
TONES: a reference framework for identifying skills and competencies and grooming talent to transform middle management through the field of project management

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Abstract: This study summarises qualitative interview findings of an approach extending the observations from a doctoral research in light of advancements in project management discipline, technical sophistication of project environments, and demands of strategic leadership expectations of project managers to meet the organisational strategy. Synthesising these observations into a framework to identify and groom future project managers as transformational change agents, this paper synthesises the interviews of various senior and executive roles across many industries on their expectation of project managers. The findings can help academic institutions to prepare the project managers serving as a practitioner reference tool in talent management.

Keywords: project; program; portfolio; product; account management; talent; team management; leadership; change management; middle management; TONES.

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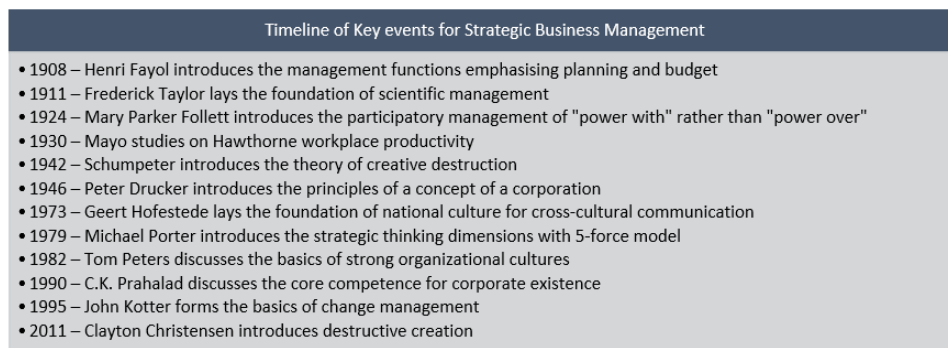
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1 Introduction

Scholars and practitioners across the globe have pondered over the theories, processes, frameworks, methodologies, and tools that the management and leadership should use in task and people management over more than a century. One of the most popular and earliest entry is by Henri Fayol in 1908 laying the first blueprint for the management functions of planning and budget control followed by Frederick Taylor’s 14 prescriptive scientific management principles in 1911. These management theories were substantially evaluated for social intelligence, participatory management styles, motivation philosophies, economic principles, quality paradigms, self and team leadership practices, and were subsequently represented by the development of tools and instruments over several decades.

Several organisations benefitted by continuously applying and expanding on these strategic business management concepts recommended by the influential researchers and practitioners as noted in Figure 1. Most notably, the last two decades experienced the power of ‘creative destruction’ (Schumpeter, 1942) and ‘destructive creation’ (Christensen, 2001) with innovation and integration as integral factors to success inexorably highlighting the alignment needed between leaders for strategic effectiveness and managers for execution efficiency. Examples such as Dell’s approach allowing end users to customise their computer systems increasing the market share (Christensen, 2001), Nokia’s tactics embracing the digital cellular trends (Kotler and Keller, 2006), Amazon’s style to revolutionise business-to-consumer space (Garud and Kumaraswamy, 2003), and Infosys’ strategy reversing the outsourcing trend emphasise the impact of revolutionary business models with disruptive technologies and levelling strategies (Friedman, 2006) exemplify the growing need for diverse mix of skills and competencies in the middle management.

Figure 1 Strategic business management timeline (see online version for colours)



These resulting paradigm shifts in strategic business management has been witnessed with different schools of leadership theories documented in Figure 2 from managing the workforce in mass production to leading knowledge workers across multinational boundaries. For instance, tapping the knowledge capital in developing countries demanded the middle management to exhibit competence in a spectrum of stakeholder relationships including internal and external clients besides the knowledge of industry space, product domain, business strategy, and cultural orientation. Therefore, the general business management principles demanded an acute awareness of leadership traits in the middle management.

Figure 2 Leadership theories timeline (see online version for colours)

Timeline of Key events for Leadership Theories
<ul style="list-style-type: none"> • 1954 – Peter Drucker highlights the principles of practicing management • 1958 – Fred Fielder initiates the contingency theory of leadership relating leader attitude to group effectiveness • 1964 – Robert Blake and Jane Mounton discuss the behavioral school of theories with leadership/management grid • 1970 – Paul Hersey and Ken Blanchard initiate the contingency leadership requiring leader to task alignment • 1970 – Max Weber and Bernard Bass begin transactional leadership focusing on the leader-member exchange principles • 1970 – Robert Greenleaf initiates the servant leadership focusing not only the people but also the society at large • 1978 – James MacGregor Burns introduces the transformational leadership to transform the workplace

The middle management's need for delicate balance of management and leadership dimensions is evident with research and development in many areas. For example, the industrial revolution experienced just-in-time (JIT) inventory modelling and foreign direct investment (FDI) balancing the economic and strategic benefits underscoring the middle management competencies with skills in the tactical processes, such as the lean thinking, elimination of waste, total quality management, plan driven approaches to project management, and systematic approaches to software development (Hill, 1997; Kotler and Keller, 2006; Winston, 1970). Simultaneously, prominent quality management studies impacting the product quality are documented in Figure 3 that had a pronounced effect across many industries including software product development. The digital revolution followed up with the emphasis beyond the economies of scale in operational cost management bleeding into increasing quality with the architectural design of the information systems, the enhancement of the technology sophistication connecting geographically distributed remote virtual teams, and the use of specialised application service providers flattening the organisational structures foreseeing the need for leadership in the middle-management (Friedman, 2006; Thompson, 2004; Scott, 2003).

Figure 3 Total quality management timeline (see online version for colours)

Timeline of Key events for Total Quality Management
<ul style="list-style-type: none"> • 1920 – Hawthorne studies on productivity paved foundation for introducing quality by design • 1930 – Walter Shewhart introduces the statistical quality control procedures • 1940 – Toyota’s Kanban approaches to managing and limiting work in progress • 1950 – Edward Deming lays the foundation with the 14-point total quality management principles • 1950 – Phil Crosby promotes zero quality defect principle for corporate quality improvement initiatives • 1964 – Joseph Juran expands cost of quality using the trilogy of cross-functional management • 1968 – Karou Ishikawa simplifies the root cause resolution approaches through decision tree designs • 1980 – Motorola introduces the Six Sigma principles to quality • 1986 – Watts Humphrey forms the Carnegie Mellon Software Engineering Institute for software quality • 1987 – ISO publishes its first 9000 series on quality management • 1988 – The capability maturity model is introduced as a process management framework

Although the management related to the workplace practices as illustrated in Figure 4 at cognitive and emotional dimensions allowing the individuals to form teams supplemented by motivation theories depicted in Figure 5, there was also an acknowledgement of leadership failure in grooming the middle management. Examples such as the fall of Enron due to several issues unchecked by management for the accounting practices (Healy and Palepu, 2003) has subsequently called for several internal and disclosure policies. Floyd and Woolridge (1997) infer how any attempt by an individual team leader or project manager challenging the status quo was unwelcome except for informational inputs.

The practice of the laissez-faire leadership and inefficient management principles allowed the middle management to withdraw citing the *above-my-pay-grade* or *it-is-not-my-function* symptom deemphasising collaborative intelligence. Yet, those managers that struggled on augmenting productivity at the process and resource levels silently screamed as they succumbed to failures or met with partial successes without getting proper mentorship and coaching (Gratton and Erickson, 2007). Somewhere in the middle of this continuum were those other managers that either accepted the fear of failure to stand out or resorted to their comfort zone launching counter efforts (Guth and Macmillan, 1986) sabotaging the strategy by delaying its implementation and redirecting the energy in the name of *on-the-job-training-not-given* diminishing the growth opportunities of the performing organisations.

Figure 4 Cognitive and emotional intelligence studies timeline (see online version for colours)

Timeline of Key events for Cognitive & Emotional Intelligence Studies
<ul style="list-style-type: none"> • 1920 – Edward Thorndike defines the early notion of social intelligence for cognitive & collaborative needs • 1936 – Dale Carnegie lays the self improvement principles on self-managing before managing others • 1983 – Howard Gardner initiates multiple intelligences with interpersonal and intrapersonal intelligence • 1985 – Peter Drucker discusses systematic creative thinking for innovation • 1990 – Peter Seneger discusses systematic thinking needs for a learning organization • 1990 – Peter Salovey & John Mayer frame the notion of emotional intelligence with a framework • 1995 – Daniel Goleman publishes the principles from identification and use of emotional intelligence

Notwithstanding, the challenges in the successful execution of change and scaling competencies to meet the growing business demands, the leadership woke up to the vibrant reality of the raise of new set of competencies in the middle management (Axelrod et al., 2006) claiming that the failure rate of organisational change efforts are

due to the strategic leadership failure in not listening to the people (Drucker, 2004; Kotter, 1990) and not listening to their emotions in designing the efficient processes to support the execution (Druskat and Wolff, 1999). No sooner this realisation became conspicuous that leadership is not just for top management (Gosling and Mintzberg, 2003), a few organisations, such as Zappos (Hsieh, 2010) and Disney (Chang and Chang, 1994) addressed these middle management challenges expanding on the harmony between employees and customers.

Figure 5 Motivation theories timeline (see online version for colours)

Timeline of Key events for Individual and Team Motivation Theories
<ul style="list-style-type: none"> • 1943 – Abraham Maslow lays the hierarchy of needs proposition • 1950 – Frederick Herzberg extends the motivation principles with hygiene and satisfiers • 1960 – Douglas McGregor introduces the principles of motivation using Theories of X and Y • 1964 – Peter Drucker discusses the humane considerations for managing for results • 1964 – Victor Vroom forms the Expectancy theory of motivation relating to performance and reward • 1965 – Bruce Tuckman introduces the stages of group formation • 1975 – Henry Mintzberg emphasises using intuition & relationships on workforce performance • 1980 – William Ouchi introduces the Type Z theory promoting career growth & stability

2 Leadership in project management

One basic middle management layer connecting many business units and the other middle managements like product, account, engineering, testing, and infrastructure is the project management discipline delivering value to the clientele by strategically applying the governance processes from capital project selection tactically controlling the work using the integrated change management processes. A brief reflection of almost a century of events in the field of project management captured in Figure 6 emphasises how project management grew leading to productivity management developing tools and processes using the projects as vehicles of change.

Figure 6 Project management events timeline (see online version for colours)

Timeline of Key events for Project Management
<ul style="list-style-type: none"> • 1896 – Karol Adamiecki introduces the harmonogram to visually see the interdependent work as a precursor to network diagram • 1910 – Henry Gant introduces the visual representation of scheduling tasks • 1954 – U.S. General Bernard Schrievie coins the “Project Management” terminology during the U.S. Air Force’s missile development project • 1957 – DuPont introduces the critical path method to see the degree of scheduling flexibility in project management • 1958 – The U.S. DoD forms the PERT technique for analyzing the project tasks to evaluate better predictability of project • 1961 – Joan Woodward categorized four different ways of organizing work for projects • 1962 – The U.S. DoD forms the Work Breakdown Structure (WBS) to assess dependencies for effective project outcomes • 1963 – Bruce Anderson forms the foundational relationship between market demand and growth using the BCG Consulting Matrix • 1968 – Project Management Institute is formed • 1986 – Hirotaka Takeuchi & Ikujiro Nonaka introduces "Scrum" as a project management discipline for focused teams • 1989 – The U.S. DoD lays the principles of earned value requiring its use in project management • 1989 – The U.K. Government agency forms the PRINCE framework to execute projects in a controlled environment • 1997 – Eliyahu Goldratt introduces the critical chain project management to address resource leveling for scheduling flexibility • 2001 – Several members collaborate to form the Agile Manifesto to execute software development efficiently

As the field of project management matured, Turner and Muller (2006) stress the importance of domain knowledge, organisational acumen, and emotional (Cherniss, 2000; Leban, 2003; Mersino, 2005; Rajagopalan, 2009) and multiple intelligence

(Gardner, 1983) in a project manager in getting work done by the people extending that the lack of these traits in project managers leads to their inability to successfully execute projects amidst the geopolitical risks, cultural diversity, distributed team norms, and workforce process expectations (Boyacigiller, 1990; Constantine, 1993; Wang, 2002; Toh and DeNisi, 2005; Boyatzis and McKee, 2005; Lugo, 2007). However, when the leadership and management failed to understand these skills and competencies expected in a project manager, their misconceptions created the accidental project managers who abused their role to ineffectively control all the organisational efficiency (Turner and Muller, 2005).

No longer can today's project afford the luxury of collocated multidisciplinary teams (Winter et al., 2006) because today's projects are part of a larger interdependent portfolio of programs with many interconnected projects where the individual projects themselves cannot maximise the benefit. As a result, this level of project complexity can only be attained with multi-faceted, multi-disciplinary, and multi-cultural teams (Friedman, 2006). Rajagopalan (2009) emphasises that today's project managers need to visualise the outcome and the associated milestones as the project evolves from amorphous requirements at inception (Greengard, 2009), thrive in uncertainty controlling scope and chartering the project schedule by managing organisational, team, and client expectations (Montague, 2000; Molden, 2008), mitigate risks proactively by managing uncertainties (Ward and Chapman, 2003; de Bakker et al., 2010), and navigate conflicts as they arise among many stakeholders (Walker, 2014). It is understandable why the Project Management Institute (PMI) unleashed specialisations in scheduling, risk, program and portfolio management.

Consequently, it is not surprising that the growing professions like the field of strategic account management (Ryals, 2012), product management (Gorchels, 2012) and strategic sales (Thull, 2010) recognise the need for project management skills as a prerequisite for these roles to serve as the organisational change agents (Frame, 1987; Rajagopalan, 2009) as defined by the change management literature (see Kotter, 1995; Bennis, 1984; Loeb, 1994). The PMI monitored this stronger impetus to possess a multitude of skills and addressed the need by extending the project management book of knowledge with the knowledge domains (Project Management Institute, 2008) to specific industry level competencies and leadership skills (Ingasson and Jonasson, 2009).

3 Virtual and agile paradigms

While the field of project management has been renovating with attention to leadership, program and risk management, and project management maturity model, there were other trends that were transforming the operating business model for many organisations. Two such notable trends are the creation of virtual teams underpinning the technological sophistication (Lipnack and Stamps, 1999; Simon, 2006; Jarvenpaa et al., 1998; Khaifa and Davison, 2000; Umbaugh, 1998; Mayer, 1998) and the agile approaches to product development (Dingsory et al., 2012). Both these trends challenged traditional project management (Balaji and Murugaiyan, 2012) on their plan-driven approaches to requirements gathering and client management with a pronounced effect on the

organisational structures demanding exemplar shifts in how, where, and when the work gets executed and in empowering the teams to become more self-organised focusing on engineering excellence, product ownership, business analysis, acceptance testing, and automation capabilities.

Although the agile approaches to product development and project management have been on the rise, criticisms also intensify questioning its suitability in environments that lend itself less amenable to readily comply with the agile manifesto principles when agility is misconstrued (Shiah, 2004). For instance, in regulated sectors like the aeronautical, financial, pharmaceutical, energy, construction, and chemical industries, the strong need to document requirements or prohibit software development prior to the required regulatory approval may lead to audit concerns and ineffective use of available capacity. Although little scholarly research exists, the practitioner agile community led by Dean Leffingwell responded to this demand with the scaled agile framework (SAFe) (O'Neil et al., n.d.).

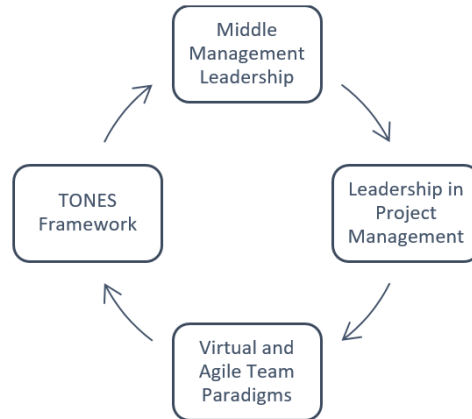
When the middle management failed to comprehend these relationships and their impact on the industry specific domain requirements and the role of information technology (IT) enabled tools (Verbaan and Silivius, 2012; Overby et al., 2006), the resulting growth of knowledge deficiency sowed the seeds for misunderstanding of the frameworks (Rajagopalan, 2014) causing rework and excessive delays due to task and role ambiguity introducing challenges to management in transformation.

Looking at the virtual team trends, Townsend et al. (1996) and Kirkman et al. (2002) remark that the virtual team structure will not effectively work for all the organisations without the cultural and technological transformation. For example, a virtual team member may need directions from the project manager and when this access is unavailable based on the time zone differences and work preferences, then inherent delays surface where the productivity from *round-the-clock* work is compromised (Simon, 2006; Lipnack and Stamps, 1999; Durate and Snyder, 2000; Beranek and Martz, 2005; Furst et al., 1999; Kurupparachchi, 2009). Moreover, as the virtual teams resort to the workflow tools as the primary means to communicate, the lack of disciplined organisation in these workflow tools yields counterproductive results due to unclear direction and conflicting requests introducing unnecessary delays wasting organisational capacity due to trust erosion (Coutu, 1998).

4 TONES framework

These above findings signified trends that emerged and ineffectively enforced particularly in the project management discipline. With the growing business demands, businesses are becoming reliant on the project management expecting leadership skills to identify with the self-organised teams indicating that task management alone will not help sustain effective project management (Cascio, 2000). These findings characterised project managers to exhibit an arduous balance of industry knowledge, domain expertise, product understanding, and stakeholder foundation theories beyond collocated teams, and virtual collaboration tools (Karim, 2003).

Figure 7 TONES framework competencies of a project manager



Based on the theoretical foundations depicted in Figure 7 and illustrated earlier, the TONES framework was constructed with five major components of middle management applicable to the project management discipline. This reference framework extends Posner’s (1987) observations of the indispensable project management skills. These five components are the technical (T), organisational (O), negotiating (N), energising (E) and strategic (S) components synthesised as critical for project leadership (Tirmizi, 2002). The various skills and competencies that effectively constitute these roles are outlined in Figure 8.

Figure 8 TONES framework (see online version for colours)



The technical role includes the leader’s technical awareness in proactively identifying and responding to technical risks impacting project and product objectives (Glen, 2003). The customer facing team’s expertise of the product and knowledge of the technology underpinning the product, and their ability to effectively use the online collaboration tools was considered indispensable asset to eliminate unnecessary handoffs in some studies (Simon, 2006; Stevenson and McGrath, 2004; Townsend et al., 1998). However, this role is not to be mixed with the IT areas, such as an understanding of programming,

network infrastructure, and database management but specifically on the domain knowledge of the portfolio of products, relationship to the servicing of the products from a customer and internal perspectives for feature identification, feasibility studies, lead generation, account growth, profitability, project delivery, and comprehension of the technical environment underlying platform (Rajagopalan, 2015).

The organiser role centres on the project manager's ability to provide unambiguous direction in task assignment and role assignment in the project environment (Beranek and Martz, 2005; Jedd, 2006). The organiser role involves proper pre-emptive planning, identification of business need and business impact, and setting the expectation with all stakeholders for the project outcomes, and constantly analysing the project progress. The organiser role requires interpersonal skills to be able to actively listen to the stakeholder, understand the business requirements, and communicate the voices of the customers unambiguously for continuous improvement. This interpersonal role is not the same as the soft skills relating to the people's fluency in communication and social skills but expand further (Rajagopalan, 2014).

The negotiator role emphasises competencies in communication, conflict resolution skills, and delegation abilities (Kayworth and Leidner, 2002; Simon, 2006). Specifically, the negotiator role extends the organiser role so that the project manager can negotiate best alternatives (Fisher and Ury, 1981) for scope to meet the schedule and persuade for phased release of features lining up with agile project framework. Understanding the differences among culture in the major dimensions of individualism or collectivism, large or small power distance, strong or weak uncertainty avoidance, and masculinity or femininity (Hofstede, 1983) lead to several changes in written and verbal communication. A project manager must be strongly attuned to these variations (Conger, 1991) and develop practices to accommodate them in conducting meetings, seeking responses from team members to make participative decisions but willing to take decisions, resolving conflicts and delegating tasks to members of a virtual team.

The energiser role focuses on empowerment and authentic involvement (Ramlall, 2004; Pearce, 2002). This role refers to the project manager's people management skills to motivate members as project or organisational changes influence the project adversely and show empathy to member's concerns to build the trust, loyalty, and commitment to the project's objectives (Goleman, 2004; Boyatzis and McKee, 2005; Salovey and Mayer, 1990). Seen as servant leaders (Greenleaf, 1977), the project manager should relate to the culture of the team (Hofstede, 1980) besides the binding organisations (Schein, 1993) as the national and organisational culture differ in motivational strategies and perception of trust.

Finally, the strategist role plays a key role in all these above four dimensions. For instance, scanning the horizon for the internal and environmental needs is integral to the techniques of functional management and setting the expectations for the communication. The organiser and energiser roles are vital strategist's responsibilities to monitoring the appropriate resource utilisation requirements, motivational aspects of team, emotional intelligence, and evaluation of the choice of methodology to apply to project management or product development. The negotiator role is fundamental to the change management and direction setting as strategies are conceived, rolled out, and controlled during execution.

5 Methodology

The participants for this grounded study to evaluate this reference framework was primarily selected from two pools namely those that had voluntarily provided their contact information in an earlier doctoral study conducted by the author and through the author's LinkedIn network. To address the challenges of schedule constraints for the participants, three options were offered such as recording the interview for later transcription analysis, a phone or a face-to-face interview if recording was not preferred, and having the interview questionnaire filled by the participant for a subsequent follow-up if required.

The request for interviewing started late 2010 and the data collection spanned over a three year period. Among the 50 respondents contacted, 18 responses declined to participate in the study. Nine responses expressed an interest to participate but the scheduling constraints and travel limitations made it challenging for them to give the time required for this interview. Therefore, the final data collection was limited to 23 responses. Only one participant agreed to record the interview while ten participants agreed for a phone interview without any recording. There were four participants that agreed to filling the document themselves while eight participants agreed to a face-to-face interview at a location outside of the office environment.

These transcriptions were later identified by a numbering scheme so that participant information can be removed for subsequent analysis and limited by the role they performed within the organisation at the time the interview was completed. The industrial representation of the participants was primarily analysed for the definition of project success, project manager bandwidth, and the types of trainings based on the organisational maturity but the participant's responses were qualitatively evaluated for the TONES framework for the 12 questions on the expectations of the project manager.

The exploratory nature of this study required a measurable criteria to signal the termination of the study. The research was self-sponsored by the author imposing schedule limitations to meet with the respondents further constrained by the respondents schedule availability. Therefore, a maximum period of five years was established by the author to collect substantial number of responses. Proposing a minimum of one interview per quarter and allowing for probabilities of error in the collected responses, a minimum of 20–25 responses with convergent data fulfilling the reliability and validity requirements was subsequently established as the exit criteria.

The qualitative nature of this study over a period of time required measures to be in place to ensure the integrity, reliability, and validity of the research design. An extensive review of the literature was conducted (Guba, 1981; Reason and Rown, 1981; McGrath and Brinberg, 1983; Kirk and Miller, 1986; Brody, 1992; Miles and Humberman, 1994; Shenton, 2004; Trochim, 2005; Padgett, 2008) to establish the following criteria for this research study.

To address the reliability requirement, Miles and Humberman (1994, p.278) recommended a few suggestions to ensure that the research questions are clear with explanations as required to draw meaningful parallelism across the participants. The research questionnaire was subsequently simplified to ensure that there were no leading questions to introduce researcher bias or not loaded to elicit response to more than one specific question. The questionnaire was divided into specific sections such as the role of the person interviewed, their industrial representation of the organisation, definition of project and project manager success, expectations of the project manager, and

explanation of each of the 12 constructs evaluated segmented by specific TONES roles. Additionally, to increase the reliability of the data collection, only the researcher was involved in the interviewing process during the face-to-face or phone interview. Such an approach allowed to eliminate processes in place to check comparable data collection protocols across may interviewers.

Since the data collection avenues included phone, face-to-face, and the participant filling it out themselves, the dependability accounting for changing conditions (Trochim, 2005) was slightly challenged, particularly when those that filled the survey themselves were not available for additional follow-up unlike the face-to-face or phone interviews where questions could be asked to avoid any pre-conceived notions during the data collection. To ensure dependability, responses from those that filled the questionnaire were evaluated against the information shared during face-to-face and phone interviews besides iterative questioning of any examples or statements made to eliminate reactivity (Padgett, 2008; Guba, 1981) due to the researcher's presence during the data collection to introduce any researcher and participant bias. Such a triangulation approach and self-evaluation to have participants define some statements they made during the interview ensured reflexivity increasing credibility and reliability (Shenton, 2004).

Moreover, researchers (Guba, 1981; Kirk and Miller, 1986; Rothe, 2000) recommended to use synchronic reliability to evaluate the similarity of observations made during the same period and the stability of observations made over time. As this research was conducted over a five-year period due to schedule constraints of the participants with a goal to collect at least 20 to 25 respondents to see if participants responses showed a converging pattern of observations, systematic evaluation was conducted at the end of every year by the author in conjunction with another peer practitioner. Guba (1981) recommended debriefing a peer to discuss interpretations would enhance the reliability and internal validity in qualitative research. The synchronic and diachronic reliability was observed across many participants from many industries leading to the termination of the study when 23 participants information became available.

The grounded nature of this exploratory study was not amenable for statistical hypotheses testing. However, the following statements were established so that the skill and competency expectations of the project management discipline can be assessed from the views of the various roles that interface with the project managers in today's organisational structures with technically engaged workforce.

- 1 today's projects require domain competencies in project managers
- 2 today's project managers need to be both strategic and tactical
- 3 successful projects are only due to project manager success
- 4 project managers need not have any leadership skills
- 5 efficient project managers are always effective project managers
- 6 emotional intelligence is critical to project manager to empowering many stakeholders
- 7 organisations must train project managers on basics of project management

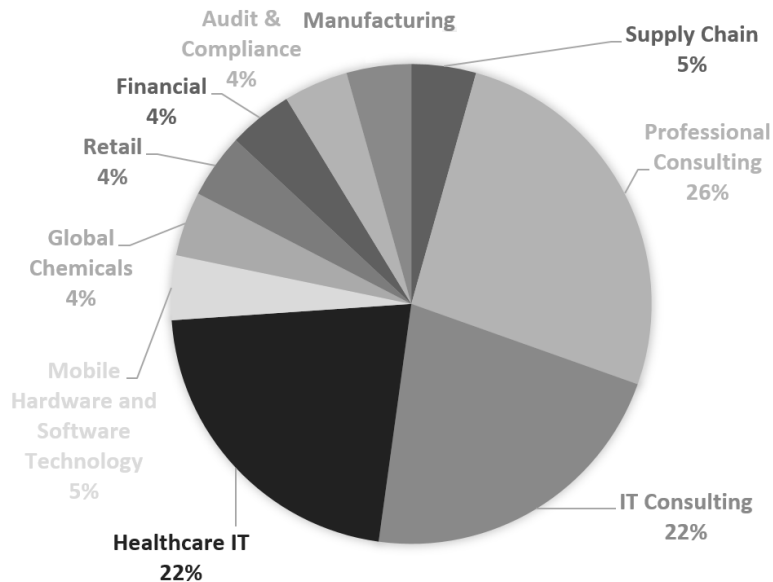
- 8 projects with virtual team members need not require any new skills from project managers
- 9 project managers get bored with projects that do not challenge them
- 10 project manager style is irrelevant in selecting project manager assignment.

6 Results

The 23 respondents represented several industries and represented in Figure 9. These respondents assumed the roles of independent professional consultants, vice presidents of customer service and project management office, senior vice presidents of client delivery and professional delivery operations, strategic account managers, engineering managers, marketing managers, product marketing managers, business intelligence analysts, director of IT and audit compliance, senior developers and software development manager, production support manager, and development team leaders.

There was a good diversity in the respondent mix with different types of projects involving regular information systems projects with custom software development in retail pharmacy, financial services, several types of audit compliance, manufacturing, ethnic food specialty package and distribution using supply chain management (SCM), telecommunication, mobile hardware and system software development, production of chemicals for the consumption of automotive, pharmaceuticals and the food industry, product development for the professional services, IT and services in an insurance sector, specialised security software development, and customer relationship management (CRM).

Figure 9 Industry representation of the respondents



The respondents mostly saw the project manager role as the nexus between the clients and project teams valuing this role bridging strategy and execution. Most of the respondents envisioned the project managers being the glue to manage their leadership to correctly select the capital projects to ensure the flawless execution and effective resource utilisation. Some respondents that assessed their organisational PMO maturity scores as low or undefined also saw the project manager as a coordinator. Additionally, a couple of organisations had disbanded their PMO because the PMO leaders failed to understand technology components for process governance.

The number of projects handled by the project manager was difficult to assess as most project managers in the representative organisations had large programs with multiple projects with several deliverables. Large consulting organisations saw the project manager responsible for large CRM and SCM implementations at the client sites. The best categorisation of project manager to project bandwidth was about 30 to 40 lower complexity projects, 10–12 higher complexity projects and mostly only one extremely large project.

Depending upon the PMO maturity levels, the individual's thoughts varied on the types of training. This spectrum of trainings fell into two major categories. The first category was organisations without a training unit. Those organisations with training units focused on several industry and product level training, such as the ISO, Six Sigma, audit regulations, and specific tools that the organisation used. "PMs are mostly unprepared for every project. Most of them are just MPP file managers than project managers", observed one senior manager emphasising that additional training needs that several respondents highlighted including leadership services, change management, finance, people management, PMP certification, presentation skills, conflict management, agile and scrum trainings. These respondents however echoed that the core project management process areas, communication, conflict management, earned value basics, fundamental technical skills, project management tools, and data processing skills are core competencies that the project manager should possess and not be expected of the business as on-job training.

Several ideas on definition of project success evolved. The respondents identified standard project management success criteria like conformance to agreed scope, meeting return on investment using key performance indicators like schedule and cost performance indices, and zero quality defects. There were also a few additional criteria that effervesced such as their contribution to the scalable architecture to minimise the maintenance overhead, accommodate the stabilisation time between project phases for reflection, organisational learning to avoid repeating mistakes, customer satisfaction leading to additional opportunity or new references, market penetration, lower resource costs, and increased productivity by avoiding rework and eliminating defects.

"The project's success is not a determining factor for the project manager [success]", highlighted a respondent stressing the project manager playing the 'calendar-man' role updating the project schedules alone does not make the project successful. The project manager success derives from a number of factors that lead the PMO office to consider a project manager to manage similar future projects. In addition to articulating a clear vision on project objectives and building the team by managing risks and tasks using integrated change control and documentation requirements, several respondents attributed the project manager success to proactive stakeholder management, comprehensive understanding of the industry and product knowledge, avoidance of hand-waving in the

name of delegation, and knowing the delicate balance of when to pull and push the product owner and the teams.

Seeking specific differentiators of effective and efficient project manager, almost all the respondents reverberated with some interesting thoughts. While the efficient project managers were identified as those that managed the triple constraints with clear direction, consistent follow-up, and delay reduction, the respondents noted that the effective project managers negotiated for success in advance. One respondent claimed that these effective project managers bring new ideas from outside, harvest internal knowledge from lessons learned, and drive the team to try out new things. Another respondent endorsed, "Team wants to work with the efficient project manager. Client wants to work with effective project manager" where the project manager not only treats internal team members as clients deftly boosting their self-confidence but also skilfully navigating through the client's network to resolve their challenges by adding value to the performing organisation.

Synthesising observations into the desired project manager skills, personality traits, task and people orientation, and leadership requirements, the responses unearthed personality styles focused on a combination of management (task orientation) and leadership (people orientation) with competencies on people management. One respondent claimed, "If you are not a good people manager, you are not a project manager. Project Manager is a leadership role. Leaders develop people." As noted earlier, another respondent noted that "... most people are Microsoft Project Plan (MPP) managers" that focus on the tasks in the work breakdown structure delegating tasks rather than understand the dynamics of the resources that work on the tasks. Several respondents echoed that project managers should know their products, clients, and teams managing productivity through earned value.

An example from the Apollo 13 movie was cited where the person leading the team on earth to keep simulating experiences to conserve oxygen summarising the leadership role of the project manager to even lead the 'successful failure' when risks outside of the project's scope evolve altering the project to return the astronauts to earth rather than landing them on the moon. Recalling the importance of people orientation, the respondents disapproved the project manager that only delegated and looked for leadership competencies such as the strong decision making skills, abstraction-to-reality thinking, open mindedness, and sociability. While some respondents felt that the emotional intelligence was critical, some claimed ignorance on that concept asking for description and relating to it later as a core people management competency once explained.

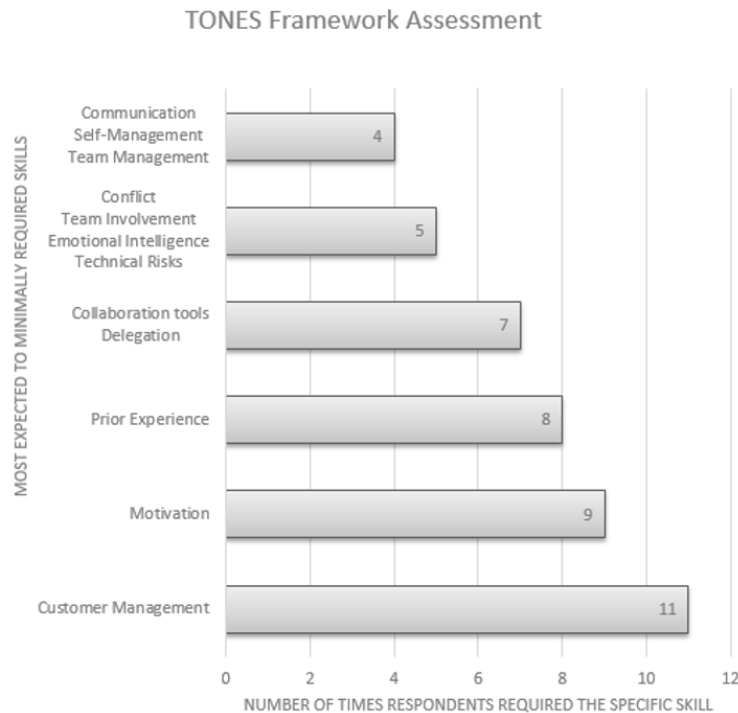
Almost all participants had some unanimous thoughts on when a project manager gets bored. On the personal side, the lack of goals for the project manager and the organisations giving repeated cookie-cutter projects evolved as the primary cause of boredom. One respondent claimed that change resistance from many levels in the organisation will also contribute to the project manager's withdrawal from raising their voice. Reemphasising the project manager role as a leadership role, another respondent affirmed that just like a good developer focuses on refactoring code at downtimes, the project manager should try to improve processes and elevate efficiency as part of the continuous improvement.

Evaluating the effective leadership of virtual teams and virtual team management skills, many respondents affirmed that the traditional mindset of collocated team management will not suffice. Several respondents claimed the project manager's ability

to unambiguously give clarity through workforce tools and avoid confusion through emails to ensure that the team can take proper accountability for completion of tasks. Other responses included the project manager's availability to accommodate geographical time-zone differences and sensitivity to cultural norms.

In evaluating what types of project managers will be chosen for a particular project, the results vary by industry. But, an underlying pattern evolved that while basic project management knowledge areas are critical, the selection of a project manager for a specific project called for a balance of industry knowledge, institutional knowledge, business acumen, and a passion for working with uncertainty. However, one respondent claim, "Project management is both an art and science", summarised the multifaceted skills required in a project manager. The study made it evident that people's leadership to manage expectations, converse with both team and the client, comprehend technical product knowledge, think on feet, deliver good presentations, and be willing to continuously learn will be required to choose appropriate project managers.

Figure 10 TONES framework validation



Analysing the ranking of the respondents on the 12 competencies desired in an emerging project manager as illustrated in Figure 10, the highly preferred skillset respondents desired in project managers was (rank = 11) their ability to interface with the customer and manage the customer expectations. This finding challenges some of the inherent incorrect practices of having a project manager only as an internal team facing role. Looking at the respondent roles that heavily relied on this customer facing competency of a project manager, there is a wide spectrum covering the roles of the consultant, developer, account manager, senior executives of business and client delivery, and audit

and compliance. The next set of competencies desired were the project manager's ability to motivate different types of team members (rank = 9) and their experience working with a wide spectrum of projects (rank = 8) followed by their ease to work with collaboration tools (rank = 7) effectively and appropriately balancing the delegation requirements (rank = 7).

The next group of skills sought were equally distributed and desired among project managers according to the respondents (rank = 5). These were conflict resolution skills, authentic involvement in the team, emotional intelligence, and ability to assess technical risks. Subsequently and closely followed by that was the minimally expected communication strength, self-management, and team management (rank = 4) that became the basic expectations of the project managers.

7 Conclusions

Starting with the statements that this exploratory study planned to also answer, the evolving role of project management as an indispensable role for managing customer engagement became apparent. The underlying theme of the respondents in selecting a project manager for a project far exceeded basic project management knowledge into domain competencies, technical skills, industry knowledge, process orientation, strategic business acumen as represented by the respondent's preferences to project management competencies. Therefore project manager's style is not irrelevant in project manager selection and the continuous learning initiatives of the project manager should be factored in organisational talent management practices.

The respondents saw project managers fundamentally as people managers requiring both task orientation and people orientation. As a result, the task orientation requirement expectations in a project management was required but such project managers were less favoured when they failed to demonstrate strategic orientation, customer management skills, and people leadership skills. These factors became the important ingredients differentiating effective project managers. Particularly, applying the TONES framework, the customer management and people motivation skills followed by prior experience in that domain knowledge, comprehension of technical collaboration tools, and delegation skills became *sine qua non* of effective project managers. As a result, organisations should avoid creation of team silos making project managers as internal team facing roles.

The respondents resonated that leadership skills are much sought after in a project manager who needs to manage various types of people. Consequently, leadership skills and emotional intelligence were perceived as important ingredients differentiating effective project managers from efficient project managers. Despite the popularity of the emotional intelligence construct, the premises behind this framework are less understood among many respondents.

Efficient project managers are not always effective project managers. The efficient project managers focus on the plan and process. But, the effective project managers work beyond their comfort zone expanding organisational capabilities and creating a want for others to work with them. Most respondents also identified that the primary reason for project manager's boredom is the lack of challenging projects that fail to stretch their comfort zone. Organisations can then consider rotational project assignments with

another project manager shadowing a new type of project to combat the boredom while simultaneously build succession planning.

Many respondents identified the core project management knowledge and tools should not be the organisation's responsibility to train. While larger organisations that had their own educational training initiatives can afford to train and promote internal job assignments, it was noted that additional industry specific trainings and expanded skillset should become every organisations training requirement. Organisations should consider training units or investment in ongoing learning as equally as individuals that step outside of their comfort zone to raise up to the changes in the project management industry.

It became apparent that the projects with virtual teams required additional collaborative and team management skills requiring time investment to establish trust.

While most of the traditional collocated team management skills can still extend to virtual team management, changing the mental map of the members requires 'high-touch' rather than 'high-tech' skills.

8 Limitations and future direction

This qualitative research with roles represented across multiple industries affirmed a few reasons on why the project management profession is losing its credibility in organisations that are depending upon this role to exhibit a strategic transformational leadership while still maintaining transactional efficiency. Contrary to the expectation that a project manager should focus only on communication, this research brought to the surface the critical evolving needs beyond communication skills to avoid being labelled the accidental and ineffective project manager by elevating their role in managing client expectations and being the voice of the customer to the product development. Several domain knowledge areas besides the generally accepted business knowledge specific to the industry of operation and technical competencies evolve as the necessary minimum expectations.

The TONES framework evolves to be a good approach with its five interdependent roles to prove its content validity in this pilot study. However, this study faced challenges due to the nature of the interview approach. Although recording features were provided to the respondents, the limitations of the self-funded researcher's approach made access to quality recording facilities inaccessible. Combined with the researcher's schedule constraints as a practitioner and the availability of the respondents introduced heavy delays in ensuring that there was dedicated and uninterrupted time available to continue the research. Having institutional sponsorship for studies of this nature would ease these challenges.

This study attempted to gain support from multiple industries and geographical regions. However, the travel limitations and budgetary constraints made it challenging to gain access to a larger respondent population in multiple countries. These challenges were met by making the respondents write their own responses for a follow up as required. Expanding this study in multiple geographical regions and additional industries with representations from agile and hybrid approaches to project management can further gain insights into the emerging core competencies of a project manager.

The 12 competencies of the TONES framework do not specifically characterise project management domains of knowledge but only extend them. Since project

management is only one unit of middle management and is trending to be the core integration of other middle management functions, the extension of the TONES framework as a viable option for other business functions like product management, marketing, account management, program and portfolio services, training and education, human resources, engineering, and testing can help evaluate the validity of the model beyond project management.

Leveraging the content validity of this framework in other geographical regions, a quantitative instrument can be designed for organisations and individuals to assess their own depth of knowledge and deficiency gaps. If such future studies could design an instrument, then an individual or departmental development template plan can be recommended. Specific domain competencies recommended by the industry can then be extrapolated for talent management in job descriptions, interview assessments, and career enhancement initiatives.

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