation than any other method. However, the possibility of subjective reasoning in the observation ensured that the method was only used to verify information collected in questionnaire and interview. Finally, the use of literature review as secondary source of information inspired the survey from the perspective of research problem, scope, questions, and hypothesis to research justification and providing information about research methodology and supporting research in the discussion of findings.

The process of analyzing the collected information started b categorization, organization of the data to locate patterns, and discover the critical meaning and theme that is seen from the data. The process used coding to name conceptual categories into groups that resulted in descriptive and multiple dimension categorization that offered preliminary framework of analysis. The recorded

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

interview was transcribed while the responses together with questionnaire were analyzed, compared, and categorized before the application of triangulation and other statistical evaluative tools to bring out interior meaning.

Many origins of lack of innovation to huge organizations and the innovation hindrance identifiable entails the difficulty in adopting culture linked with constant innovation. Such causes organizations to struggle in their attainment of necessary practices. Other causes in organization lack of innovation associated with inherent challenges with the impossible complete management of huge organization resources. Such demand the need for efficiency, scale, sustainable, and coordinated profitability within global marketplace experiencing brutal competition together with equally adored security market.

The modern huge corporations building blocks comprises of structures, procedures, and rules that can also inadvertently hinder innovation and others kill it. Whether accidental and intentional, the ideas with innovations mortality prematurely happen within ordinary basis. The sense supporting the innovation suppression make logic within constrained shorter context like when senior executives attempt exercising their administration unwieldy corporations such that they attain the significant objectives. However, the organizations end up sacrificing the longer due benefits. Consequently, the use of agile project management attempt to balance the long and short terms need of innovation within an organization. The agile project management also ensures the operation units together with the innovation teams' work as a team with efficient collaboration than rivalries viewing another as a threat to their job that changes their competition for similar resources.

Just as other business, the technological businesses characteristically struggle at long- and short-terms needs balancing. They cannot balance the operational essentials on the requirement to develop modern services and products with present methods. However, the technologist

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

development of agile project management remains ahead than other methods such as traditional and imperative at balancing the organization needs.

Agile characterizes numerous principles governing various practices as created by software programming group aiming to attain two perspectives. They aim at accelerating the teamwork together with reliably producing highest value work. Such eliminated bureaucratic project management burdens while freeing programmers into working highly productive for better satisfaction. The researcher will realize robust methods and amazing success for corporations that adopt the principles of agile software development according to the manifesto created in 2011.

The researcher will note some relationships between classical innovation and the agile project management after the study on the huge organization's adoption of the agile project management. As speedometer assist drivers to assess the speed of the vehicle or other motors and predetermines the duration of an activity, the agile project management will work at assisting the involved parties and organizations in determining the duration of the project. The failure of the speedometer means the driver guesses between the present paths with choosing of the right path depending on probability. The traditional methods relied on guesses whereby the researcher could attain the less familiar and longer routes at fate and as the worse prediction, a conviction to them on the effect of guessing wrongly. As complementary to the speedometer is the GPRS that guides drivers into the unknown course to remain glued to their destination's course. The agile project management assumes the responsibility of the GPRS. The agile process ensures project commences even when the clear cutting course associated with comprehensive specifications and documentation. Whenever project manager bumps into jams or embraces the wrong turn, the agile process signals immediately and make recommendations on the best process to correct the course. Such ensure the project manager cannot worry about the length of the course and bends involved as the estimations

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

between the distances and destinations remain well documented and specified within the agile processes.

The advocates and users of the agile project management processes view themselves as the ants that face giant activities. They stand to face the giant as small, lean, and determined to finish the giant's bureaucracy. The giant aim at destroying their creativity-suppressing their innovations and eliminate their productivity while taking joy within the workplace. The agile literature bears rebellion undertone together with determination aimed at defending programmer's self-organization capacity. Because of the love, they bear for their duties with a complete commitment to attaining their utmost capabilities. Consequently, the agile project management within huge organizations beams profoundly significant with inner definition drive.

The agile project management study on the huge organizations will proof that the inner innovations characterize the roots upholding great genius works. The external motivation emerging from the agile project will base on punishment and reward attained within the best and compliance. The agile creation characterizes the desire to develop and attain greatness with the principle of innerness associated with agile procedures proofing the drivers of organization's innovation. Huge organizations attain tremendously on extending the replicate of energy associated with agile procedures resulting in the equal driver to organization innovations that extend far than programmers and project managers as well as past the R&D team. The energy influences numerous segments of the organization that capture and develop tremendous value. Consequently, the agile project management works entails passionate directing the marvelous innate innovation power particularly towards progressing innovations through applying its principles and concepts with varied business aspects.

The researcher will propose shifting from control oriented, top-down, and traditional management to consumer drove, self-organizing agile innovation. Such represent a revolution that

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

bears no substitution, as organizations with huge roots can never compete with SMEs with better creativity. Innovation becomes a force to reckon with for organizations that they accept or exit the market with its progression. Agile offer a fresher method of working that demand the forces controlling society and economy force the organization into engaging the stipulated revolution kind. The sooner the organization adopts the safer but later increases procrastination associated with adverse effects. The work team and project managements needed when developing changes that empower innovation with the huge organizations embraces the critical aspects associated with leadership in organization revolution that ensure organizations instills actions to their plans.

Proposed solutions

Many origins of lack of innovation to huge organizations and the innovation hindrance identifiable entails the difficulty in adopting culture linked with constant innovation. Such causes organizations to struggle in their attainment of necessary practices. Other causes in organization lack of innovation associated with inherent challenges with the impossible complete management of huge organization resources. Such demand the need for efficiency, scale, sustainable, and coordinated profitability within global marketplace experiencing brutal competition together with equally adored security market.

The modern huge corporations building blocks comprises of structures, procedures, and rules that can also inadvertently hinder innovation and others kill it. Whether accidental and intentional, the ideas with innovations mortality prematurely happen within ordinary basis. The sense supporting the innovation suppression make logic within constrained shorter context like when senior executives attempt exercising their administration unwieldy corporations such that they attain the significant objectives. However, the organizations end up sacrificing the longer due benefits. Consequently, the use of agile project management attempt to balance the long and short terms need of innovation within an organization. The agile project management also ensures the operation units together with the innovation teams' work as a team with efficient collaboration than rivalries viewing another as a threat to their job that changes their competition for similar resources.

Just as other business, the technological businesses characteristically struggle at long- and short-terms needs balancing. They cannot balance the operational essentials on the requirement to develop modern services and products with present methods. However, the technologist development of agile project management remains ahead than other methods such as traditional and imperative at balancing the organization needs.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Agile characterizes numerous principles governing various practices as created by software programming group aiming to attain two perspectives. They aim at accelerating the teamwork together with reliably producing highest value work. Such eliminated bureaucratic project management burdens while freeing programmers into working highly productive for better satisfaction. The researcher will realize robust methods and amazing success for corporations that adopt the principles of agile software development according to the manifesto created in 2011.

The researcher will note some relationships between classical innovation and the agile project management after the study on the huge organization's adoption of the agile project management. As speedometer assist drivers to assess the speed of the vehicle or other motors and predetermines the duration of an activity, the agile project management will work at assisting the involved parties and organizations in determining the duration of the project. The failure of the speedometer means the driver guesses between the present paths with choosing of the right path depending on probability. The traditional methods relied on guesses whereby the researcher could attain the less familiar and longer routes at fate and as the worse prediction, a conviction to them on the effect of guessing wrongly. As complementary to the speedometer is the GPRS that guides drivers into the unknown course to remain glued to their destination's course. The agile project management assumes the responsibility of the GPRS. The agile process ensures project commences even when the clear cutting course associated with comprehensive specifications and documentation. Whenever project manager bumps into jams or embraces the wrong turn, the agile process signals immediately and make recommendations on the best process to correct the course. Such ensure the project manager cannot worry about the length of the course and bends involved as the estimations between the distances and destinations remain well documented and specified within the agile processes.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

The advocates and users of the agile project management processes view themselves as the ants that face giant activities. They stand to face the giant as small, lean, and determined to finish the giant's bureaucracy. The giant aim at destroying their creativity-suppressing their innovations and eliminate their productivity while taking joy within the workplace. The agile literature bears rebellion undertone together with determination aimed at defending programmer's self-organization capacity. Because of the love, they bear for their duties with a complete commitment to attaining their utmost capabilities. Consequently, the agile project management within huge organizations beams profoundly significant with inner definition drive.

The agile project management study on the huge organizations will proof that the inner innovations characterize the roots upholding great genius works. The external motivation emerging from the agile project will base on punishment and reward attained within the best and compliance. The agile creation characterizes the desire to develop and attain greatness with the principle of innerness associated with agile procedures proofing the drivers of organization's innovation. Huge organizations attain tremendously on extending the replicate of energy associated with agile procedures resulting in the equal driver to organization innovations that extend far than programmers and project managers as well as past the R&D team. The energy influences numerous segments of the organization that capture and develop tremendous value. Consequently, the agile project management works entails passionate directing the marvelous innate innovation power particularly towards progressing innovations through applying its principles and concepts with varied business aspects.

The researcher will propose shifting from control oriented, top-down, and traditional management to consumer drove, self-organizing agile innovation. Such represent a revolution that bears no substitution, as organizations with huge roots can never compete with SMEs with better creativity. Innovation becomes a force to reckon with for organizations that they accept or exit the

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

market with its progression. Agile offer a fresher method of working that demand the forces controlling society and economy force the organization into engaging the stipulated revolution kind. The sooner the organization adopts the safer but later increases procrastination associated with adverse effects. The work team and project managements needed when developing changes that empower innovation with the huge organizations embraces the critical aspects associated with leadership in organization revolution that ensure organizations instills actions to their plans.

Results and Findings

The implementation of the agile project management study returned many responses, which have been found to be useful and relevant to the purpose of the study. As it is, two methods were used to gather information, namely interviews and surveys. The managers engaged in project managed were interviewed and surveyed, with the aim of getting their responses with regard to those that use agile models, as well as those that use traditional modes. The outcomes are presented here.

First, the survey results showed that more than three thirds of the people that had been surveyed said that they were yet to start using agile project management practices, while 41% said they had embrace agile models. As it is shown in the diagram below, this difference is notable, and it also highlights the fact that the organizations that are embracing agile project management are increasing.

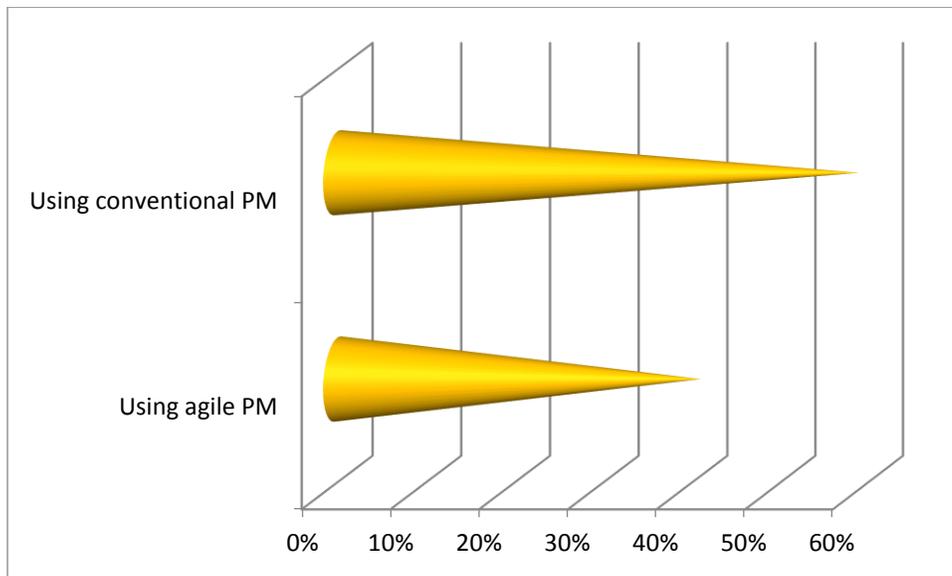


Figure 1: the percentage of organizations using agile project management versus those that using traditional models of project management.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

The conventional or traditional PM is described as the use of the top-down and rigid project management approaches which entail bureaucratic leadership. On the similar note, 88% the project managers that were surveyed and their organizations were using the traditional project management approach rather than the agile design, they implied that they were ready to adopt the agile models. This may suggest many more people have realized the benefits of the agile model of project management, hence are ready and considering to adopt the new model. As may be seen in the diagram below, only 7% of the project managers said that they felt that the conventional methods of project management did were suitable, hence they would not be considering the agile approach. The main reason for such insistence is the fact that the agile approach does not fit the needs of the firms.

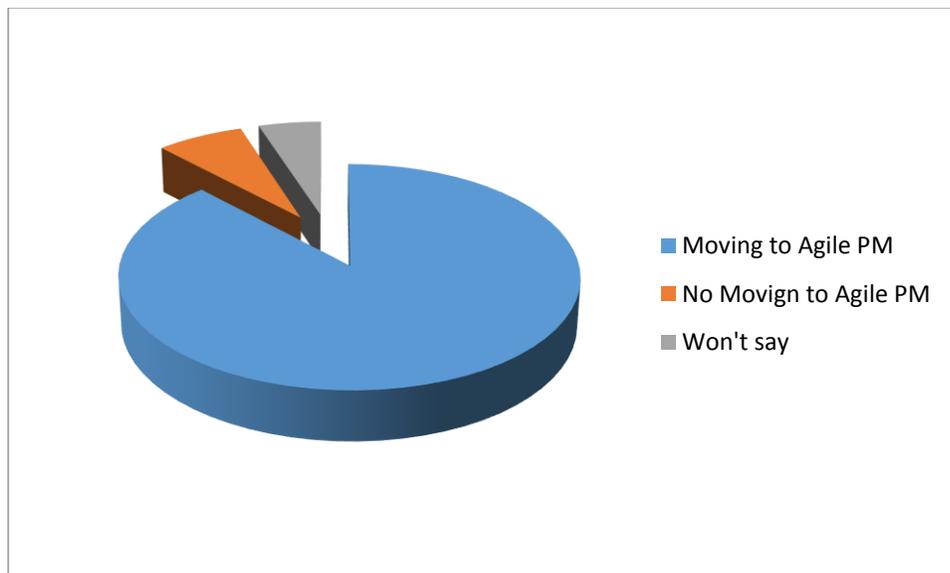


Figure 2: The diagrammatic representation of how many of the surveyed project managers using traditional PM approaches would like to implement the agile model of project management

The diagram represents the fact that the vast proportion of project managers and organizations that are not using the agile approach would be willing using the process.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

On the same note, the respondents were asked during the surveys to list down the reasons that they had for either using or wanting to use agile project management approach, or the traditional mode of project management. The resulting findings showed that for those that said that they were using agile model, the three most important reasons were as follows, in terms of how many participants listed them in their response.

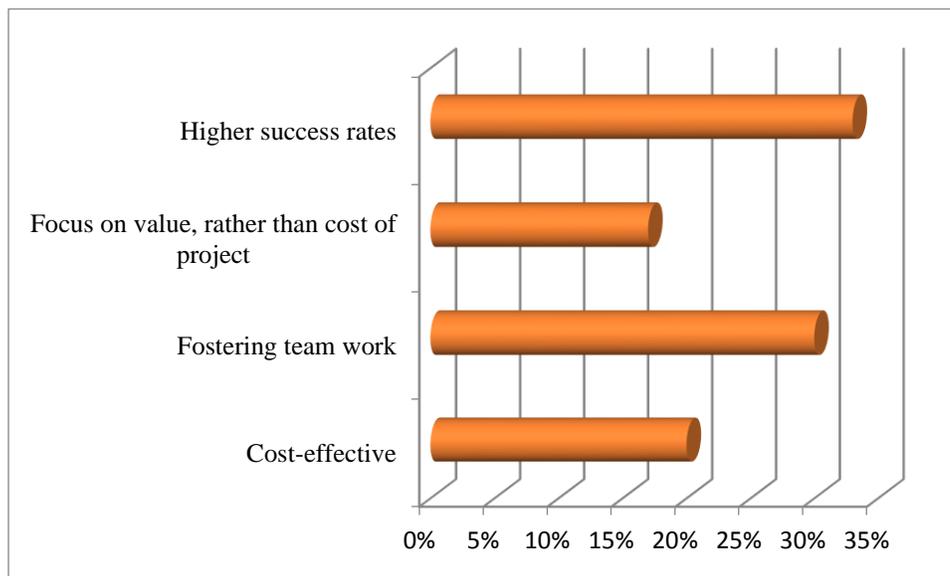


Figure 3: The representation of the different reasons for using agile project management showing the importance of each of the top four as seen in the data

The data in the graphic above shows that the fact that agile project management functions help project managers to complete projects successfully most of the times is a major reason for the preference of the agile model. Based on the responses from the people that preferred not to use the agile approach, the main reason for their responses were the cost implications and the possibility of unsuitability of the model for certain projects or organizations.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Moreover, the people that were using agile project management were asked to compare their experiences before and after starting using the agile model. 83% of the said that they had noticed significant difference between the two time; the time prior to the adoption of the agile was characterized by many difficulties, and high project failure rates. While the time after adopting agile was marked by easy project management, better management of change and risks, and notably higher rates of success. The diagram below shows that comparison of the responses of the project managers, with regard to their experiences in terms of project management success.

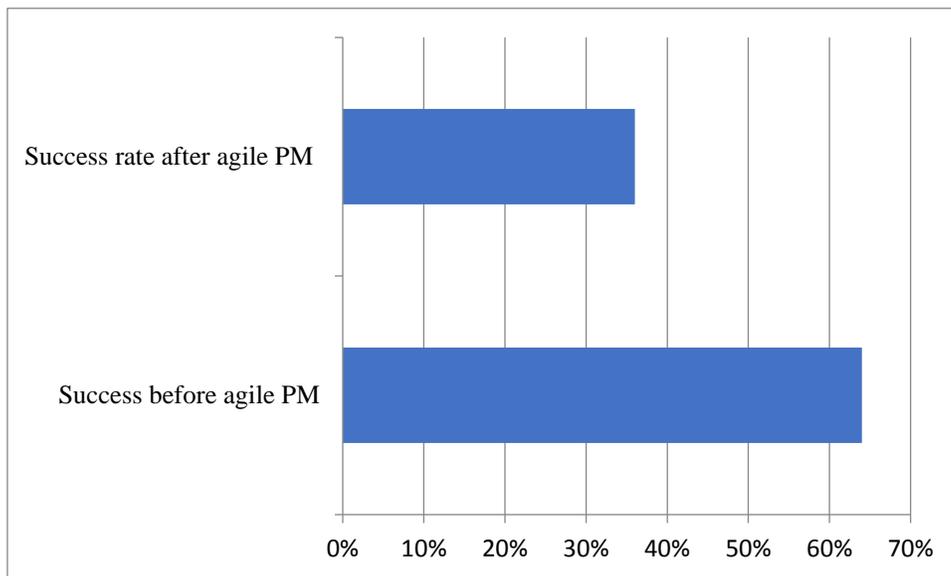


Fig. 4: Success rate in project management before and after agile PM for the managers using agile PM presently

The project management process has shifted greatly in the recent times. The organizations that were using traditional project management in the past, but are now using the agile methodology were emphatic regarding the value of agile. As the diagram immediately above depicts, the success rate of projects when using agile project management is nearly double that when there was no agile.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

This difference underpins the use of agile project management as being associated with many reasons. These data are reflective of the existing studies, and in line with the assumptions made in the current study.

On the other hand, and regarding the results from the interview data, it is worth noting that the response rate for the interviews was 86%. The people interviewed were all project manager who had handled important projects in the past. Some of the people were currently managing ongoing projects. Their responses were therefore relevant to the study, as they spoke from a point of experience and knowledge. Upon being interviewed, 96% of the interviewees said that they were aware of the agile project management system, which they noted was relatively new in project management. This was suggestive of the idea that agile project management was popular among project managers, in terms of knowing, even though the proportion of those implementing the system was significantly lower, as shown in the results from the questionnaire survey. As in the case of the survey, the interviews showed that majority of the project managers were using agile project managers. In this regard, one of the project managers stated that they had used agile project management for five years, and “I can tell you, the difference is tremendous... you don’t make as many mistakes as you would with the older way of doing things. Best of all, you don’t need to spend more to go agile.” These to remain were reiterated by at least other 13 project managers who took the interviews. When asked why they preferred to remain with te older project management approach, the project managers that had said that they would not move to the agile bandwagon implied that they were taking time to study the methodology and see how it served their interests, if at all it. As per one of them, “I will not go agile because others have done so; I have to examine my organizational needs and see whether there would be value in adopting the change.” These responses show that despite the agile project management approach being quite popular not only in theory but

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

also practice, no all project managers were willing to embrace it. However, the majority value and use it.

Discussion and Conclusion/Future work

The research of this work found that the methodology of agile methodology in today's industry was accepted widely with great success. There were other project methodologies but mostly accepting is agile methodology. Actually, based on different methodologies, agile has excellent efficiency and output. The members through survey, they have expressed how the agile is making success over other methodologies.

The numerous influences that have scrutinized and expressed in the section of results and findings to show how each area affected the acceptance of agile. Also, the type of project would also be plays important role in acceptance of agile. The major advantage of agile has helped in many ways like customer expectation, the end user's/client involvement, the flexibility, changing the requirement in the mid of process, and mainly lower development cost. I would say that there are no cons except sprint duration is very less like 2 weeks.

Future work

The result and finding section clearly provides a clear picture of how the agile methodology is accepted over other methodologies. Some of the future study to further enhance the results would be conduct an in depth and detailed questionnaire to find out the other methodologies. Also, am planning to do another survey with professionals of different methodologies with variety of organizations.

Conclusion

The major decision to adept agile over other methodologies are good assumed and contribution of end users and properly analyzing best practices. Also, the good and common is a management support and interest towards agile for changing the methodology. Finally, I would say from the above all information agile is more success methodology over other methodologies in every aspect.

References

- Alves, J., Marques, M. J., Saur, I., & Marques, P. (2007). Creativity and innovation through multidisciplinary and multisectoral cooperation. *Creativity and Innovation Management, 16(1)* , 27-34.
- Augustine, S. (2005). *Managing agile projects*. New York: Prentice Hall PTR.
- Chin, G. (2004). *Agile project management: how to succeed in the face of changing project requirements*. AMACOM Div American Mgmt Assn.
- Conforto, E. C., & Amaral, D. C. (2010). Evaluating an agile method for planning and controlling innovative projects. *Project Management Journal, 41(2)* , 73-80.
- Fernandez, D. J., & Fernandez, J. D. (2008). Agile project management—agilism versus traditional approaches. *Journal of Computer Information Systems, 49(2)* , 10-17.
- Highsmith, J., & Cockburn, A. (2001). Agile software development: The business of innovation. *Computer, 34(9)* , 120-127.
- Leybourne, S. A. (2009). Improvisation and agile project management: a comparative consideration. *International Journal of Managing Projects in Business, 2(4)* , 519-535.
- Nerur, S., Mahapatra, R., & Mangalaraj, G. (2005). Challenges of migrating to agile methodologies. *Communications of the ACM, 48(5)* , 72-78.
- Rigby, D., Jeff, S., & Takeuchi, H. (2016, May). *Embracing Agile*. Retrieved August 28, 2016, from hbr.org: <https://hbr.org/2016/05/embracing-agile>
- Cook, C., Heath, F., & Thompson, R. L. (2000). A meta-analysis of response rates in the web or internet-based surveys. *Educational and psychological measurement, 60(6)*, 821-836.
- Gratton, C., & Jones, I. (2010). *Research methods for sports studies*. Milton Park, UK: Taylor & Francis.
- Hennink, M., Hutter, I., & Bailey, A. (2010). *Qualitative research methods*. Thousand Oaks, CA: Sage.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Lazar, J., Feng, J. H., & Hochheiser, H. (2010). *Research methods in human-computer interaction*. Hoboken, NJ: John Wiley & Sons.

INNOVATION THROUGH AGILE PROJECT MANAGEMENT

Appendix

Agile: Agile is a framework of software development which uses iterative approach in building incremental solutions

Sprint: It is period of time in which all the team members need to finish their tasks according to their requirements.

Scrum master: He/she plays as scrum master like a project manager they can monitor all the works.

Scrum meeting: It is meeting where every end of the sprint, all the team members get collaborated each other and discuss about the work what they have done so far.