



THE READINESS OF THE INDIAN IT MIDDLE MANAGER TO LEAD CHANGE AS THE INDUSTRY TRANSFORMS

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TABLE OF CONTENT

ABSTRACT	3
RESEARCH CONTEXT	4
THE CHANGING INDIAN IT LANDSCAPE	5
• Digitalization-led disruption is still underway	5
• Changing business models add to the challenge	5
• Despite the demographic advantage, there is a talent shortfall	6
• The pandemic changed the landscape further	7
• The role of the middle manager is under scrutiny	8
• Middle management needs to carve its own niche in this landscape	8
LITERATURE REVIEW	9
• Focus on middle management	9
• Focus on the individual	10
FRAMING THE HYPOTHESIS	13
• Hypothesis testing: Six interviews that set the stage	13
• Research framework	14
• Data collection	14
• Data analysis	15
FIRST EXPERIMENT	17
• Two middle managers, two ways of looking at change	17
• Factors that contribute to successful change	18
• FINDINGS	18
• INFERENCES	20
SECOND EXPERIMENT	23
• Decision-making during a pandemic-induced crisis	23
• Mintzberg's mindsets and their relevance to today's middle manager	24
• FINDINGS	25
• INFERENCES	27
THIRD EXPERIMENT	30
• Work life in times of radical change	30
• Framework for the experiment	31
• FINDINGS: Experiment 3(A), 3(B), 3(C)	33
• INFERENCES	37

CONCLUSION	40
• Breaking the frozen-middle mindset	40
• The mindset shifts required to meet the challenges brought about by the changed industry environment	40
LIMITATION OF THE STUDY AND POTENTIAL FOR FUTURE RESEARCH	47
WAY FORWARD	48
• Corrective considerations for organizations	48
REFERENCE	51
• ACADEMIC PAPER	51
• INDUSTRY REPORTS	55
• NEWS ARTICLES	56
Appendix 1: INDUSTRY PERSPECTIVES ON THE ISSUE	58
• The adaptable organization framework:	58
• Human Capital Trends 2020 and Global Millennial Survey 2020	59
Appendix 2: INTERVIEW QUESTIONS	61
Appendix 3: RESEARCH ENABLERS	65
• MAXQDA:	65
• JMP One Way ANOVA:	65
• Vader Sentiment Analysis:	66
Appendix 4: ONE-WAY ANOVA RESULTS	67
Appendix 5: PARAMETER DESCRIPTION	69
• EXPERIMENT 1 Success Parameter Description	69
• EXPERIMENT 2 Five Mindset Parameter Description	78
• EXPERIMENT 3 (A) Individual Parameter Description	80
• EXPERIMENT 3 (B) Organization Parameter Description	82
• EXPERIMENT 3 (C) Role Parameter Description	84

ABSTRACT

The global economy has been in a state of disruption brought about mainly by advances in technology. The Indian IT industry is poised to lead this change, given its previous achievement in this area and the country's young, educated population. However, the cost advantage it has thrived on so far is soon waning due to rising talent costs and automation replacing most routine IT work. This calls for a new set of skills that include both tangible technical skills as well as intangible ones such as critical thinking and decision-making, which are currently in short supply in the Indian IT talent market. The COVID-19 pandemic has exacerbated and accelerated this change and raised new talent challenges for Indian IT companies in the form of the necessity to enable remote work quickly, ensure employees wellbeing—both physical and mental—and deal with employees reassessing their what they seek from their employer.

The position of the Indian middle manager in these conditions might seem fragile as organizations try to restructure themselves to meet these challenges but research shows that this layer can play a crucial role in keeping workers motivated and engaged, connecting various layers of management and employees, and offering innovative solutions due to their involvement with day-to-day work. But how can it be enabled to drive and nurture this change and play a key role in it? What changes will these professionals need to make to not only survive this transformation but to lead it?

To study this, I interviewed Indian IT professionals across three levels of management (junior, middle, and senior) and analyzed their interview responses from three different perspectives:

1. Is the Indian IT middle manager's thinking aligned with the factors that are vital for successful change management?
2. What is the readiness of Indian IT middle management professionals to perform managerial activities in the new normal?
3. How prepared is an individual in Indian IT middle management to work with the organization to lead growth in the new normal?

Based on this qualitative study I show how a mindset shift in middle management can help them lead change in the Indian IT industry that is in a state of constant flux and disruption.

RESEARCH CONTEXT

The middle management quandary amidst the digital wave

Before the COVID-19 pandemic began, the Indian IT industry was on the verge of massive transformation brought about by the global digital wave. Organizations were trying to rapidly adapt their technology infrastructures, change their work processes and styles to adapt to this, and help their talent keep up with these changes.

It was during this phase that I started exploring areas where research could throw a light on talent issues in the IT industry. The peculiar situation of the middle manager amid all this change caught my attention. Evolution of technology meant that some aspects of their job, such as tracking their teams' productivity or project management were going to become redundant. They had been recruited for certain skills, to handle a given set of situations. But all of that had changed, and if organizations were to retain them, they would need to reconsider what value they would derive from these professionals.

The tremendous cost pressures made it tempting to downsize this layer. At the same time, research and experience have shown that this layer can play a crucial role in helping the workforce adapt to this transformation, both psychologically and in terms of helping professionals at every level understand the changes in their work and reskill themselves as they adapt. Besides, removing this layer would have larger societal repercussions, as this is a large demographic, earning a good part of the salaries that the IT sector disburses and directly and indirectly contributing to the growth of the Indian economy. The IT industry seems to have little choice but to ensure that this layer contributes to and, in fact, leads the transformation.

But is this layer prepared to lead this change? Does it have the required skill sets? Is it attuned to the changes on the horizon, and is it ready to lead this change? If there are gaps between expectations and reality, how is the industry going to bridge them? I began exploratory interviews to study these issues in the middle of 2019, but while I was in the middle of my research, the pandemic began, and the changes in the industry accelerated, adding urgency to these questions.

Organizations scampered to arrange for remote work that also took into consideration clients' concerns around productivity, security, and timely delivery. The industry avoided major upheaval by making use of digital capabilities that they had already put in place as part of the wave of pre-pandemic digitalization. But this meant speeding up the adoption of digitalization trends that would have been spread over a few years. The larger part of my research took place at the peak of the pandemic, when middle managers were trying to keep their teams together, ensure productivity, and at the same time were worried about their own place in the organization. Now that the pandemic has abated, organizations are not in a hurry to get back to where they were before. Many of the changes such as automation of some aspects of jobs, security measures, hybrid work models, are here to stay, which means that the research conducted during the pandemic retains its relevance in the post-pandemic world.

THE CHANGING INDIAN IT LANDSCAPE

To set some context around my research, it would help to take a closer look at the IT industry to understand where the middle management stands right now, and what role it can carve for itself. In 2018-19, the Indian IT sector was a major contributor to the Indian economy, accounting for 8% of India's GDP and employing over 4.5 million people. It was on a growth trajectory, poised to contribute to 10% of the GDP by 2025 (NASSCOM, IBEF). The sector is only set to grow further, given the cost advantage—India still offers 60-70% cost savings over source countries as of today—and its demographics—the median age of its population in 2020 was 28 and as of 2020 it has the largest pool of graduates from which the industry can draw its talent.

For a long time, the objective of organizations in this sector has been to establish market leadership based on cost advantage, product quality, and its talent. India's IT revenue still comes mostly from large scale, long-term projects such as ERP implementations and production, where teams of 200-300 people or more deliver on client engagements over the course of months.

Digitalization-led disruption is still underway

As mentioned above, India has the advantage of being both a low-cost destination (though that advantage is quickly vanishing) and of having a young talent pool. Organizations were harnessing this to create shareholder value, and thus contributing to the growth of the Indian industry. That is fast changing with the advent of new technologies such as AI, blockchain, and quantum computing, which are likely to call for short-term engagements with targeted results. This would mean a change in the way these large organizations will function in the future—moving from scale to scope. With the emergence of new technologies, the challenge is to adjust to the new requirements while keeping the revenue flow intact.

Maintaining the cost advantage comes with drawbacks in the form of shrinking margins, shorter business cycles, lower quality of work in the value chain, and just-in-time business-ready talent. This trend is a hurdle in the industry's quest for growth and expansion, developing new capabilities and models, establishing sustainable businesses, safeguarding business and clients from risks that come from disruptions, and acquiring appropriate talent.

Besides, the cost advantage is no longer a given, as Indian IT salaries are scaling up to the source country wages, and many of the large-scale maintenance projects are going through phases of automation. Organizations are trying to move their business in the direction of value-add by understanding the businesses of their clients better as a way of defending market share. Some of them are also trying to move into new business areas and geographies and investing in research and development to come up with more innovative products.

Changing business models add to the challenge

While the large Indian IT companies are still set to flourish in this landscape, the move from scale to scope would mean more competition from smaller companies, especially the MSMEs being set up by Indian

entrepreneurs, which would also be able to handle these projects. Another major source of competition is the GCCs—global corporations, which are leveraging the cost arbitrage in countries like India by setting up their own software units in these places, instead of outsourcing them to large IT companies. These units contribute to approximately 1% of the GDP of India, account for about 5.5% of the personal income tax collected by India for the financial year 2019-2020, and directly employ 1.2–1.3 million, about 25% of the direct employment generated by India's IT sector (NASSCOM). GCCs and start-ups also compete with large IT organizations for talent. This could be a major area of concern.

Despite the demographic advantage, there is a talent shortfall

Though India has the demographic advantage, the fact remains that the talent pool is mainly inexperienced and lacks the structured training and education required by the industry. The shortfall of adequately trained talent and the lack of opportunities for the workforce to acquire the needed training and experience could lead to higher unemployment rates. With the industry moving away from routine tasks that are now being taken over by low-code, no-code development platforms, the skill set requirements for the future revolve around new technologies such as AI and quantum computing. According to the World Economic Forum's The Future of Jobs Report 2020, 43% of businesses are likely to reduce the number of employees due to technology integration, but 34% also plan to expand their workforce due to technology integration. These changes will make some jobs redundant, and we can expect upheaval in the skills market and society.

Since these new skill sets cannot easily be acquired outside the work context, organizations will need to invest in training their workforces. Besides, retaining trained professionals could also pose a challenge, and companies are ending up paying higher salaries, taking a reduction in margins as they do so. Paradoxically, the usual lure of higher salaries in dollar terms is also fading with most companies offering competitive pay and is no longer a differentiating incentive. Immigration or work visas are no longer a big incentive, as the cost of talent is evening out between source and outsource countries, and workers' social priorities are changing and many prefer to stay back in India with their families.

The use of contract or gig workers is also on the rise. According to The Future of Jobs 2020 report, 41% of businesses plan to expand their use of contract workforce. These alternative work arrangements bring with them their problems, especially in productivity and wellbeing, as workers struggle to adapt to new ways of working. Organizations are also exploring more ecosystem opportunities for growth by connecting with and using third-party resources and talent to deliver value to clients, instead of going through the usual paths of organic growth and M&A. This allows them to generate revenue growth with far fewer resources, more quickly than through traditional paths Leadership In An Ecosystem Age: Secrets For Success (Forbes 2022). For instance, in India, the co-location of GCC in financial services/banks, IT organizations, and fintech start-ups can come together to develop innovative solutions.

Figure# 1.0: Analysis of the Indian IT Industry through Talent Lens | Strengths and Weaknesses

Strengths... • Industry comprises 7.5% of the GDP • Employs over 16 million people, of which approximately 10% falls in mid-managerial levels • Population with a median age of 28 years by 2020 • Will be the largest supplier of graduates to the world by 2020 • 55% market share of global services sourcing business • Cost savings of 60-70% over source countries • Predominance of large scale projects–e.g., ERP, production • Global corporations transitioning work to Indian IT firms • Opportunities in the form of new technologies–AI, cyber, cloud, blockchain, 5G, quantum computing • Rise of global capability centers (GCC) in India ...and weaknesses • Paucity of experienced talent • Lack of structured training/education to meet emerging needs • Shrinking margins on engagements • Inconsistencies in quality of work and leadership pipeline • War for talent among IT Firms, GCC's, and start-up resulting in rising wage bills Implications on the industry • Shrinking project pipeline from global corporations • Shrinking project margins and revenues due rising salary costs • Emergence of digital collaboration tools – need based requirement for global mobility • Emergence of DIY (do it yourself) platforms like low code, no code • Spotlight on reskilling talent to work on newer technologies • Great Resignation or Great Reshuffle leading to rising cost of operations
• Pre pandemic
• Added factors post pandemic

The pandemic changed the landscape further

The pandemic brought with it its unique issues, with remote work making it difficult for organizations to upskill their workforce and many mid-level professionals leaving their jobs, in what is now being called the Great Resignation. For the Indian IT organization aiming to establish market leadership based on cost, product, and people, being the first choice of customers, and creating shareholder value, this talent situation poses challenges. Work moved to a virtual environment, and is likely to be a combination of in-person and virtual in the post-pandemic world. This would mean not only an investment in digital capabilities in line with the transformation that was happening before the pandemic, but also a change in management style.

The role of the middle manager is under scrutiny

In this landscape, middle management in Indian IT organizations are under tremendous pressure as their usual tasks, such as overseeing their teams and project management are fast being made redundant by new technologies and automation. As mentioned earlier, cost pressures, AI and automation, and the hybrid work imperative make it tempting for organizations to downsize this layer. But that may not be a good idea, as they have the potential to add value to the organization. Instead, organizations can reinvent this role to enable these professionals to not only act as mediator between higher management and employees but also help manage the emotional response to change and help the workforce adapt and perform through the transition.

Middle management needs to carve its own niche in this landscape

From my initial conversations with industry leaders, literature published in the popular press as well as trade magazines, and my interviews, it emerged that the Indian IT middle manager's thinking is in need of a realignment, especially given the kind of work that the Indian IT industry is likely to handle in the near future—most of it will focus on **value-add, rather than volume and cost concerns**.

This calls for a change in the thinking around what constitutes a manager's role. Middle managers are expected to not only translate the vision of the organization and senior management, but also work on the floor with their teams to enable the changes that matter. TCS CEO, Rajesh Gopinathan (Future of work: Welcome to the era of 21st century artisans, Economic Times 2020) believes this is similar to the artisanal world of the pre-industrial era, when everyone worked from home and the chief artisan did more than just supervisory work. In short, they need to assume what he calls the **responsibilities of a playing captain**. It is important for the manager of the future to not only manage their own teams but also learn how to work with various components of the **ecosystem of organizations** where talent from different work cultures and with different styles of working, as well as expectations, come together.

Organizations and managers will also need to adjust to the new reality of the hybrid work model, finding creative ways to keep the workforce engaged and productive. Middle managers need to reflect on how they will handle the upskilling of both themselves and their teams throughout their careers, which translates into life-long learning and career growth driven by impact and purpose rather than promotions.

One more area that rose in prominence during my interviews was the need to redesign work and the workplace to accommodate the growing number of women professionals entering the industry. As of now, women interviewees highlighted the fact that their unique needs (as the designated care providers in the family who continue to take on a large portion of household responsibilities) are ignored as is the need for a non-traditional growth path.

All of this calls for holistic thinking around the entire situation, which requires both technical and business knowledge, as well as the right tools to help ideate, analyze, and act upon change strategy as well as anticipate situations that would call for creative solutions and be ready to handle crises as they arise.

As research studies have shown, this layer is in a unique position to help organizations lead change, as they are aware of broader organizational change strategy and are close to the ground, where change affects every day work. But are they ready to lead this change? This proves to be an area ripe for research, and I decided to explore this further through literature review.

LITERATURE REVIEW

Focus on middle management

As a management student and practitioner, I found this tapestry of issues fascinating. It presented a huge opportunity to explore the various facets of human resources and ways to bridge the gaps between technology, individuals, businesses, society, and governments. Inspired by the works of scholars such as Dutton, Dukerich, and Harquail (1994), Hargadon and Sutton (1997), and QN Huy (2002), I decided to build a conceptual model grounded in qualitative data gathered through interactions with actual middle management role holders.

My exploratory research covered issues across the industry, organizations' growth strategies, upcoming trends (Deloitte's Human Capital Trends 2020 and Global Millennial Survey 2020—see the Appendix 1, for more details), government regulations for industries, demographics, education trends (formal and vocational), and cultural nuances across countries and geographies, among others. I looked into where organizations and individuals stand in terms of adaptability (The adaptable organization framework—see the Appendix 1, for more details), whether they are prepared to weather the storm, and, if they are not, what they can do to prepare for future changes.

I also focused on the role middle management can play in strategy implementation, as they are (or should be) an integral part of organizations' change strategy. There are three main reasons why I focused on this middle layer:

1. Because of their position in the organization as the sandwich layer between higher management and professionals on the ground, middle managers can help bridge the gap between disconnected players (Floyd & Wooldridge, 1999; Nonaka, 1991). Change in complex, global organizations cannot be managed by single actors or even small groups but requires a network of leaders throughout the organization, and middle managers can play the important role of mediator between levels and units (Balogun & Johnson, 2004).
2. They are influencers of organizational outcomes (Hambrick & Mason, 1984). Though early studies on the role middle management plays in change focused on managers as sources of resistance (Guth & MacMillan, 1986), later research highlighted their potential as agents of change (QN Huy, 2002).
3. The middle managers are in a better position than higher management to understand the nuances and causal relationships between an organization's capabilities and its economic performance (King & Zeithaml, 2001), and thus may be better-placed to play a larger role than top managers in capability development.
4. In other words, studying middle management is important to understand how organizations build and renew their capabilities. Published research on this topic covers the roles and influence of middle managers including those on corporate entrepreneurship (Bower, 1970; Burgelman, 1983b), innovation and organizational learning (Kanter, 1982; Nonaka, 1994; Nonaka & Takeuchi, 1995); strategy implementation (Balogun & Johnson, 2004; Guth & MacMillan, 1986; Huy, 2002), and strategy-making processes (Currie & Procter, 2005; Dutton & Ashford, 1993; Floyd & Lane, 2000; Pappas & Wooldridge, 2007; Wooldridge & Floyd, 1990).

Focus on the individual

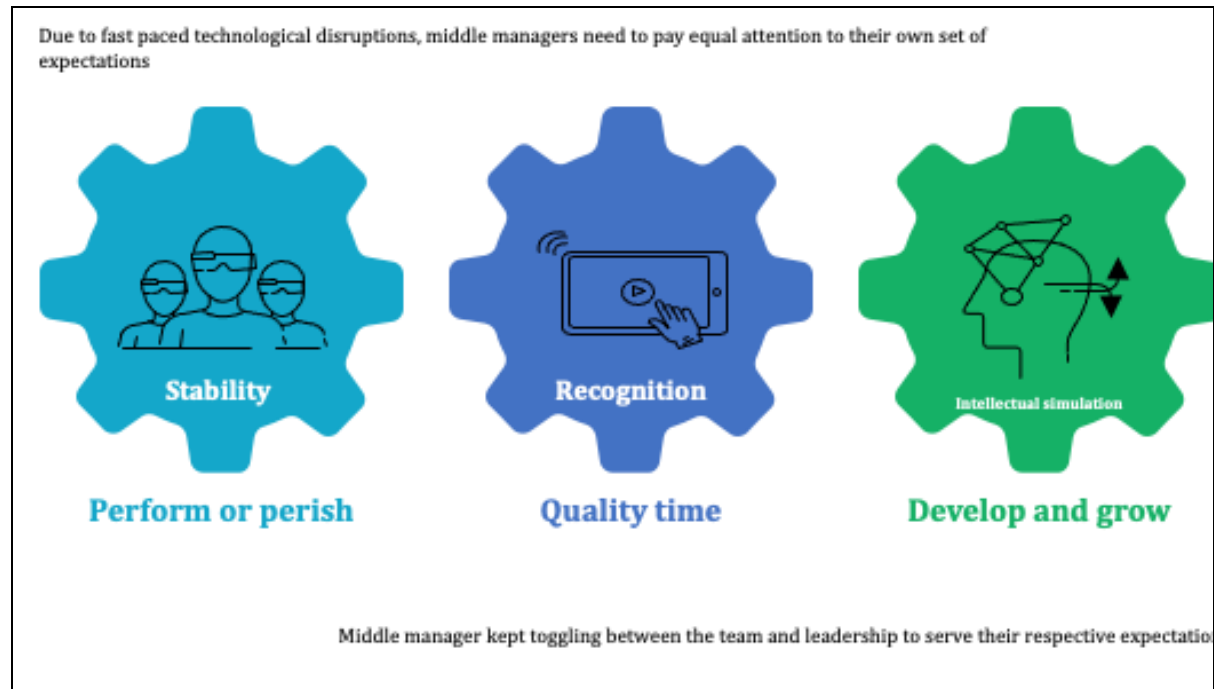
As my research progressed, I realized that the individual is key to the successful adaptation of organizations. So I narrowed my focus to the individual's perspective, rather than the group as a whole, as individual adaptability is a critical quality for employees, especially in radical change. Some researchers consider it a third type of job performance in addition to task and contextual performance (Griffin, Neal, and Parker, 2007; Tucker, Pleban, and Gunther, 2010). Research covered topics such as how in a changing work environment, a highly adaptive employee will be more open to change (Oreg, 2006), contribute more to change implementation (Pideret, 2000), and focus intensely on the new situation (Niessen et al., 2010).

The research on how individuals vary in their mindsets, that is, their beliefs and assumptions about the extent to which human attributes can be shaped (Dweck, 1999; Dweck & Leggett, 1988). At one end of the spectrum is the entity mindset, based on the belief that human attributes are fixed and cannot be changed. At the other end is the incremental mindset, based on the belief that human attributes can be moulded. A person's belief about the malleability of human attributes has a great influence on their thoughts and behaviors (Dweck, 1999; Dweck, Chiu, & Hong, 1995).

Most research (Heslin, Latham, & VandeWalle, 2005; Heslin & VandeWalle, 2011; Heslin, VandeWalle, & Latham, 2006) on the individual mindset has been conducted in nonwork settings (Dweck, 1999). However, individual mindset influences how people work and how they relate to others (Dweck, 1999). I contend that employees' mindset is likely to influence outcomes such as job performance and their relationships with others. For instance, managers whose mindsets are learning goal orientated, that is, they focus on developing capabilities and increasing competencies in themselves are better matched with employees with an incremental mindset who believe they are capable of learning and developing (Hong, Chiu, Dweck, Lin, & Wan, 1999).

Figure# 2.0: The individual is at the core of many dilemmas about the future

Hypothesis testing data suggests that middle management professionals rely on their employer to prepare them for the future



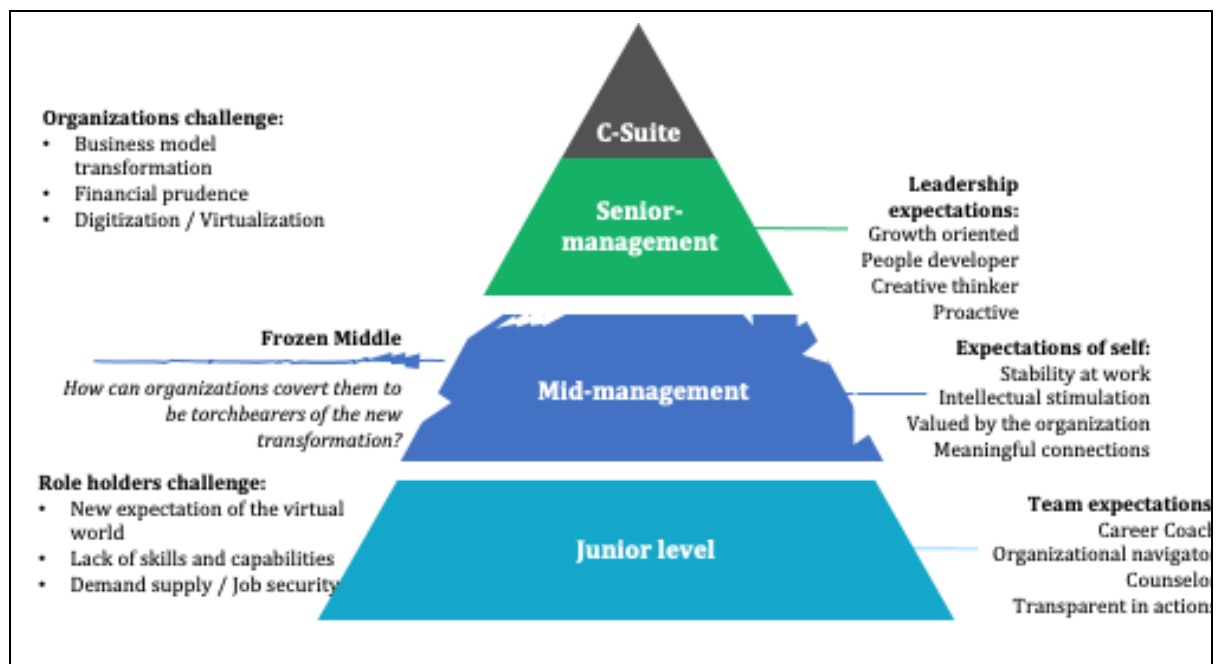
My research convinced me that while much has been written about the role of technology adoption, leadership, and junior employees' mindset in this context, there is a gap in studies involving middle managers' mindset and the role it can play in how they mould their job to take a lead in the altered situation. Literature on this subject is sparse, leaving much room for research.

I decided to investigate the space that the middle manager in the Indian IT industry occupies as a mediator and driver of change. Do they fall into the category of managers who are resistant to change—as QN Huy (1999) says is described as "a person who stubbornly defends the status quo, because he is too unimaginative to dream up anything better--or worse, someone who sabotages others' attempts to change the organization for the better," or do they bring in the entrepreneurial spirit, the networking abilities, the capability to manage teams' emotions during change that he believes they are capable of?

Initial forays and discussions showed that the individuals in this role can be described as a frozen layer, as their potential to play the role of change manager is curtailed by organizations' failure to provide direction, lack of requisite skills, worries about their future in the face of unprecedented change, and the need to show results in a fast-paced work environment that allows little time or space for introspection and reflection.

Organizations need to figure out how to unfreeze the potential of middle management to overcome the current crisis and thrive in the future. During periods of radical change when organizations face challenges such as business model transformation, need for financial prudence, and digitalization, the middle management is sandwiched between the expectations of the layers above and below it. While senior management wants them to be growth-oriented, people developers who think creatively to proactively help the organization navigate change, their juniors are looking for a career coach and counselor who helps them navigate the organization. Caught between these two layers, they have their own expectations to cater to: an aspiration to feel valued by the organization, stable employment, and opportunities to pursue work that stimulates their intellect and helps them make connections that matter (The figure below illustrates these challenges at a glance).

Figure# 3.0: The 'Frozen Middle' challenge



I conducted further detailed interviews to probe further into this issue and understand the various parameters that can enable change, whether the Indian IT middle manager's thinking is aligned with these factors, how ready they are to adapt and perform the activities that their role in the new situation calls for, and, finally, how the individual in this role can work with the organization to lead growth.

FRAMING THE HYPOTHESIS

I used a combination of methods to build my grounded theory:

1. An initial exploratory set of interviews to identify trends to create a roadmap for my study.
2. A second series of detailed interviews across three levels against the theoretical constructs and mechanisms, which yielded data for my experiments' machine-learning phase.
3. Text analysis used MAXQDA – a computer-assisted qualitative research platform – to analyze interview statements and identify critical patterns that enable robust, accurate, and generalizable predictions. This enabled theory building using large data sets.

Hypothesis testing: Six interviews that set the stage

To shape the contours of my research study and understand the day-to-day challenges of middle management, I interviewed six middle management professionals from a spectrum of IT companies based in Hyderabad, India, in 2019. They included individuals from small, medium, and large companies and covered local and multinational product and services companies, with an equal representation from both genders. Interviews were in person and a free-flow format, and I have recorded them for analysis. I designed questions to explore individuals' experience at the workplace and the role of their families, network, organizations they worked for, and education in shaping their journey and their hopes and fears about the industry's future.

I leveraged insights from this exercise to identify some key attributes a middle management IT professional must have to navigate pandemic-induced change and broad parameters that would enable these attributes: For example, the ability to transition from a physical work setting to digital/virtual work setting and still collaborate and feel connected to their companies' vision, mission, and growth. Second, resilience to adopt agile work methods, i.e., breaking down work into distinct manageable packages, each of which has a tangible output to be accomplished by small teams of empowered people working virtually. Third, the ability to play a supervisory role by organizing groups of people to ensure efficient and productive output.

I also identified the issues into which I would delve deeper. How do the Indian IT mid-management professionals view the challenges they face in an environment of constant change? Can they cope with these challenges and thrive in this dynamic environment? What kind of mindset will they need to navigate change?

Seeking answers to these questions through conversations with professionals, company leaders, and industry bodies, I zeroed in on one key question I would explore through my research: "Is the individual in middle management roles prepared to lead the growth of their organization?" As my research progressed, I began to identify the factors that influenced the middle manager's preparedness for the role and build a framework around this question, which would help anchor my research.

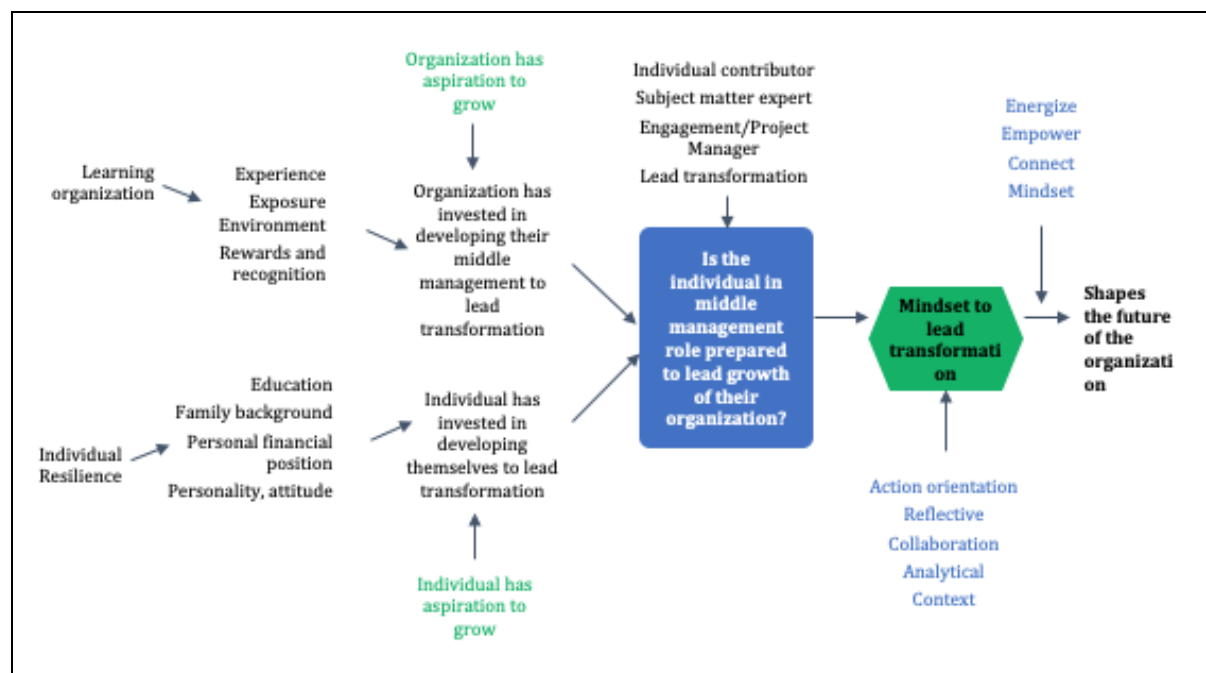
Research framework

As individual contributors, subject-matter experts, and engagement or project managers, middle managers can lead change in an organization, but whether they can do so depends on several factors. As my research progressed it became clear that both organizational and individual factors influence the growth of a middle manager. The organization's growth aspirations determine the investments it is willing to make toward the development of the middle manager by transforming itself into a learning environment that provides the right experiences, exposure and environment, and rewards and recognition that will nurture individual development. Simultaneously, individual growth aspirations will determine whether middle managers will invest towards their growth and transformation, mainly whether they will build on the individual resilience that their education, family and background, personal financial position, and personality and attitude give them.

Assuming that all of these parameters, both individual and organizational, are in place, is today's middle management capable of leading the growth of their organization? As my secondary research and initial interviews showed me, the frozen middle management due to various factors (discussed earlier) and a mindset shift in middle management is required to help them lead change. I decided to explore this hypothesis by conducting more detailed research, which I will now discuss.

Figure# 4.0: Proposed study framework

Key question to be answered is "What is the readiness of an individual in middle management to drive growth in their organization in the new normal?"



Data collection

To dig deeper, in 2020, I designed a study that zeroes in on the mindset changes required for middle managers to lead organizational change.

In this phase, I interviewed 41 management professionals across three levels – the middle management (23 professionals), bolstered by interviews with professionals a level below them (junior management - 11 professionals) and a level above them (senior management - 7) for a well-rounded assessment and to validate the views of the middle management. Insights from these interviews allowed me to triangulate findings from diverse sources to build more robust assertions about interpretations (Eisenhardt, 1989, Yin, 1994).

For both the initial interviews and the later ones, individuals were nominated by the C-suite executive of their companies, paying particular attention to the diversity of the sample. The interviewee sample covered a spectrum of IT companies based in Hyderabad, India, from small, medium, and large, local, and multinational software development products and services companies, with an equal representation from both genders. The middle management subjects' tenure of professional experience in the IT industry ranged between 12 and 18 years.

During the global pandemic involving multiple lockdowns, I collected data and conducted interviews via Zoom video conferences. I have recorded the interviews and generated transcripts of the session from the Zoom platform, following which I reviewed them to ensure accurate capture of the conversation for data analysis.

Questions revolved around what changes they see happening in the industry, how these changes are affecting their work, how middle management has coped with these changes, how they have grown professionally, and what investments the organizations and individuals have made to drive this growth. These were designed to explore the organization and individuals' parameters for growth in times of radical change. The next question to explore was that if these are the changes that are happening, do they have the right mindset to deal with these changes?

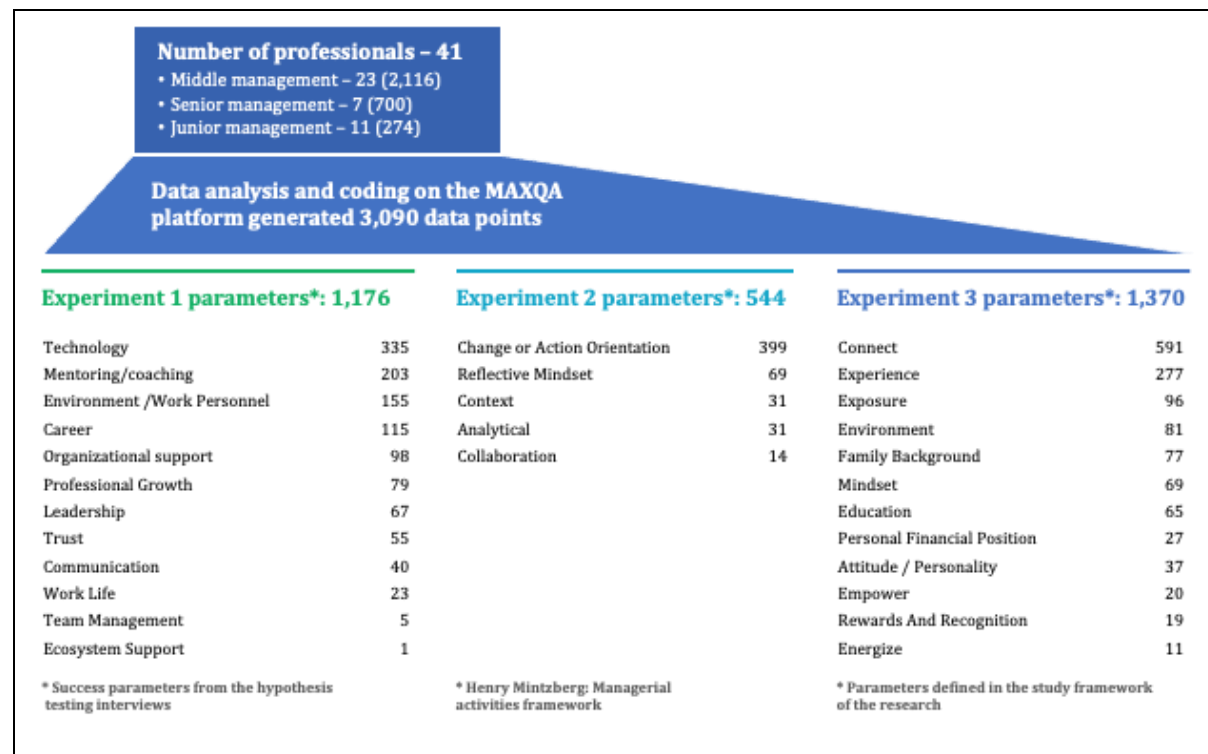
I included questions that explored the following mindsets: global, growth, diversity of thinking, and design thinking. The questions revolved around whether middle management engages them in ideation, engagements, decision-making, and team management. (See the Appendix 2, for the complete set of questions.)

Data analysis

Using the MAXQDA tool and statistical analysis (one-way ANOVA) I confirmed that the voices were unique by level. I also used VADER analysis to measure the sentiment attached to the statements. (See the Appendix 3, for details)

Figure# 5.0: Interview statistics and data analysis

The sample included professionals from product and services IT organizations (domestic and multinationals; small, mid, and large-sized) with equal representation from both genders across levels in Hyderabad, India I analyzed my data across three dimensions:



First experiment: Analysis of the text from the initial hypothesis-testing interviews yielded vital words that appeared repeatedly, and which my initial interviews and secondary research highlighted as priorities in the middle management role: technology, mentoring/coaching, environment/work personnel, career, organizational support, professional growth, leadership, trust, communication, work-life, team management, and ecosystem support. Then I analyzed statements from the main interviews to understand the thinking of the middle management in the IT industry around these parameters.

Second experiment: I analyzed the text from the main interviews for the five mindsets (Gosling and Mintzberg, 2003) to understand the readiness of the middle manager to perform managerial duties and to think through the changes required both in their own actions and those of their teams to lead change. Mindset parameters include change or action orientation, reflective, context, analytical, and collaborative.

Third experiment: My research framework identified four parameters that individual middle managers develop to the table: family background, education, personal financial position, attitude/personality and 4 parameters that the organization contributes: experience, exposure, environment, rewards and recognition. If these fall into place, the manager needs to connect, empower, energize, and bring about a mindset change. I next analyzed the text from the main interviews against these 12 parameters to find out how they aligned with the requirements in the new landscape.

FIRST EXPERIMENT

Is the Indian IT middle manager's thinking aligned with the factors that are vital for successful change management?

My next step was to analyze my interviewees statements for the 12 parameters that I had identified as vital for middle managers to adapt well to the changes in the IT industry and help those they manage adapt as well. From my initial interviews I understood that these factors include the ones that are essential for performing the job, such as technology, mentoring and coaching, and the work environment, as well as those that are required for a more strategic management of change, such as leadership, communication, and trust, though of course there is overlap between the two. Most managers' thinking revolved around the tactical factors, while a few of them did venture to think from a more strategic standpoint of building and developing their team and helping them adapt to the new reality.

Take for instance the case of two middle managers, X and Y, whose experiences I have constructed based on the initial interviews I conducted and whose experiences are narrated in the box "Two middle managers, two ways of looking at change."

TWO MIDDLE MANAGERS, TWO WAYS OF LOOKING AT CHANGE

X and Y have been in the IT industry for almost a decade and started off as coders, before being promoted into the middle management.

X, after having worked for some years as a coder, now manages a team of 30 IT professionals. His passion was, and remains, coding. After having obtained a Bachelors in Computer Science, he joined an Indian IT company that is a coding hub for a US-based technology major, where he wrote code nine hours a day or more. Growth in an Indian IT company is usually vertical, and, X, considered an expert in his field and good with getting projects completed, graduated through various levels to his current position.

Aware that the industry is changing fast, X is concerned about keeping himself and his team relevant. With a focus on catching up with change, he tackles day-to-day issues as they arise. At the tactical level, he can see that technology is being made redundant every day, so he pushes himself and his team to upskill themselves in this area. He mentors them about what they need to do to stay relevant, and ensures that projects are completed on time to the satisfaction of the client. His major concerns today mirror those of his early career: Wondering about his growth and survival in a scenario where technologies go redundant every day.

X's situation is typical of the IT industry, where the scale is of more importance than scope. Most Indian IT companies face intense margin pressures. To ensure career growth and exposure to various technologies and services, X switched a couple of jobs during his 8 years in the industry, but the mindset of the organizations as well as the professionals remained the same: How do we get this task

done quickly? How do we win in this cost game? Once X became a middle manager, he continued to think along the same lines.

Y, too, is concerned about the need to upskill to stay relevant in a transforming industry, but rather than focus on the well-ingrained concerns of technology change and vertical growth, he thinks through what is different now, both in the market as well as his professional situation as a middle manager.

Y's main concerns are about the holistic experience of being a middle manager and understanding the business he is working in, not just from the perspective of the technology it uses, but its concerns, its challenges, its goals. In short, he thinks of the ecosystem in which he and his team perform their job. He knows that India is losing the cost advantage because of rising operational costs and that for his organization, his team, and himself to stay relevant, they all need to replace the current mindset with a more creative way of thinking, where adding value and offering unique solutions to clients are important.

He realizes that his team consists of young, talented professionals and needs to be nurtured and encouraged through mentorship, communication, and training. He focuses not just on promotions (both for himself and his team) but on creating experiences and opportunities, while at the same time thinking about how to maintain the team's morale and motivation.

Factors that contribute to successful change

Indian IT middle managers' thinking could fall anywhere on the spectrum between the two scenarios that X and Y's experiences demonstrate. I carried out the first experiment, to better understand where the Indian IT middle manager is positioned with regard to awareness and strategizing around the various factors that influence successful management of change at their level.

The 12 parameters I identified are: technology, mentoring/coaching, environment/work, career, organizational support, professional growth, leadership, trust, communication, work-life, team management, and ecosystem support. Using both machine learning and text analysis software I analyzed the statements from the main interviews for these parameters and the middle manager's thinking around them.

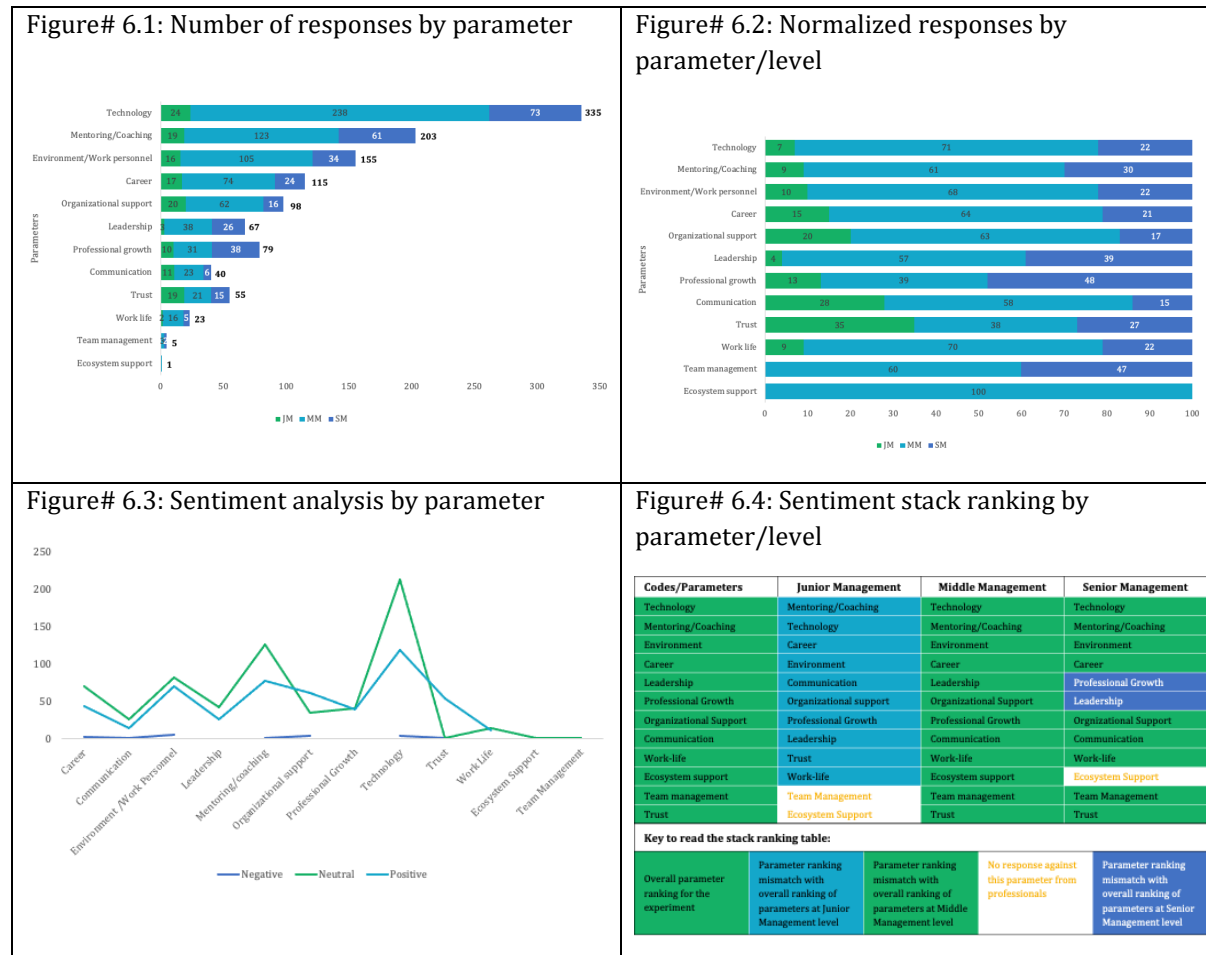
FINDINGS

Technology, mentoring, and work environment are on top of most managers' minds to the near exclusion of most other parameters

My analysis revealed that technology was on top of mind for all levels, with 335 responses aligning with this parameter. Next came mentoring (203), work environment (155), career (115), and organizational support (98). Surprisingly, leadership, professional growth, communication, and trust find an increasingly scarce echo, while team management and ecosystem support find almost no mention (see the figure for details), indicating that most middle managers' thinking is closer to that of Manager X than Y.

Managers in my interviews are mostly reflecting on their immediate concerns: technology, mentoring their teams, and managing the work environment, all targeted at project completion at the least possible cost in terms of time. Either because of their lack of experience, individual propensity to stick to the familiar vs. exploring the unfamiliar, or the paucity of time to think through problems, various other parameters important for change management, such as ecosystem support, trust, and communication get scant attention.

Figure# 6.0: Data analysis | Experiment 1



Managers of all levels are focusing solely on the neutral and positive aspects

The sentiment analysis showed that most responses were neutral, positive, with almost no negative sentiment overall. This lack of negative responses indicates that middle managers are only looking at the positives, not really giving deep thought to issues to be solved or bottlenecks to be cleared. And, if one sees no problems to solve, one sees no need for change. This leads to stagnation when the rapidly evolving situation calls for radical alterations at every level of work.

There is little variation in thinking around parameters among various levels

I next explored variation in the thinking of the three levels of managers on these parameters. One-way ANOVA validated that the voices we heard from different managerial levels were unique. (See the charts in Appendix 4, for more details.)

Stack ranking of parameters indicated that the first four parameters—technology, mentoring, career, and environment were more or less of similar concern among the three levels. There were few shifts in priorities across levels when it came to other parameters as well. This could mean one of two things: that

the mindset shift that is often required to tackle the unique challenges at each level is minimal or that all levels have arrived at a consensus as to what is required in this environment of constant change. As my research findings progress, however, it shows that the former (minimal mindset shift) scenario is the more likely one.

Senior management is the group most concerned about leadership and team management

One or two differences do stand out, however: Team management concerns found no echo among junior management (which is not too much of a concern, as it is more of a middle and higher management issue), while ecosystem support found no voices among both junior and senior management. Apparently, it was more of an area of focus for middle management (a mild one at that, going by the number of statements that revolve around it).

Normalized data shows us that while technology, mentoring, work environment, career, and organizational support are the main parameters that find a voice among all levels; voices echoing the need for leadership and team management mainly came from senior management. This could be because of their higher exposure and experience.

Middle managers in the Indian IT sector are usually promoted faster than in other sectors, due to the exponential growth of the industry and its workforce over the last decade or so (NASSCOM, IBEF), and are often still thinking about project delivery and deadlines, rather than strategies to bring about changes in the team and its outlook.

Communication and trust were more of a concern for junior management than for other levels, a likely reason being that juniors consider the middle management as a guide to navigating the organization. Trust is therefore a priority as they wonder whether they should open up about their concerns and aspirations. From the middle and senior managers' point of view, however, trust could be viewed as a part and parcel of their daily job. They likely assume that they can be trusted to prioritize the interests of their teams. Looking at it from the juniors' perspective could give them more insight into how trust is an important factor when it comes to steering change.

For a more detailed discussion of my findings against each parameter see Appendix 5.

INFERENCES

Interviewees' statements barely skim the surface of the parameters that are important for middle management to steer their teams through radical change

My research shows that management thinking around the parameters that enable middle managers to navigate their teams through current changes in the Indian IT industry, while somewhat deep in one or two areas, barely skims the surface of most others. I will first consider the reasons behind this surface-level thinking before I move into corrective considerations.

To understand these reasons better, I leveraged Daniel Kahneman's insights from his research-driven book, "Thinking, Fast and Slow." Kahneman believes that humans naturally think in what he calls System 1. While making decisions under uncertain conditions they do not behave in the way that economic models have traditionally assumed: logically. Instead, they use what Kahneman calls System 1 thinking; they fall back on cognitive shortcuts. For instance, they "associate new information with existing patterns;" they use heuristics, in other words. In this research for example, when faced with the uncertainty brought about by overwhelming change, my interviewees focused on technology, the known devil.

Even the sentiment analysis reveals shallow, reflexive thinking: most responses fall into neutral or positive territory. But this mindset is not conducive to innovation and change. Skepticism (a trait of the System 2 thought process) encourages us to be more analytical and more vigilant in our thinking, and is

essential for a rethink of the status quo in order to bring about meaningful change. If middle managers have no negative sentiments about the job they are doing, they are not seeing the problems that are out there calling for a solution.

Statements reflect a preoccupation with technology—at the surface level

While a vast majority of statements revolve around technology, even in this, the focus is mostly around the need to reskill and upskill themselves and their teams. Concerns reflected the need for team members to be flexible enough to learn new technologies. This is definitely important, but few statements went beyond reiterating this need. There is a distinct lacuna when it comes to statements about how they can facilitate this learning or make it possible for this learning to happen, given that Indian IT companies focus on getting the job done in the shortest possible time, leaving little scope for learning or creative thinking. Few statements reflected their intent to dig deeper into factors that prevent this learning or into how technology is affecting their work and careers.

Not only do their statements reflect a preoccupation with technology, even their thinking around other parameters revolves around technology. For instance, when it comes to team management, statements reflect the opinion that managers of today fall short when it comes to technical skills.

While technology is important, middle managers can be much more than technology experts. According to QN Huy (In Praise of Middle Managers, 1999), they have the potential to play the role of “entrepreneur” contributing ideas to solve knotty day-to-day tactical or even strategic problems; “therapist” to team members anxious about radical changes to their work; “communicator” who uses informal networks to manage day-to-day activities through chaos; and “tightrope artist” who finds the right balance between change and stability for their teams. For this, they need to think through their roles more systematically.

Many important parameters find little mention in interviewees’ statements

In my experiment, only three of the parameters identified as critical for successfully steering the organization through the current changes are on middle managers’ radar, or for that matter, on the radar of junior or senior management: technology, mentoring, and environment. Important parameters such as communication, worklife, trust, team management, and ecosystem support hardly find a mention, indicating a focused investment—in terms of ideation, time, effort, and money—in just a few areas, irrespective of the incremental returns these investments are likely to yield. This narrow focus could result in a neglect of other equally, if not more important, areas.

One area that did reflect more diverse thinking on the part of middle managers is the need for a supportive environment. They reflected upon topics such as an environment that is supportive of failure, and thus, creative thought. Women professionals, in particular, were vocal in calling for an environment that takes their unique needs into account—an environment where success doesn’t depend on rigid work hours or presenteeism, and instead, gives them the time to take care of their families as well. They also expressed the need for alternative growth paths that allow them to take a breather as they focus on other areas of their life. Their male counterparts’ statements, however, revealed no interest in the issues that their women colleagues might be dealing with or in finding inclusive solutions.

Absent in this discussion is how they will manage the transforming post-pandemic environment—where work is going to be hybrid and younger generations demand a freer, more dynamic environment that supports their personal and professional interests. Instead, the focus was on how to continue to improve the work environment on the assumption that things will get back to where they were before the pandemic and then remain more or less the same.

Mentoring and career growth were definitely on middle managers’ minds. However, most statements were reflective of their own needs and anxieties, not so much about how to nurture their team members and help them thrive. It is also telling that worklife, team management, and ecosystem concerns were not really areas my interviewees have reflected on.

Well-rounded thinking is required to handle both strategic and tactical priorities

The average Indian IT middle manager's limited thinking around parameters vital to successful change management might call for some reflection on the part of organizations. As mentioned in the introductory sections, today's middle manager will have to deal with scope rather than scale, but my interviews show that the focus is still on winning the cost game. The superficial focus on technology also indicates that there is a paucity of thinking around creating an environment that enables working in an ecosystem of organizations, supervisory roles in the world of hybrid work models that might call for them to take on the role of playing captain and create an atmosphere that is conducive to the growth of diverse populations such as women workers.

Organizations will need to find ways to stimulate well-rounded thinking and guide these professionals and expose them to experiences that will help them reflect along all of these parameters that are required for successful change. I discuss them in further detail in the conclusion section.

SECOND EXPERIMENT

What is the readiness of Indian IT middle management professionals to perform managerial activities in the new normal?

My next step was to explore the readiness of the middle manager to lead change. Are they ready to perform the managerial activities that are required to keep the team afloat? Are their actions mere knee jerk reactions to a situation or do they deliberate on options and reflect on their actions once they are completed? Since my main research was conducted during the pandemic, the lockdown-induced remote work situation was on the top of almost all managers' minds, apart from the broad industry changes that were already in motion when the pandemic began, which is exemplified by the case of P which I narrate in the box "Decision-making during a pandemic-induced crisis."

DECISION-MAKING DURING A PANDEMIC-INDUCED CRISIS

P is a middle manager (whose experiences I reconstructed based on my interviews) in a large IT services organization. She understands that though a manager's role is designed to be that of a conduit between the top management and professionals, translating strategy into a vision and language that the ground level understands, today, services and products are also expected to be delivered at lightning speed, even as the teams delivering them struggle to come to terms with the changes around them and worry about their own career prospects.

Take for example how P and her organization had to adapt to the pandemic. Everyone—clients, professionals, managers, the organization—was in a panic. Clients were uncertain about how the work from home situation would affect their control over projects and security, individuals panicked and left for their hometowns without informing managers, and managers were caught in a situation where they had to reassure clients that they had things under control even as professionals had to be convinced that they had to obey the rules of the organization.

Within three days, they had sent 150 or 200 laptops to every single person around the world. They set up additional monitoring, with security measures at each step. They sent daily or weekly reports to customers to maintain their credibility. P values what she learnt from these failures and their recovery during the pandemic, and believes it will help both her and the organization deal better with future crises. She believes that to nurture growth in times of rapid change, the tolerance for failure is imperative. She has made sure that this message has trickled down to her team.

In the process of overcoming this crisis, P's organization had collected data, analyzed it and drew insights from it. The team keeps records and collects measurable data on their work that could later be analyzed for identifying problems and areas for improvement. The way the organization dealt with the crisis paid off when the customer approached P's organization asking for a proposal on how they could build security for themselves on top of their current systems.

P says that five years ago, she used to be in a role which focused on one customer in the US, and the team delivered whatever the customer wanted. Now, automation, the pandemic, and labour market trends have resulted in leaner teams that serve several customers from remote locations, and

professionals are expected to don the advisor hat. P believes that in order to influence this transformation, it is important for a manager to be culturally educated and sensitive. She realizes that the way one speaks, the body language, the words one uses, are perceived differently by different cultures, and it is important for professionals to understand these nuances to work in a global setting. To prepare for this, P says she herself had to undergo a kind of transformation. She not only learnt from experience, but also opted for some behavioural coaching.

Mintzberg's mindsets and their relevance to today's middle manager

As P's case above shows, today's manager must not only work within the constraints of the job to meet the demands of the organization and the client, but must do so under circumstances where the management role itself is a blur, where the manager is often required to influence people without authority. This calls for not only speedy action but a knowledge of the business and a systematic thought process that takes into account all factors affecting the situation, considers the long-term vision of the organization, reflects on possible options within the constraints of the situation, and measures and analyzes the variables involved.

To understand how prepared the middle management is to go through these considerations as they choose what action to take, I analyzed the statements of my interviewees through the lens of Henry Mintzberg's five mindsets framework, which I chose because of its relevance to current practice.

To gain a broader understanding of where the middle management stands in terms of having the right mindset to identify and act on areas of choice, I analyzed the statements from my interviews against the five mindsets from Henry Mintzberg's framework. I chose the Mintzberg framework because of its relevance to current practice.

Their approach may not be scientific or comprehensive, but it is practical and straightforward and clarifies the individual role-holder for day-to-day practice in leading their teams and organizations.

In the Harvard Business Review (November 2003 edition) article "The five minds of a manager," the authors Jonathan Gosling and Henry Mintzberg say that the world of the manager can be complicated and confusing. Making sense of it requires not a knack for simplification but the ability to synthesize insights from different mindsets into a comprehensible whole.

Based on their analysis, the practice of managing involves five perspectives:

Managing change: The action mindset.

A typical organization is pulled in many directions by the emotions, aspirations, and motives of the people working in it. In such a scenario, holding a steady course is as complex as changing direction. An action mindset is not just about setting things in motion but about understanding context, the emotions of people, and thereby setting direction and motivating people to perform in that direction. In times of change, there is an overemphasis on energized action at the expense of reflection. However, it is essential to realize that change and continuity co-exist, and change management should take into consideration the need to maintain continuity in some aspects.

Managing self: The reflective mindset

As Saul Alinsky says in his book, *Rules for Radicals* 1989, most people go through a series of happenings that will not translate into experience unless they reflect on them. Reflection is "that space suspended between experience and explanation, where the mind makes the connections (Gosling and Mintzberg 2003). It involves more than just introspection. It means reflecting on the everyday actions that make organizations work, and using these experiences to inform future decisions. In the words of Gosling and Mintzberg, "action without reflection is thoughtless; reflection without action is passive."

Managing organizations: The analytical mindset

Good analysis allows managers to help others understand what is driving their efforts; it provides measures for performance. But to make complex decisions, it is necessary to go beyond number crunching and take into account other data such as values underlying the decisions. This kind of analysis calls for looking beyond obvious decisions that come about from shallow analysis to dig out other information, question assumptions, and discover the limitations of the methods being used.

Managing context: The worldly mindset

The world is not uniform; it is in fact made up of all kinds of worlds. Only when we get to the ground and experience worlds beyond our own can we begin to better understand our own. It is, therefore, essential for managers to be more worldly, more experienced in life, and to think from the perspectives of people immersed in circumstances, habits, and cultures different from their own.

Managing relationships: The collaborative mindset

Managing is about working with people, not just about the boss-subordinate relationship. It is essential for managers to consider their role as collaborators—colleagues and partners—when it comes to managing people. In the words of Mintzberg and Gosling, “It means getting away from the currently popular heroic style of managing and moving towards a more engaging one.”

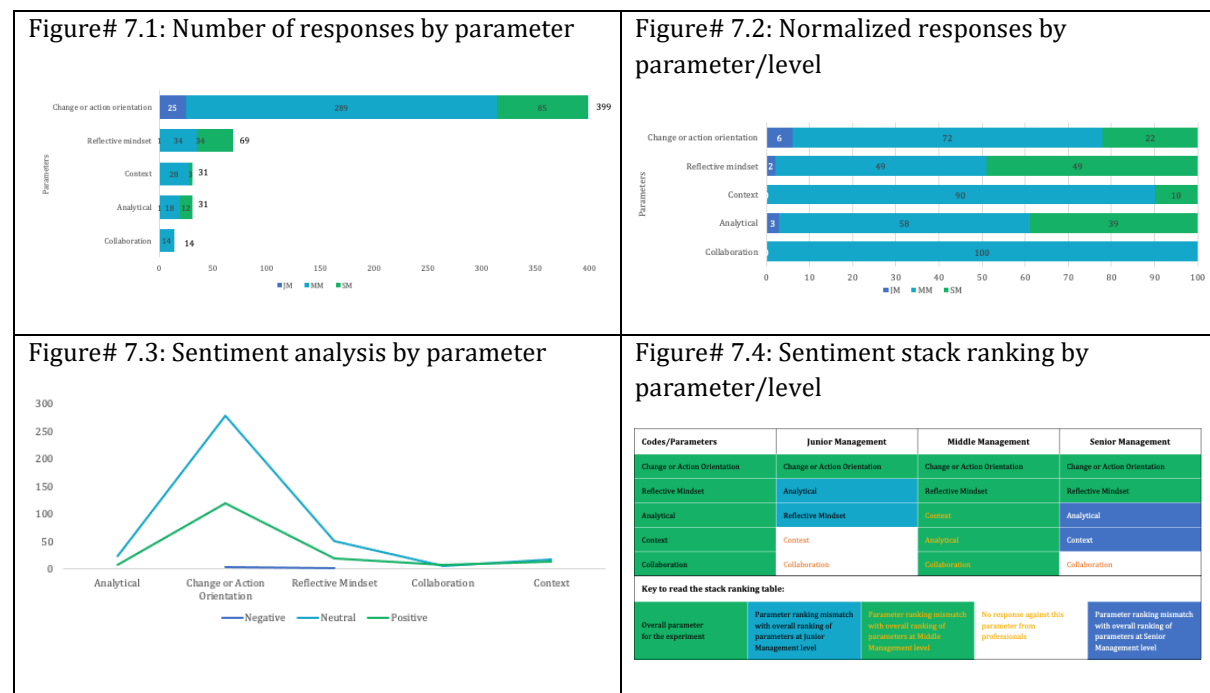
FINDINGS

To assess where our middle-management stands in this aspect, I created five codes against Henry Mintzberg's framework of the five mindsets of a manager. The sections below talk about the details of the experiment and my findings regarding the dominant mindsets among my interviewees.

The action mindset dominates; the reflective, analytical, worldly, and collaborative aspects are relatively dormant.

From the 3,090 comments in the study, I could map 544 comments against the five codes for this study. The breakdown of the numbers are as under, with by far the most significant number of statements (399) aligning with the action mindset and a relatively insignificant number reflecting the remaining four: reflective (69, a large proportion of them from senior management), context (31), analytical (31), and collaborative (14). This indicates a gap in areas that are essential for identifying areas where their choice of actions can make a difference as they steer their teams through transformation.

Figure# 7.0: Data analysis | Experiment 2



The reflective mindset is a bigger priority among senior managers than middle managers; middle managers are the only ones whose statements reflect a collaborative mindset

Normalized data and stack ranking show us that while most responses aligned with the action mindset, this was most pronounced among middle management. The reflective mindset, whose importance is redoubled in times of transformation, also finds a place among the respondents, but it appears to be a bigger priority for senior managers than for middle managers. As expected, the importance of this mindset is reflected in only a small number of responses of the junior management. This research shows that the middle management mindset is yet to find a balance between action and reflection.

Middle management responses were also focused on context, reflective of the global mindset. The analytical mindset is another area where more senior management responses were focused than middle management.

Unsurprisingly, middle management responses were the sole representatives of the collaborative mindset—which is only natural given that their role is mostly about managing expectations from junior and senior management and ensuring that tasks get completed.

Most statements were neutral in sentiment, indicating a tendency to cater to the status quo rather than seeking out and confronting issues

Sentiment analysis shows that the responses are mostly neutral. Next in prominence was positive sentiment, with almost no negative remarks among the responses. As in the previous experiment, this could be indicative of a lack of adequate reflection on the possibilities of their roles and the hurdles they are likely to encounter if they embark on a reflective journey on what their roles entail and how they can make a difference given the constraints and demands of their jobs.

INFERENCES

As the case of P illustrates, before the pandemic the middle management was largely a conduit through which the organization communicated and implemented change, which was generally done in manageable tranches and at a manageable pace. However, that changed with the pandemic. Almost overnight managers were required to manage virtual teams, deal with security issues, manage panic both among team members and clients, and make sure their teams are engaged. The also accelerated digitization and the shift in the Indian IT industry towards value vs. volume. Managers had to not just make sure projects were completed on time and within budget, but also advise clients on what's the best solution in the given circumstances, the alternatives they could consider, and innovative ways of dealing with completely unique situations. All of this calls for not just energized action, but also reflection, analysis, and collaboration.

Action vs. reflection

In such circumstances, everything an effective manager does is sandwiched between action on the ground and reflection in the abstract. Action without reflection is thoughtless; reflection without action is passive. Every manager has to find a way to combine these various mindsets to function at the point where reflective thinking meets practical doing, so that they fully capitalize on the choices that are available in their roles.

Clearly some of the managers I interviewed are aware of the variety of needs that their role must cater to and the need for reflection and analysis as they perform their work: "So I think that are so many flavors to it in terms of people management, innovation management, technology management, overall collaboration, creating that excitement and enthusiasm, managing people's aspiration on the ground that it will be very difficult to put that role in a very square kind of a box that this is what role means."

However, as is evident from my research, the Indian IT middle management is more oriented toward the action mindset. They are inclined to react to change instead of reflecting, preparing, planning for it, and acting in a way that does not tilt the balance towards chaos.

Demands, constraints, and choices—How the managerial mindset affects the choices that make a difference

Looking at the current role of the middle manager through the lens of Rosemary Stewart's demands, constraints, and choices framework, the middle manager's job, as do most jobs, comes with a set of demands and constraints. However, it also has areas of flexibility, where managers can make choices that influence outcomes. This is partly what accounts for the variations in results that different managers with similar teams achieve.

Demands, or the core of the job, the minimum that a manager must do in his job – the tasks to be completed, the client's requirements to be met, and so on – may not vary much for managers in similar roles. Constraints such as finances, workers' attitudes and talent, could limit what the role-holder can do.

Value-based demands

My interviews revealed that client demands were the biggest priority. With most IT company business models' payment based on volume rather than value, clients' profits are a massive constraint. As one of my interviewees said, "So we have that mindset that, you know, that whatever you do may impact the way the client is seeing the results or the shareholder is making profit." However, with the pandemic, changes that were in their infancy are gaining speed. Now the mandate for IT firms is to find creative solutions to unique problems, thus putting value before volume. This might translate into "choices" for professionals at the ground level as well as for middle managers who now focus on solutions, rather than the mere completion of tasks within tight timelines.

This brings us to the question of whether the current crop of managers has the skills required to handle these value-based demands. My interviews reveal that middle managers are cognizant of the fact that reskilling and upskilling, not only in terms of technology, but other softer skills such as team management, communication, negotiation, and so on, can be a constraint: "So, I think that passing the message or communicating to their teams in front of 20 people, especially when speaking in English...trying to articulate, is one of the challenges that I have seen." This too can translate into an area of choice, as skills training can help professionals as well as managers to overcome it.

Psychological constraints

More difficult to overcome are the psychological constraints that keep individuals from giving their best: "Let's say, so everybody will have some demons in their heads, whether it is family, whether it is the previous employer, previous manager in the same organization, also different manager would have probably, you know, treated them differently." Some of my interviewees believe that clients could have their own psychological biases which could prevent professionals and middle managers from giving their best: "So currently I would say the last few years have been extremely challenging as compared to the first three years, as I have just transited from an open-minded environment to an extremely closed-box environment where every suggestion given to client is being kind of seen negatively or as being kind of reviewed multiple times in order to really understand the value of it."

Constraints specific to women professionals

Women professionals listed out a unique set of constraints, given the fact that most of the invisible work (such as child care and elder care) fall on them, which could slow them down in their professional life or prevent them from performing their jobs in keeping with workplaces designed mainly with male workers in mind. "And I started getting more and more responsibilities and accountability but you know, everything has a but to it because on the family front this meant being able to spend a little less time, always being occupied with work and thinking about what to do next. Without a support system, that is always a challenge." Enabling women managers in the current societal context would mean that organizations will need to design jobs with women's unique constraints and requirements in mind; for instance, offering a more flexible work model which allows them to spend more time with their family.

Once again, more difficult to overcome are psychological barriers to women climbing the professional ladder—the glass ceiling. One of the women managers said, "So that's where, you know, that person made me realize that you don't find many females in leadership roles because every time they come up with an excuse that, you know, I have this thing to cater to."

Other constraints

Not mentioned in the interviews are other constraints such as organizational rules, ethics, need for diversity, and laws that might prevent certain actions such as, for instance a law in certain states of the country that prevent organizations from asking women professionals to work out of the office beyond certain hours of the night.

Many of these constraints can be overcome through some innovative thinking and the right choices. While some managers may welcome this area of choice and exercise it to manage their jobs well, others may stick to the defined structure of their job. This experiment showed that many of the managers I interviewed fell into the latter category, not through a lack of will, but mainly because of a lack of awareness of the choices available to them and ways in which they could exercise these choices to overcome constraints.

How a more reflective and analytical mindset can help with choices

What is needed is a more reflective and analytical mindset that can consider all the choices available in a particular situation and then plan out actions that will yield the best results. In my interviews, even what can be considered reflective statements are decidedly action-oriented, as is reflected in statements such as: “But one of the things is tracking of things because the world is changing at a fast pace and tracking becomes very, very critical.” Tracking is necessary, as this professional points out, but it is more important to reflect on what tracking can achieve in terms of identifying a range of actions from which to choose.

If the Indian IT industry middle manager is to play a key role in walking teams through change, organizations need to consider a few changes in the way middle managers are groomed and motivated to adopt a more reflective mindset, instead of merely reacting to situations as they arise. This requires organizations to focus not on what managers do, rather than understanding their actual work, as Mintzberg’s model does. This will help in fostering an atmosphere that stimulates reflective thinking.

THIRD EXPERIMENT

How can an individual in Indian IT middle management and the organization work together to lead growth in the new normal?

In the next experiment I tested the statements from my interview against my framework. How ready is the individual in the middle management to take the lead in managing change? What factors do they bring to the table? What does the organization bring to the table? What actions do they need to take for successful change leadership?

The case of Q (whose experiences I reconstructed based on my interviews) narrated in the box “Work life in times of radical change” illustrates how factors such as background, work life, and thinking of a middle manager as well as organizational inputs interweave to influence how the Indian IT middle manager deals with change.

WORK LIFE IN TIMES OF RADICAL CHANGE

Q has been with her current employer several years now. She has a master’s degree in technology, which she believes has given her the theoretical base to not just survive but mould the shape of things during change. Her family (both her parents when she was still studying and her spouse after she took on various managerial responsibilities) has provided the support she needed as she progressed in her career. Whether it was about deciding on which course to take, which path to pursue, or what to prioritize. She considers herself lucky that her family was in a financial position to fund her education and give her the breaks she needed as she progressed. That said, she also believes that these are not a given or that they are frozen at any particular stage of a career. With the right kind of attitude on the part of the individual and a push from the organization in terms of facilitating life-long learning, for instance, Q believes that gaps in education and personal circumstances can be overcome.

In the last few years, the changes in the marketplace as well as in the field of technology have meant that skill sets acquired in college and even later are rapidly becoming redundant and Q has kept pace by constantly training not only herself but also her team. When dealing with such a fluid situation, which in turn means that her role needs to be fluid, Q needs support from the organization in terms of learning, mentoring, and coaching. For instance, neither she, nor her team of 200 people, nor the organization was prepared for the sudden shift to remote work. So everyone had to contribute to ensure the success of this shift.

The organization moved with agility and spread the message to the team about the speed at which things are changing in this environment and how quickly they needed to change in order to survive and face this change. Q believes that the organization went about it in a methodical fashion, providing the tools required, coaching people on how to use them, and ensuring that they did not burn out in this environment of fast-paced change, while also facing pressure from clients who were insecure about the remote work arrangements. Q is also cognizant of the fact that the pre-pandemic efforts of the organization in terms of keeping the team motivated and up to date in terms of technology, the kind of mentoring opportunities it gave people, and maintaining a non-toxic environment helped in these new circumstances. Under circumstances that could be viewed as negative and disheartening, the

organization instead added a positive tone to the entire pandemic-driven changes by focusing on the growth opportunities these changes could entail. However, she believes that one thing the organization could have done differently in the lead up to change was to give people more diverse opportunities. People at her level are usually compartmentalized to look into specific areas. Q thinks they need much more exposure and diverse challenges to handle if they are to successfully drive change.

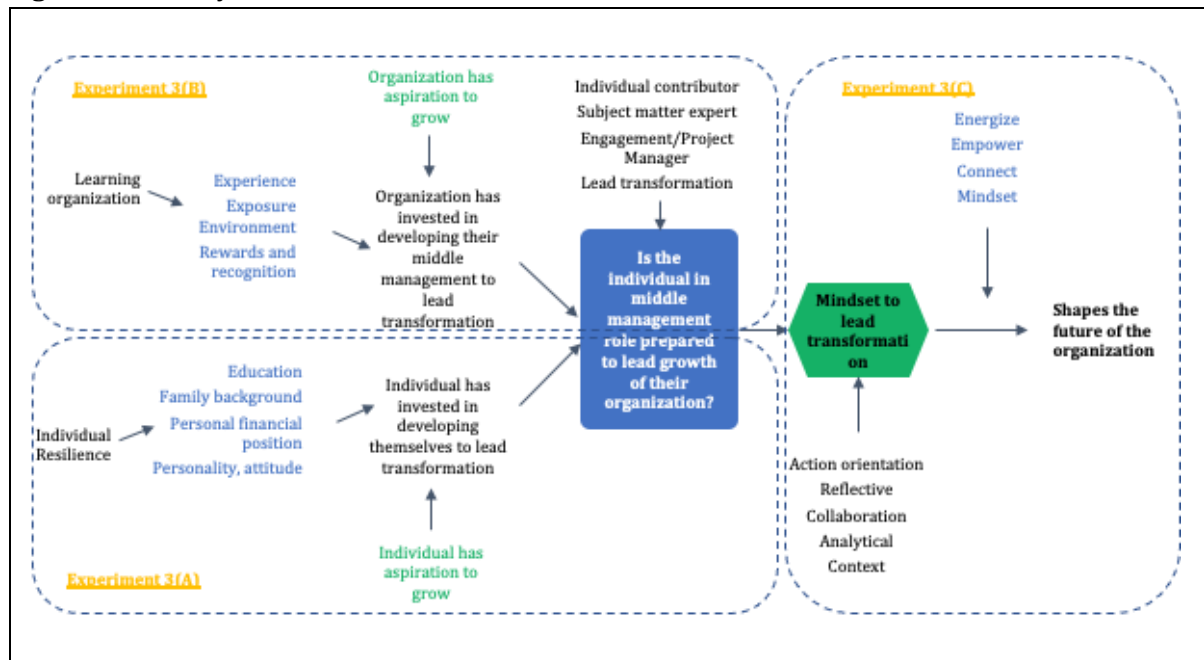
Q believes that even when everything falls into place, a manager's job of keeping the team motivated and communicating change is easier said than done. Her experience shows that a middle manager might have the skills, but may be unable to transform them into actual benefits or that they may not have the required skills and the organization will need to develop those skills, which would require a tailored approach to coaching and mentoring. She has also noticed that people's approach to life and human values has changed with the pandemic. For instance, no longer is an IT job all about going to the US and earning money. People are valuing being with their family and supporting them a lot more. Besides, the shift in the kind of IT roles available as automation and AI take over some of the human functions and the anxieties of possible job loss add nuances to the middle manager's task. All of these considerations come into the equation as the manager strives to keep the teams motivated and engaged.

With the pandemic tapering, her organization sees the pace of digital transformation remaining the same. Though the pandemic forced this pace, organizations have seen the value of this move and continue to push for change. Q thinks that professionals in such situations tend to get caught up in the day-to-day work of meeting targets and completing tasks. She believes she needs to do some introspection on how to ensure that the lessons learnt during the pandemic stick. With AI capabilities rapidly transforming the nature of work that professionals will be required to do in the future, the race is on to catch up with this change. What lies ahead for them and what will it take to compete in this new world? What should Q do to prepare herself for this situation?

Framework for the experiment

My research, conversations, and data analysis around the issues middle managers such as Q encounter led to the creation of a framework that identifies the various factors that influence the preparedness of the individual to lead this change and what these factors translate into in terms of the actions that the middle manager needs to take. My data analysis led to the identification of four individual factors a manager brings to the table (education, family background, personal financial position, and personality and attitude) and four organizational factors (experience, exposure, environment, and rewards and recognition) that will help the individual manager to lead growth. Then I identified a set of three actions a manager needs to take in order to bring about successful change: energize, empower, and enable, along with a mindset that enables these actions.

Figure# 8.0: Study framework



I analyzed the text from the main interviews against these keywords divided into three segments—the factors that individuals bring to the table, the ones that the organization contributes, and given that all these factors fall into place, what the middle manager needs to do to lead change. I present the results of this analysis below.

The first part of this experiment (3A) revolves around individual factors such as family background, education, personality or attitude, and personal financial situation. My experiment aims to find out the thinking of the average middle manager in the Indian IT industry around these factors and they assign to each of these factors based on how many of their statements reflect each of the statements.

I do the same with the second part of the experiment (3B), which revolves around organizational contributions—experience, exposure, environment, and rewards and recognition.

In the third part (3C) I expand upon the framework I had put together at the start of my research which showed me that once the above conditions are all in place a middle manager's role can connect, energize, enable, and bring about a change-oriented mindset among the team. I test the statements from the interviews against these parameters (see the figure below).

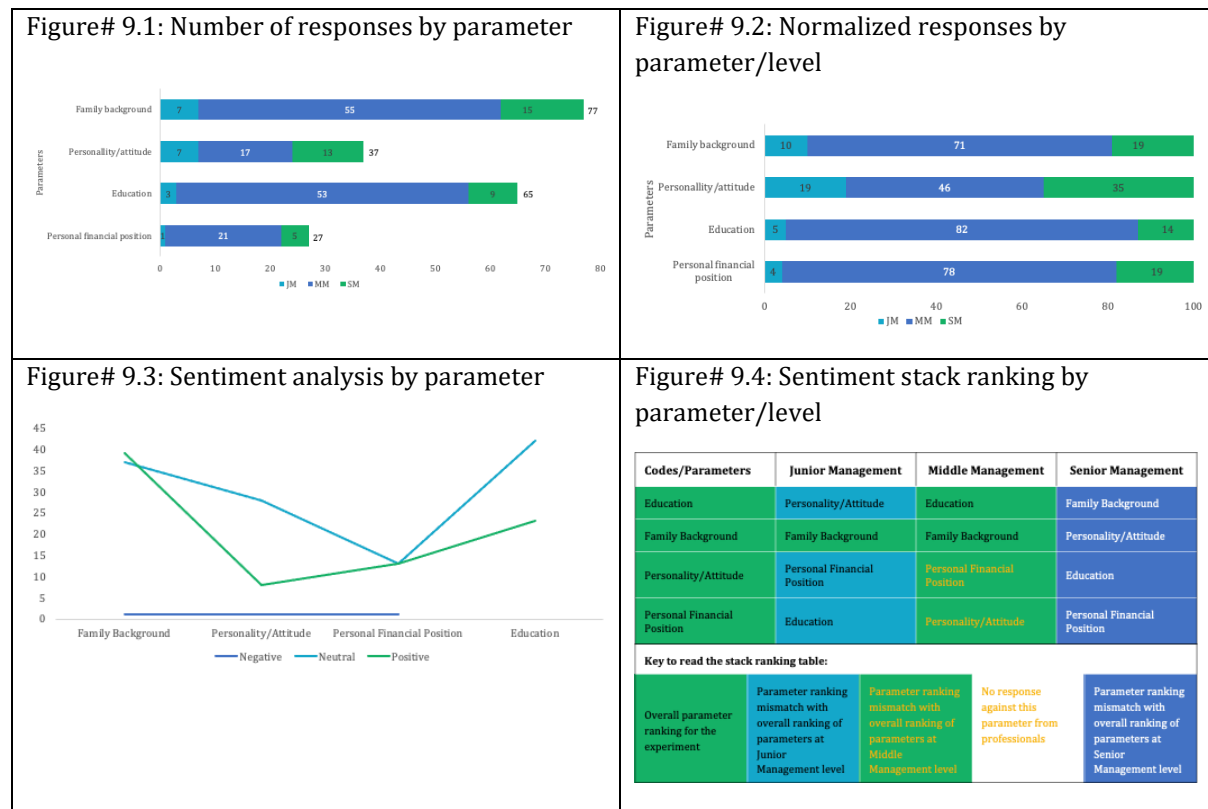
FINDINGS

3(A). What do individuals in middle management bring to their role?

Family background and education are firmly on the radar for individuals

Analysis of my interview statements identified that middle managers' thinking revolves around family background and education as the most important parameters, with 77 statements emphasizing family background as an essential factor and 65 reflecting on education. Personality or attitude, came a surprising third, given that much of the research around factors ensuring successful change emphasized personality as a deciding factor. For example, a study by Lewis R. Goldberg (The Structure of Phenotypic Personality, 1993) has shown that personality predicts job performance across a variety of outcomes that organizations value, in jobs ranging from skilled and semiskilled to executives. Personal financial position was reflected in the least important, with 27 statements aligning with this parameter.

Figure# 9.0: Data analysis | Experiment 3(A)



Higher management is focusing on personality or attitude as an important contributor

Normalized data shows us that family background, education, and financial position find most mentions among my middle-management interviewees, while higher management focuses on personality or attitude as a more important source of success in managing change than does middle and senior management.

The personal financial situation is an area of concern for managers

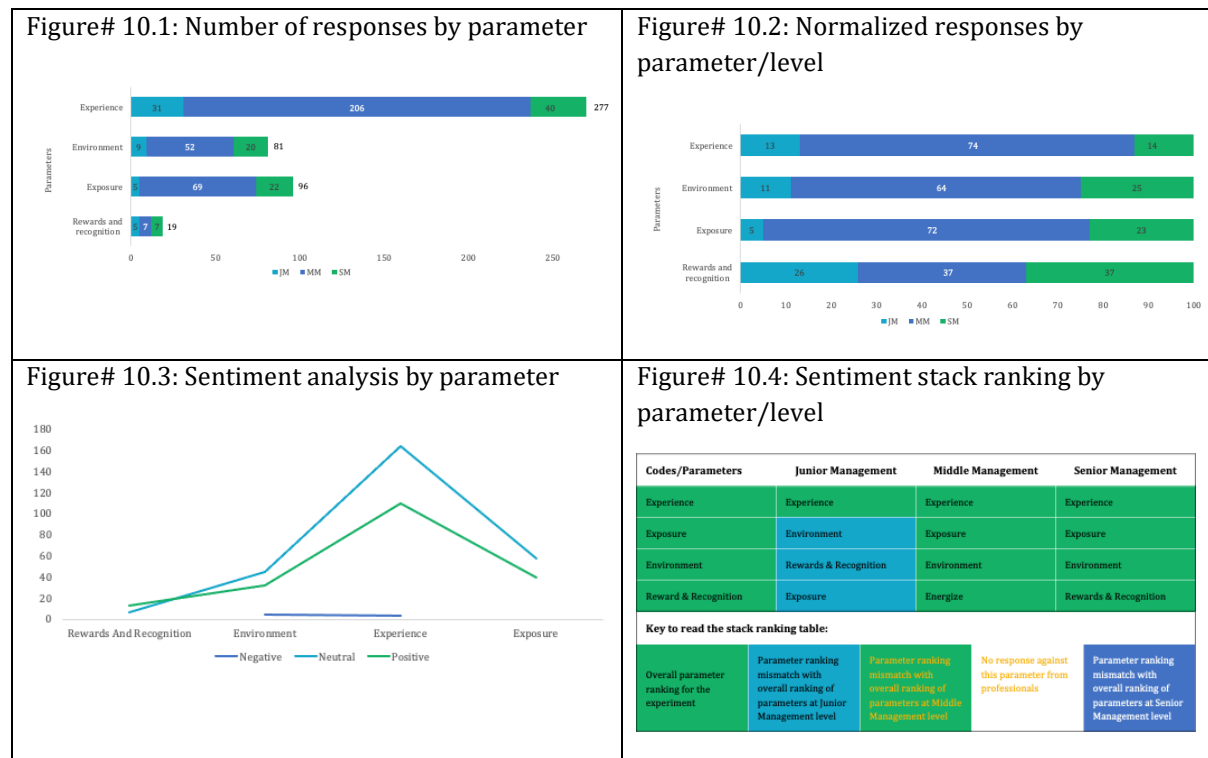
Sentiment analysis shows that the responses for family background and education are primarily positive or neutral, indicating that these are not areas of concern for managers, possibly because they are robust. Statements expressing negative sentiments are somewhat in the mid-range when it comes to personality and attitude, but what stands out is that the most number of statements with negative sentiment fall under the personal financial situation. This indicates that finances are a major area of concern for individual managers, which could mean that financial considerations may hold back individuals from giving their best, thinking creatively, or taking risks. This could be flagged as an important factor for change management—whether in terms of managing the individual's expectations or creating other factors that are powerful motivators of performance—such as the right experiences, growth trajectories, or intrinsic value of the work being performed.

3(B). What does the organization contribute towards the successful fulfilment of the middle manager's role?

Managers rely on the organization to provide relevant experience and exposure

Analysis of my interview statements showed that experience was the dominant parameter, with 277 statements mentioning it as an essential factor in successful change management, followed by exposure, with 96 statements, environment (81 statements), and just 19 statements mentioning rewards and recognition as a contributing factor. This indicates that individuals in middle management roles have big expectations from the organization when it comes to gaining the right kind of experience that will help them perform to the best of their capacity in their roles and the exposure that will set them up for future growth, both in terms of career as well as professional and people skills.

Figure# 10.0: Data analysis | Experiment 3(B)



Senior and junior management considers rewards and recognition an important parameter

Normalized data shows us that the middle management considers experience, environment, and exposure as equally important, while senior and junior management considers rewards and recognition as an essential contributing factor along with creating the right environment to perform work.

Responses mostly express a neutral sentiment

Sentiment analysis shows that the responses are mostly neutral. Next in prominence was the positive sentiment, with almost no negative remarks to be found among the responses. This indicates a satisfaction with the status quo, showing little inclination among managers to drive change in these areas.

There is a mismatch in the priorities of junior managers vs. middle and senior management

Stack ranking of these parameters indicates that experience is rated as equally important by all levels, while junior managements' priorities for the other three parameters vary from those of the other two levels. This could indicate a mismatch in expectations from junior managers, which the other two senior levels are not meeting—in terms of environment and exposure, and rewards and recognition in particular.

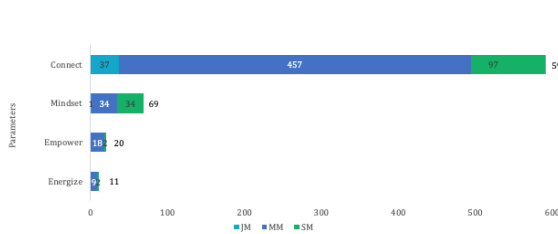
3(C). What can the middle manager do to manage transformation?

Most statements indicate a focus on the connect parameter aligning with the action mindset

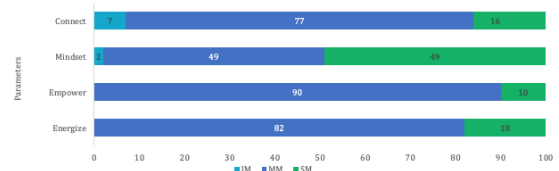
Analysis of my interview statements showed that connect is by far the dominant parameter, with 591 statements mentioning it as an essential factor in successful change management. This aligns with the findings of the second experiment, which indicated a leaning towards energized action as against reflection and analysis. Middle managers, faced with the need to manage radical change, step into action by trying to connect the dots, get their teams to perform as per the new strategy, and so on. On the other hand, energizing and empowering teams and handling a mindset shift are parameters that require more of a reflective and analytical mindset, which seems to be less of a priority as per both this experiment as well as the last one.

Figure# 11.0: Data analysis | Experiment 3(C)

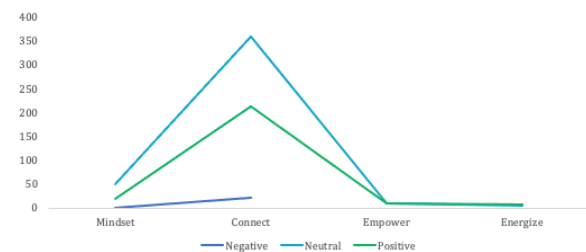
Figure# 11.1: Number of responses by parameter



Figure# 11.2: Normalized responses by parameter/level



Figure# 11.3: Sentiment analysis by parameter



Figure# 11.4: Sentiment stack ranking by parameter/level

Codes/Parameters	Junior Management	Middle Management	Senior Management
Connect	Connect	Connect	Connect
Mindset	Mindset	Mindset	Mindset
Empower	Empower	Empower	Empower
Energize	Energize	Energize	Energize

Key to read the stack ranking table:				
Overall parameter ranking for the experiment	Parameter ranking mismatch with overall ranking of parameters at Junior Management level	Parameter ranking mismatch with overall ranking of parameters at Middle Management level	No response against this parameter from professionals	Parameter ranking mismatch with overall ranking of parameters at Senior Management level

There is a complete absence of junior management voices that reflect upon energize and empower parameters; senior managers consider mindset an important factor in leading change

Normalized data shows us that middle management considers connect, energize, and empower equally important, while senior management considers a mindset shift the most important contributing factor. One interesting finding is the fact that none of the statements of junior managers reflect on the energize and empower parameters, when reason would indicate that juniors would expect their middle and senior managers to motivate, energize, and empower them to do their jobs. This probably indicates that their expectations of their seniors, as well as the ground reality is these roles do not focus on these functions. This is also reflected in senior and middle managers' statements: They do not consider these as key parameters. Middle management's focus is on connecting and seniors' is on mindset.

Sentiment analysis shows that the responses are primarily neutral. Next in prominence was the positive sentiment, with almost no negative remarks among the responses. Negative comments mostly came from

junior or senior managers, with none from middle managers, reflecting that they are satisfied with things as they are and see no reason to change the way things are done.

INFERENCES

Financial considerations are the prime driver of middle managers' actions

My experiment shows that of all the personal factors, the middle management's statements mostly reflect comfort with their family background and education. Fewer statements reflect upon personality and personal financial situation. However, the sentiment analysis shows that statements on the last parameter are more negative than for any of the others, indicating that middle managers are not too comfortable when it comes to their personal financial situations. This further indicates that salary and other monetary rewards might be playing a large role in what they expect from their roles, while organizational thinking revolves around more holistic rewards in line with what research and their own experience show that other contributors to job satisfaction such as the right kind of work, experience, and opportunities to build their skillsets, could be more powerful incentives for individuals to contribute satisfactorily to their roles.

Individual managers depend rely heavily on the organization for professional growth

Analysis of organizational parameters indicates that individuals in the middle management role are heavily reliant on the organization for their professional growth. They expect the organization to provide them with the experience, exposure and opportunities to learn on the job, as well as to acquire skills in a more formal manner. This, in combination with little focus on personality as a factor determining the success of the middle manager in their role, could indicate a paucity of drive to acquire these on their own.

Energized action dominates

One more finding from experiment 3 supports the view that the Indian IT middle manager of today is more caught up in reacting to situations as they arise, rather than take action based on reflection and planning—most responses align with the “connect” parameter and statements reflect an orientation toward taking immediate action to connect individuals with the change that is required. For instance, one of managers says, “So my organization enabled me to drive that change with the help of certain technological competencies and exports within the organization that I was able to focus on compartmentalizing and focus on different areas in the customer organization and enable that change.”

This attitude ties in with the results of experiment 2, where the focus on the day-to-day aspects of the job overwhelms the average manager, leaving little scope for self-reflection and planning around their careers, other than an eagerness to grow in terms of position. This calls for organizations to build time around day-to-day tasks that allows managers to think about the issues they are facing and offer clients more creative solutions that revolve around the inevitable move towards organizations taking up projects that are more scope- than scale-driven.

The middle manager's mindset is not adequately equipped to take on a variety of potential roles

As my framework shows, when individual and organizational parameters align to enable the middle manager, they should be in a position to not only connect, but also energize, and empower professionals and bring in a change-oriented mindset. This is amply illustrated in a six-year study by Prof. Quy Huy, which shows that middle managers can make valuable contributions by playing four key roles, particularly in times of radical organizational change. However the results of Experiment 3 shows there is much opportunity for individuals and organizations to work towards developing a more holistic view of the parameters that enable middle managers to play these roles successfully.

1. **Entrepreneur:** Middle managers often have the opportunity to come up with entrepreneurial ideas that can add value to the organization. Being close to everyday operations, they are aware of the problems. Moreover, being far away from frontline work, they have a comprehensive view of the big picture. However, Prof. Huy's examination of factors that prevent middle managers from bringing their ideas to life shows that business leaders often believe in the stereotype of the middle manager being a dinosaur (Floyd and Wooldridge, 1994), resistant to change. Such actions result in their ideas not being taken seriously, and they, in turn, do not push their seniors to pay attention to their ideas. This calls for a mindset attuned to innovation and creative problem-solving rather than energized action.
2. **Connector:** They are far better than senior executives at using their company's informal networks to implement change. Many middle managers begin as technical specialists and move up the organizational ladder. They pick up professional connections that help them get work done through informal channels as they move from one role to another in the same organization. Senior managers, too, have their connections, but they tend to be outside the organization, and therefore, less powerful when it comes to managing organizational change. My interviews do show that the middle manager in today's IT organizations are thinking along the lines of making these connections.
3. **Therapist:** The third area where middle managers can make valuable contributions is in managing employees' emotional and psychological well-being. Working on an every-day basis with them, the middle managers are attuned to employees' moods and emotions. Change brings with it fear and anxiety and low morale. Senior managers are too far removed from ground staff to help alleviate these emotions. On the other hand, middle managers cannot afford to ignore these fears, as work will come to a grinding halt if they do. They create a psychologically safe place for workers to keep things going on a day-to-day basis. Besides, they are the ones who best know their people and can talk to them personally, rather than at the corporate level. For instance, they are in a unique position to be able to "reduce unpleasant/high-activation emotions (e.g., anger and fear) and instill pleasant/low-activation emotions (calm) among their employees." (QN Huy, 1999) This calls for a focus on enabling individuals through change, which again is scantily reflected in the statements of my interviewees.
4. **Tight-rope artist:** Middle managers can also manage the balance between stability and change—preventing either of them from taking over and causing workforce inertia on the one extreme and chaos on the other. Both inertia and chaos can result in underperformance. The middle managers are as affected as their teams during extreme change (QN Huy, 2002). However, they are in a position to find the right balance and deal with the uncertainty by putting on their problem-solving hat. However, as results of experiment 3 show, their thinking is skewed toward operating in the old style and resorting to tried and tested solutions rather than finding the right balance. Besides, a pointed focus on their own fears and financial concerns could make it difficult for them to find a balance between addressing their own needs and the psychological needs of their team members.

Need for restructuring the role around strategic, rather than operational work

Earlier, the middle manager's role involved overseeing the operational aspects of work, ensuring that projects are completed in time, saving costs for the client, and ensuring productivity through supervision. Now, many of these functions are not as relevant as they used to be, and as middle managers and the organization think through the new roles the middle manager is capable of adopting, and must adopt, to survive, there is a need for them to play a larger, strategic role. As my framework shows, when individual and organizational parameters align to enable the middle manager, they should be in a position to take on the role of a playing captain and not only connect, but also energize, and empower professionals and bring in a change-oriented mindset.

Middle managers have the unique capacity to develop capabilities among team members (Floyd and Wooldridge, 1994), which give organizations a competitive advantage, as capabilities are acquired through lived experience along with guidance and mentorship from experienced people. For middle managers to play this role and enable life-long learning among their teams, they will need to think along the lines of energizing and empowering their people and bring about a change in their mindsets. This is a lacuna that organizations will need to fix.

CONCLUSION

As explained in the introductory sections of this paper, the Indian IT industry is facing tremendous margin pressure. The cost of stanching attrition and retaining the right talent is eating into margins (The Economic Times, From Infosys to HCL, employees costs are squeezing IT margins. So why is TCS setting its bar so high?). Funds that would have been spent on growth are now going into retention strategies. Besides, with the pandemic abating, other costs that had been put on hold for almost two years are not back, bringing in its wake more margin pain. But as TCS chief executive Rajesh Gopinath puts it, growth is not all about margins. It is also about being relevant to customers, extending relationships, and helping them scale up along with the organization.

Studies show that middle managers have a major potential role to play in change management, but is the Indian IT middle manager ready to take on the role that is expected of them?

Breaking the frozen-middle mindset

My experiments show that the average Indian IT middle manager's mindset is not quite ready to adequately perform the functions they have the potential to take on. The triangulation of patterns from the three experiments shows a pattern in the thinking of the Indian IT middle manager that influences their ability to lead change. Experiment 1 explains how their thinking doesn't go deep enough to consider all the requirements to ensure success in the current evolving environment. They focus on a narrow set of parameters and emphasize personal growth in terms of promotions and level changes, instead of change management. The second experiment shows the dominance of an action-oriented mindset over the reflective, analytical, collaborative, and global mindset. The third experiment also shows that while some of the thought process of the middle manager does reflect on a move toward playing the role of connector, some of the other roles such as that of energizer and empowering are left unexplored.

The mindset shifts required to meet the challenges brought about by the changed industry environment

As explained in the introductory passages of this paper, through my research, I identified seven areas where a mindset shift at the individual level can better equip the manager to play a lead role in the current scenario of radical change. While I sketched them out roughly in my introduction, in this segment I will describe in detail the challenges that the current landscape faces, where (according to my experiments) the middle manager of today stands in terms of what's required of them, and how organizations can move the needle on these challenges.

CHALLENGE1 : The Indian IT business model will move from “scale” to “scope”

The ongoing changes in the market—as well as the pandemic-driven accelerated transformation as organizations handled one emergency situation after another—have brought to focus the changing business model. At one time, the Indian IT sector performed routine IT tasks, coding, and maintenance work, where cost arbitrage was the major advantage for Indian IT companies. That has been changing for some time now and global organizations are relying on India-based workforces to add value, suggest the best solution to their problems, and come up with creative ideas. Indian IT firms too have taken to this change as a means of ensuring that they stay relevant in a scenario where costs, especially those related to talent, are rising. Offering value is the current requirement.

What my research shows about middle managers’ readiness to meet this challenge

Middle managers I interviewed are aware of this need: "The mindset is different between onshore and offshore here in India, but then the flexibility is there for you to execute and that gives a better opportunity to work unlike in earlier days when it was difficult."

However, my experiments show that most middle managers are still caught up in the numbers game, as they drive day-to-day tasks that give the client a cost benefit. In fact, my interviews reveal that they operate under what they call the “vendor mindset,” where they provide specified services to clients, and are more like service providers rather than trusted advisors or consultants.

For example, experiment 1 shows that their thinking around parameters that enable successful change still revolves around finishing tasks within tight deadlines. Even when it comes to upskilling, technology is the only factor that most middle managers’ focus on. Here too the scope of their thinking is limited; they usually listed out how many new technologies they and their teams need to master, instead of thinking a level or two higher and looking at the broader business landscape.

Experiment 2 also shows that most of their mindsets are oriented towards energized action, rather than reflection: delivering on time, at the least possible cost to the client, rather than around how to come up with more creative solutions or how to advise the client on what’s the best course to follow.

However, though the number of responses that aligned with a reflective mindset were few, the ones that did echo a reflective mindset showed that the Indian IT middle manager is inclined to reflect on how things are done, if given the mandate and the time for it. This sample provides a glimpse of the direction that their thinking could take: “The challenge is, from a mindset perspective, to set the context both for the persons who are defining the scope and who are actually delivering the things.” And as organizations’ work moves from scale to scope, this kind of thinking would become more relevant.

Sentiment analysis of all three experiments is more or less positive or neutral, indicating that they are satisfied with the status quo and see little need for change in the way they themselves operate or how their teams should handle their professions.

This lacuna needs to be addressed if the Indian IT industry work is to move from scale to scope. The focus on the cost game means that most of a middle manager’s time and attention go towards managing delivery against tight deadlines, leaving little room for doing anything that is beyond the scope of the project.

CHALLENGE 2: Most Indian IT organizations will operate in an ecosystem of organizations

Today's successful organizations cannot exist in a vacuum. Instead, they draw upon networks of suppliers, customers, competitors, partners, and more to create value. Any organization can no longer be viewed as a separate entity but as part of a business ecosystem, whose components operate cooperatively or competitively to create new products, meet customers' needs, and share talent. Operating in this ecosystem requires a mindset shift both at the individual and the organizational level. New leadership capabilities will be increasingly valued as relationships based on reciprocity, mutual trust, and shared interests become increasingly vital and effective.

What my research shows about middle managers' readiness to meet this challenge

Some of the professionals I interviewed do recognize this. As one of them said, "We need to be much more broad-based as a firm, and we need to have a better ecosystem of industry, vertical experts, and technology specialists to come together to solve a problem."

Experiment 1, however, shows that the overall thinking revolves around individual teams, rather than the broader ecosystem of workers and how to leverage it. Technology, mentoring, and environment are the major parameters they focused on in the interviews. Parameters such as organizational support, communication, ecosystem support, and team management—which could enable better leverage of ecosystems and help individuals fit into it better and find their niche—are not reflected in their statements.

Experiment 2 also reveals little thinking around this factor. Statements that reflect thinking around a global mindset, which enables working in an international ecosystem and the collaborative mindset, an absolute necessity when working across teams, business lines, and organizations, are more or less absent among the interviews I conducted.

In experiment 3, while "connect" is the area on which most managers' statements converged, the other factors for successful change, such as the right mindset, energizing the workforce, and empowering them for success find little mention. All of these factors are in fact essential for working in an ecosystem of organizations.

CHALLENGE 3: As the pandemic abates, hybrid work models are becoming the norm.

Many Indian IT professionals will deliver work in a hybrid setting, splitting work hours between the workplace and home. Besides, younger generations of workers are demanding more flexible work conditions, and a freer, more dynamic work environment with ample opportunity to meet their personal and professional goals. The details are yet to be decided upon, but future middle managers need to develop capabilities to face the virtual working model.

A hybrid work model requires a well-rounded management strategy, which calls for a manager who is not only able to trickle down the vision and mission of higher management down to the workforce, but also participate in day-to-day work and problem-solving. They will need to use digital tools for tracking hybrid teams and be prepared to lose grip of monitoring people and workflow information flow and focus on leadership development instead. They will need to find creative ways to keep the workforce engaged and keep at bay the feeling of alienation that is normal for workers working miles away from each other, however often they meet virtually. On the other hand, they will also have to deal with client concerns and insecurities. Is the current crop of managers ready for this role?

What my research shows about middle managers' readiness to meet this challenge

Experiment 1 shows that while their thinking around technology is keen enough, other factors that enable smooth functioning in a hybrid model such as trust, communication, ecosystem support, and team management find little mention in their statements. Work environment gets little attention, and even when it was discussed, statements rarely touched upon the post-pandemic environment. Instead they revolved around the assumption that things will go back to where they were before the pandemic began. Experiment 2 aligns with the findings of experiment 1, as energized action dominates all other mindsets, where hybrid work models require managers to stop and reflect on how to make a success of their role in a radically changed environment and help the organization move towards the new normal.

Changes in the way work is performed and from where it is performed will require a focus on individuals' personality and attitude, more than any other individual factor contributing to successful careers. However, experiment 3 shows that the middle manager gives little thought to this contributor to performance at both the team and individual level. The same can be said about factors that the organization provides to ensure successful change—the right environment and exposure. Middle managers' statements hardly reflect upon these factors in my findings from experiment 3. That said, they do give huge importance to the connect parameter, but hardly any voices reflect a focus on energizing the team and empowering them.

CHALLENGE 4: Middle managers need to work as playing captains

The middle manager's role will change from that of a supervisor to one who nurtures teams. Most of the supervisory functions will be taken over by new technologies like robotics, AI, and ML. Organizations will invest in AI algorithms that can identify employees' skills and competencies. Technology will monitor people and assess efficiency and worker fatigue. One of my interviewees commented: "With respect to the COVID-19 pandemic, human behaviors are changing, and technologies are changing, organizations are becoming leaner." Organizations are cutting down on the luxury of having a layer that only communicates and coordinates.

Organizations are changing in other ways too as they move away from a cost-centered model to a value-add model and the pace of change of technology forces them to evolve equally fast. The role of the middle manager will evolve into one where they develop talent, create connections, and build inclusion among employees. Managers will not only need to put forward innovative solutions, but also manage team members' emotions even as they worry about their own job security, career, and relevance. This means that the middle manager's role has changed into a multi-faceted one, where they will need to work as playing captains rather than team manager in the future. They will not only need to coach and mentor their own team members, but also educate clients about the changes in the way things are going to be done in the future, as Indian IT organizations move into a consulting rather than the service-provider role.

What my research shows about middle managers' readiness to meet this challenge

My research indicates that middle managers are aware of this requirement, as Experiment 1 shows their keen interest in upgrading their own and their team's technology skills, but little concern over other areas such as team management, ensuring the right atmosphere for work to be performed, or communication. However, some of them are aware of the need to take on the role of a playing captain who takes care of the team's needs and keeps them motivated, as is reflected in statements such as: "So we keep them motivated by saying, focus on what you have, because it keeps telling them that, you know, do not focus on the changes, which are not under your control." or "So, what I feel is a major change is that previously, managers used to be more controlling and commanding, but that definition is now changing with the time where they are being more empathetic, or we can say more considerate and supporting their employees,

understanding the main challenges of the growing industry." A mindset such as this is one step closer to reflection on the choices available to them to perform these functions of a middle manager.

Experiment 2 reveals a focus on action: As one interviewee attested, "My organization enabled me to drive that change with the help of certain technological competencies and experts within the organization that I was able to compartmentalize and focus on different areas in the customer organization and enable that change." However, there does seem to be a paucity of reflection around what changes to bring about to their role as their teams and organizations evolve.

Experiment 3, once again reveals scant interest in energizing and engaging their teams, though they do seem to be reflecting upon the need to connect. Concerns revolve mostly around their personal financial situation, while their expectations of the organization revolve around finding the right experience. The experiment also shows that middle managers are mostly focused on their own growth prospects and how to climb the career ladder, rather than about acquiring skills to keep their teams engaged and energized.

CHALLENGE 5 : Lifelong learning will be the norm

The massive disruption that is taking place in the IT industry means that new technologies will make many jobs redundant, but they will also create new ones. Tasks will move from repetitive to non-repetitive ones, from problem-solving to problem-finding. To navigate this landscape, incumbent professionals must commit to lifelong learning. What does this comprise?

By 2028, the most high-value work will be cognitive. Employees will have to apply creativity, critical thinking, and constant digital upskilling to solve complex problems. The demand for digital skills has grown by 60% over the past several years. Employees will use avatars, language software, conversational interfaces, and real-time dialect translation to work and speak with team members across languages, borders, and cultures, with almost no loss of context or meaning.

Many middle managers need to consistently and constantly upskill their technical skills, but that is not all. More importantly, they will need to deal with the emotional components of change management. One of the interviewees expressed it lucidly when they said, "So definitely any kind of education that helps you not only technically gear up, but also increasing anything which improves your emotional quotient towards change and disruption is the education that I would recommend because I have seen many times that the middle manager has the technical capability to implement the change, but does not have the emotional training to understand and adapt to change." But where do most middle managers I interviewed stand on this index?

What my research shows about middle managers' readiness to meet this challenge

My research indicates that middle managers are aware of this requirement, but as Experiment 1 shows, the focus is mainly on learning technology skills. The fact that other parameters such as communication, team management, and ecosystem and environment get little attention indicates a narrow focus on task-centered learning, rather than broader people-related skills training. Middle managers also indicated that tight deadlines (common because of the cost-centered nature of the work) make skills acquisition a struggle. Learning on the job may work to some extent, but organizations do need to make room for lifelong learning if their workforces are to stay relevant beyond today.

Experiment 2, which reflects on the areas of choice available to the middle manager and the mindsets that enable them to think through and make their choices, reveals a mindset that is oriented toward task completion rather than reflection on why things worked out the way they did, how to improve upon results, and what lessons to learn from each project. A system that perpetuates this mindset would be a barrier to lifelong learning. Organizations will need to think through how they can bring about a change

in the way work is performed and how individuals react to it—whether they reflect and analyze and make choices that enable learning or are content to finish their tasks.

CHALLENGE 6: Career growth will be driven by impact and purpose rather than promotions and hierarchy.

The middle management in the Indian IT industry is caught in a situation where they have to manage their team members' growth expectations, as well as their own. When good ratings do not translate into promotions, there is a good chance that the organization may lose talent. That said, with the IT industry in India moving from scale to scope, career growth often calls for a new set of skills. It is also not practical to keep promoting junior team members into management positions based just on their technical expertise. The IT industry is already in a position where it has rapidly promoted professionals to middle management positions, as a result of which they have not been exposed to the experiences, ideas, and mentors that are required to deepen their thinking. Organizations will need to base middle management's career growth on the kind of projects they work on, their performance as well-rounded team members and managers, and their ability to innovate. That apart, organizations will also need to consider other ways of incentivizing their workforce apart from the traditional growth paths.

What my research shows about middle managers' readiness to meet this challenge

In my research, most of the concerns voiced by interviewees on professional growth centered around hierarchical growth. As one management professional said, "Why promotion matters to me is because I have very high goals for myself," and another said, "And I think culturally, we all want promotion; whether we get a raise or not is secondary, but you want to be known as a senior guy." Society, too, is still to reach a level of maturity where people's worth is not measured by their position in the workplace.

While this has its uses, it cannot ensure the diverse thinking, creative solutioning, and experimentation that the current scenario calls for. The bright spot is that Indian IT middle management professionals are also thinking divergently about what will get them to the place where they want to be. Some at least are not expecting to be promoted just for doing their job: "I think as an industry, as a whole, and, especially in India, we are in the transition phase of having that hierarchical growth--going from one layer to the next level. While I still respect the reason why it is there, I think whoever goes through the process of failing faster and then showing the results and the efforts, if they pick the right boss, I think they are going to grow." However, this is the minority view.

Experiment 1 shows that most IT middle managers value technical skills over people skills. Their thinking is unidirectional and focuses more on technology, rather than the various other factors that are needed for competent change management. However, some of the statements from experiment 2 also show that some of them are on the path to a more reflective thought process around promotions and understand that learning, experience, and exposure are more important for professional growth than a mere change in level.

Experiment 3 makes this focus of both managers and professionals on hierarchical growth even clearer. Sentiment analysis of the first part of the experiment shows dissatisfaction with just one of the factors: the personal financial situation. Organizations need to, and are, designing reward systems that promote various kinds of behaviors, in such a way that promotions are only part of the rewards, individual thinking is yet to orient itself to this change. My research also shows that individuals in middle management are heavily dependent on the organization for gaining the experience and exposure that they need to grow in their career. Organizations should leverage this as a kind of reward system that automatically develops the kind of talent they are in need of.

CHALLENGE 7: The work-life of a woman middle manager is different from that of a man.

The ratio of women middle managers versus men is rising, but they continue to face the same barriers to career growth as a few decades ago. Most of the unpaid work of society—child care, home care, elder care—falls on women. As one woman professional said, "These days, since we are all more or less like a nuclear family, you know, looking up to child and family and work was always a challenge," and "I started getting more and more responsibilities and accountability, but you know, everything has a but to it because on the family front that means being able to spend a little less time as you are occupied with work. Without a support system, that is always a challenge." Organizations need to consider what it takes to make women professionals successful. They must design jobs around women professionals' unique needs, if they are to leverage a major part of the population of highly educated IT workers.

What my research shows about middle managers' readiness to meet this challenge

Enabling women managers would mean redesigning jobs to enable women in the current societal context to succeed. Statements from Experiment 3 show that most women professionals depend on support from their family to succeed, but get little organizational support as they grow in their roles.

Experiment 1 shows that concerns around a flexible work environment and career growth in the face of personal individual situations were voiced mostly by women managers. Male middle managers do not even seem to consider it a problem. This could undergo some changes as most professionals move into hybrid work modes, and virtual work becomes at least part of the new normal. Besides, new generations of workers expect more flexibility and personal liberty to do the work they like at a pace and place they decide upon. Managers will need to address the problem of flexibility sooner than expected, thanks to the pandemic.

But these measures are just part of the answer. As the inferences from experiment 2 show, this issue requires a sharp pivot in the middle manager's mindset that organizations could help accelerate using training and awareness programs. There is also the psychological barrier of the glass ceiling that several women interviewees described, though none of the male interviewees so much as mentioned it. This requires a top-down change in outlook, with measures such as having more women in the boardroom who can throw light on the issues women managers are likely to face as they grow in their professions and ensuring more diverse teams that could help the middle manager walk in the shoes of those whose lives are different from theirs.

LIMITATION OF THE STUDY AND POTENTIAL FOR FUTURE RESEARCH

A study like this is suggestive rather than prescriptive. It gives textured and individualized interpretation of situations and middle managers' reactions in response to these situations. However, these limitations themselves offer scope for more research on the subject of the role of middle management in transformative change. Literature and research on middle management's role in change management, though plenty in international context, is scanty in Indian contexts. This study will add to academic research in this area.

India is a fast-growing economy, and nearly 75% of digital workers are based in India. It has the highest concentration of youth in the world and is expected to provide 50% of the workforce by 2030. It therefore stands to be heavily impacted by transformative change. A study like this could offer ideas for solutions to the real challenges experienced by the businesses that are at the forefront of these disruptions.

While this study focused on the IT industry in Hyderabad, the same research can be replicated in other industries and in other cities to offer insights on how this layer of management influences change, both upward and downward. The sample selected here is a representative one, but it is small. The methodology could be replicated for similar research on larger sample sizes.

Findings from this study go beyond the IT industry and apply to other industries. While the IT industry is leading the current transformation, the imperative for change soon cascades down to other industries. A study like this would be relevant to any industry that is undergoing radical change that has an impact on the way work is done.

Besides, the methodology used here, with machine learning identifying statements from an interview that align with various parameters, can be a prototype for other researchers seeking to investigate similar subjects. As much as this study is done using new research and analytical methods, this itself is an area of study.

This research will provide insights for action at three different levels—individuals, organization, and the government. The individual and mindset will remain a constant topic of research in times to come. The stress on white collar workers now is similar to what was experienced by blue collar workers in the earlier industrial revolutions. This study will contribute to literature around the topic of handling change at the individual level.

This body of work will also have broader implications on our education system, generations, human capital, and its interdisciplinary linkages to the business strategy, and it will provide additional opportunities to explore the role of an individual, organization, and the government to define rules, roles, and responsibilities of stakeholders for value creation, education, skill development, and employment.

WAY FORWARD

Corrective considerations for organizations

India's traditional strength in IT services positions it to take advantage of the current wave of transformation by incorporating emerging technologies such as artificial intelligence and machine learning-based analytics. The industry has adapted to and shown resilience and has the potential to lead innovation to drive highly connected global organizations, shifts in business models, contactless communication, increased competitiveness, changes in talent and the workforce, and provide solutions to serve the changing needs of consumers, despite the turmoil that changes over the last few years have brought about. Studies have shown that middle managers can play a key role in this transformation. However, questions remained about how prepared this layer is to lead this change. My research has shown the gaps in the thought process and mindsets of middle managers when it comes to essential elements that they will need to address in order to carve a niche for themselves and play a key role in this landscape. How can organizations find a path through this maze of shortcomings in the thought process of individuals that my research uncovered?

Each organization is complex and may have different approaches to address its unique goals across reorganization, talent, technology, and training. However, several broad dimensions that define any transformation journey will include the organization's culture; managing the employee lifecycle; and alignment of people and business strategies to meet growth aspirations.

Humans are hardwired to think emotionally and intuitively

As my analysis of results in the three experiments revealed, one of the key shortfalls is the lack of well-rounded thinking by middle management around factors that influence how well change can be managed. At first sight, encouraging well-rounded thinking about the middle manager's role may sound like the solution—what Daniel Kahneman calls “slow thinking” or “System 2” thinking—deliberative and logical thinking—probably the most productive way to think. But while this may be true, it's also a fact that we, as humans, are wired to depend more on System 1 thinking, “fast thinking,” which is emotional and intuitive, and this is difficult to alter. Kahneman believes that “although humans are not irrational, they often need help making accurate judgements and better decisions, and in some cases policies and institutions can provide that help.”

Technology can help managers actions align with logical thought processes

Today's Indian IT organizations, with the resources, both human and technological—artificial intelligence, machine learning tools, and so on—are in a position to draw insights from massive pools of data. These machine and data-driven insights are more in line with System 2 (slow) thinking and can cover for the cognitive biases under which humans labour. These insights in turn could inform human decision-making. By making these insights available to middle managers, organizations can equip them with the information and knowledge required to navigate change.

The role of behavioral interventions in channelling the thought process

Assuming that the organization is equipped with the right insights and information required for successful change management at the team level, how do they drive this change among middle managers? After all, if middle managers, like all humans, are wired for System 1 thinking, it's not enough to just show them the right path and expect them to follow it. Organizations could instead look into what behavioral

economists Edward Thaler and Cass Sunstein call “nudges” to help middle managers make the right choice, rather than the “normal” choice based on cognitive biases. This would involve designing the path to their decision-making or framing the individual’s decision in such a way that there is a greater probability of their making choices that are in line with System 1 thinking. For example, the ways in which information is presented can influence perceptions, which in turn influence the thought process.

The role of training and experience in helping managers shift focus

That apart, training middle managers to familiarize them with the need for considering a variety of parameters necessary for successful change might be one of the answers. Organizations should give a serious thought to investing in educating middle managers about the changes that are in store for them and their teams and the role they can play in this. This would compel managers to think about these issues, instead of focusing on the familiar. Change communication—spelling out what the change involves and what’s the role of the middle manager in this process—is also helpful.

One other feature that stands out in the Indian IT industry is that the tremendous growth in manpower in the recent past has meant a rapid promotion of IT professionals into management positions. This sometimes means that professionals with good technical skills but untested people skills often find themselves in middle management roles. They have not had the opportunity to observe and imbibe these skills from their colleagues, mentors, or managers, nor have they been adequately trained. As Kahneman says, “the acquisition of skills requires a regular environment, an adequate opportunity to practice, and rapid and unequivocal feedback about the correctness of thoughts and actions.” Once this happens, “the intuitive judgements and choices that quickly come to mind will be mostly accurate.”

Without this, they will have to painstakingly figure out what they need to do, and by default, give thought to only those parameters that come to their minds immediately—technology, work environment, and mentorship in the case of my experiment, for example. Organizations therefore need to put in place systems that give these individuals the opportunity, exposure, and training to develop these skills and thought processes.

Organizations will also have to rethink traditional career paths and begin to offer development tracks that enable individual contributors to advance without necessarily taking on people-management responsibilities. In an ecosystem of organizations, individual skills could become an important factor in the professional growth of an individual. Organizations will need to reassess who becomes a manager. They could focus on hiring managers with skills to operate in the virtual-first world and having more individual contributors at the managers/ VP level.

Building slack into the work week can encourage reflection

One more thing that stands out in my interviews is that organizations’ focus on the cost game gives managers little time or space to do anything beyond the scope of work. Being on the volume treadmill, where the focus is on delivering volumes of work at a low cost instead of offering unique and creative solutions, means compromising on thinking through solutions or contemplating anything outside the immediate scope of the project. Building some slack into the work week could help managers slow down, reflect, and strategize rather than focus on reacting to situations as they arise.

Without this, middle managers will be caught in the cycle of getting tasks done reflexively, relying on what works, rarely reflecting on what could have been done better and how to change the way things are done.

The role of incentives in motivating managers to think through the situation

Another way to encourage well-rounded thinking is to put in place a viable incentive system and growth trajectories for middle managers, along with the criteria that will reward middle managers—both

monetary and intangibles such as respect, prestige, and job satisfaction. If, as my research shows, the sole focus of most middle manager is on climbing the ladder, the organization might need to reconsider how they incentivize the right mindset—one where leading and nurturing a team through change is more important than titles, where entrepreneurial thinking and ideation is rewarded, and where keeping the team intact and supporting them psychologically becomes a middle manager's priority when it comes to change management.

The requirement here is not so much about finding fixed solutions or to dictate the job of a middle manager as to motivate them to think about how their teams can find unique and relevant solutions to their day-to-day work issues without being overwhelmed by the transformation; how to manage their teams' emotional response to change; and how to balance change with stability and familiarity where possible.

The role of diversity in encouraging diverse thinking

One more measure that companies across the world are adopting in an attempt to shake up the thinking processes within their professionals is increasing the diversity of their teams. As Cass Sunstein (Getting beyond groupthink to make smarter groups, 2015) says, groups or teams tend to foster groupthink, where conformity pressures prevent people from expressing what they know instead of just agreeing with the group. However, one way of getting away from this, Sunstein says, is to build more diverse teams, where individuals from different family or educational backgrounds, gender and gender orientation, regions, nations, and political viewpoints could result in a variety of ways of looking at things and foster collective intelligence instead of groupthink. With many companies, especially MNCs taking diversity seriously, future research could focus on the effects of this initiative on middle management thinking and the differences it has made to the way teams work—whether it encourages more people to participate in decision-making, how different generations look at their world of work and the choices they make, given the demands and constraints.

Organizations should also think along the lines of incentivizing behavior that will foster the reflective, analytical, global, and collaborative mindsets, apart from the action mindset among their middle managers and encourage entrepreneurial thinking, the building of micro networks, and creative thinking. Reward systems, instead of focusing on a job done, could instead move a step away from the action to the thinking behind the action. Here again, researchers have much scope for examining how reward systems are structured in IT companies and how this affects their decision-making processes and actions. Whether rewarding the thinking behind an action has an effect on how often middle managers take the time and make the effort to reflect on their actions, inculcate a collaborative mindset.

REFERENCE

ACADEMIC PAPERS

- Ahearne, M., Lam, S.K., and Kraus, F. 2014.** Performance Impact of Middle Managers' Adaptive Strategy Implementation: The Role of Social Capital. *Strategic Management Journal* 35: 68 – 87
- Alinsky, S.D., 1989.** Rules for radicals: A practical primer for realistic radicals. Vintage.
- Aspinwall, L. G., and S. E. Taylor 1992** Modelling cognitive adaptation: A longitudinal investigation of the impact of individual differences and coping on college adjustment and performance. *Journal of Personality and Social Psychology*, 64: 708-722.
- Balogun J, Johnson G. 2004.** Organizational restructuring and middle manager sensemaking. *Academy of Management Journal* 47: 523–549.
- Beenakker, W., Brensing, S., Krämer, M., Kulesza, A., Laenen, E. and Niessen, I., 2010.** Supersymmetric top and bottom squark production at hadron colliders. *Journal of High Energy Physics*, 2010(8), pp.1-25.
- Berg, J.M., Wrzesniewski, A. and Dutton, J.E., 2010.** Perceiving and responding to challenges in job crafting at different ranks: When proactivity requires adaptivity. *Journal of Organizational Behavior*, 31(2-3), pp.158-186.
- Block, J. and Kremen, A.M., 1996.** IQ and ego-resiliency: conceptual and empirical connections and separateness. *Journal of personality and social psychology*, 70(2), p.349.
- Boyd, D.E. 2014.** The growth mindset approach, *Journal on Centers for Teaching and Learning*, Vol. 6 No. 1, pp. 29-44.
- Bridges, W. 1980.** Making Sense of Life's Transitions. New York: Addison- Wesley.
- Brown, S., and K. M. Eisenhardt 1997.** The art of continuous change: Linking complexity theory and time-paced evolution in relentlessly shifting organizations. *Administrative Science Quarterly*, 42: 1 - 34
- Burcu Kor, Ingrid Wakkee, and Peter van der Sijde 2020** "How to promote managers' innovative behavior at work: Individual factors and perceptions." *Technovation*
- Burgelman, R. A. 1983b.** A process model of internal corporate venturing in the diversified major firm. *Administrative Science Quarterly*, 28(2): 223-244.
- Callan, V. J. 1993.** Individual and organizational strategies for coping with organizational change. *Work and Stress*, 7: 63-75.
- Carver, C.S. and Scheier, M.F., 1994.** Situational coping and coping dispositions in a stressful transaction. *Journal of personality and social psychology*, 66(1), p.184.
- Currie, G., & Procter, S. J. 2005.** The antecedents of middle managers' strategic contribution: The case of a professional bureaucracy. *Journal of Management Studies*, 42: 1325-1356.

- Dutton, J. E., Ashford, S. J., O'Neill, D. R., & Lawrence, K. A. 2001.** Moves that matter: Issue selling and organizational change. *Academy of Management Journal*, 44(4): 716-736.
- Dutton, J.E., Dukerich, J.M. and Harquail, C.V., 1994.** Organizational images and member identification. *Administrative science quarterly*, pp.239-263.
- Dweck, C. S., & Leggett, E. 1988.** A social-cognitive approach to motivation and personality". *Psychological Review*, 2, 256–273. doi: 10.1037/0033-295X.95.2.256
- Dweck, C. S., Chiu, C., & Hong, Y. 1995.** Implicit theories and their role in judgments and reactions: A word from two perspectives. *Psychological Inquiry*, 4, 267–285. doi: 10.1207/s15327965pli0604_1
- Dweck, C.S. 1986.** Motivational processes affect learning. *American Psychologist*, 41, 1040–1048.
- Dweck, C.S. 1999.** Self-theories: Their role in motivation, personality, and development." Philadelphia: Psychology Press.
- Dweck, C.S. 2006.** *Mindset: The New Psychology of Success*, Random House, New York, NY.
- Dweck, C.S. 2014.** The Right Mindset for Success." *Harvard Business Review*
- Dweck, C.S. 2019.** How Companies Can Profit from a "Growth Mindset." *Harvard Business Review*
- Eisenhardt KM, Graebner ME. 2007** Theory building from cases: opportunities and challenges. *Academy of Management Journal* 50: 25–32.
- Eisenhardt KM. 1989** Assessing agency theory: an assessment and review. *Academy of Management Review* 14: 57–74.
- Floyd S.W. and Wooldridge, B. 1994.** Dinosaurs or dynamos? Recognizing middle management's strategic role. *Academy of Management Executive*. Vol. 8 No. 4
- Floyd, S. W., & Lane, P. M. 2000.** Strategizing throughout the organization: Managing role conflict in strategic renewal. *Academy of Management Review*, 25: 154-177.
- Floyd, S. W., & Wooldridge, B. 1992.** Middle management involvement in strategy and its association with strategic type: A research note. *Strategic Management Journal*, 13: 153-167.
- Floyd, S. W., & Wooldridge, B. 1996.** *The strategic middle manager: How to create and sustain competitive advantage*. San Francisco: Jossey-Bass.
- Floyd, S. W., & Wooldridge, B. 1997.** Middle management's strategic influence and organizational performance. *Journal of Management Studies*, 34: 465-485.
- Floyd, S. W., & Wooldridge, B. 1999.** Knowledge creation and social networks in corporate entrepreneurship: The renewal of organizational capability. *Entrepreneurship Theory and Practice*, Spring: 123-143.
- Floyd, S. W., & Wooldridge, B. 2000.** *Building strategy from the middle: Reconceptualizing strategy process*. Thousand Oaks, CA: Sage.
- Folkman, S. and Moskowitz, J.T., 2004.** Coping: Pitfalls and promise. *Annu. Rev. Psychol.*, 55, pp.745-774.
- Goldberg, L.R., 1993.** The structure of phenotypic personality traits. *American psychologist*, 48(1), p.26.
- Gosling, J. and Mintzberg, H., 2003.** The five minds of a manager. *Harvard Business Review*, 81(11), pp.54-54.

- Griffin, M.A., Neal, A. and Parker, S.K., 2007.** A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2), pp.327-347.
- Guth, W. D. and Macmillan, I.C. 1986.** Strategy Implementation Versus Middle Management Self-interest. *Strategic Management Journal* Vol. 7, 313 – 327
- Hambrick, D. C., & Mason, P. A. 1984.** Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9: 193.
- Hargadon, A. and Sutton, R.I., 1997.** Technology brokering and innovation in a product development firm. *Administrative science quarterly*, pp.716-749.
- Heslin, P. A., & VandeWalle, D. 2011.** Performance appraisal procedural justice: The role of a manager's implicit person theory. *Journal of Management*, 6, 1694–1718. doi: 10.1177/ 0149206309342895
- Heslin, P. A., Latham, G., & VandeWalle, D. 2005.** The effect of implicit person theory on performance appraisals. *Journal of Applied Psychology*, 5, 842–856. doi: 10.1037/0021-9010. 90.5.842
- Heslin, P. A., VandeWalle, D., & Latham, G. 2006.** Keen to help? Managers' implicit person theories and their subsequent employee coaching. *Personnel Psychology*, 4, 871–902. doi: 10.1111/j.1744-6570.2006.00057.x
- Hong, Y. Y., Chiu, C. Y., Dweck, C. S., Lin, D. M. S., & Wan, W. 1999.** Implicit theories, attributions, and coping: A meaning system approach. *Journal of Personality and Social psychology*, 3, 588–599. doi: 10.1037/0022-3514.77.3.588
- Huy, Q.N. 1999.** Emotional capability, emotional intelligence, and radical change. *Academy of Management Review*, 24: 325-345.
- Huy, Q.N. 2001.** In praise of middle managers. *Harvard Business Review*, 79 (September): 72-79
- Huy, Q.N., 2002.** Emotional balancing of organizational continuity and radical change: The contribution of middle managers. *Administrative science quarterly*, 47(1), pp.31-69.
- Huy, Q.N. 2011.** How Middle Managers' Group-Focus Emotions and Social Identities Influence Strategy Implementation. *Strategic Management Journal* 32: 1387 - 1410
- Jackall, R. 1988** *Moral Mazes: The World of Corporate Managers*. New York: Oxford University Press
- Journal**, 22: 75-99.
- Kahneman, D., 2011.** *Thinking, fast and slow*. Macmillan.
- Kanter, R.M., 1982.** The middle manager as innovator. *Harvard business review*, 60(4), pp.95-105.
- Keating, L. A. and Heslin, P.A. 2015.** The potential role of mindsets in unleashing employee engagement. *Human Resources Management Review*
- King, A. W., & Zeithaml, C. P. 2001.** Competencies and the causal ambiguity paradox. *Strategic Management Journal*, 47: 523-549.
- Leonard, T.C., Richard H. Thaler, Cass R. Sunstein, 2008.** *Nudge: Improving decisions about health, wealth, and happiness*.
- LePine, J.A., Colquitt, J.A. and Erez, A., 2000.** Adaptability to changing task contexts: Effects of general cognitive ability, conscientiousness, and openness to experience. *Personnel psychology*, 53(3), pp.563-593.

- Luthans, F., Avolio, B.J., Avey, J.B. and Norman, S.M., 2007.** Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel psychology*, 60(3), pp.541-572.
- Marjolein C.J. Caniels, Judith H. Semeijn, and Irma H.M. Renders 2018.** Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work *Career Development International* Vol. 23 No. 1, pp: 48 – 66
- Nonaka, I. 1991.** The knowledge-creating company. *Harvard Business Review*, 69: 96-104.
- Nonaka, I. 1994.** A dynamic theory of knowledge creation. *Organization Science*, 5: 14-37.
- Nonaka, I., & Takeuchi, H. 1995.** The knowledge-creating company: How Japanese companies create the dynamics of innovation. Oxford, UK: Oxford University Press
- Oreg, S., 2006.** Personality, context, and resistance to organizational change. *European journal of work and organizational psychology*, 15(1), pp.73-101.
- Pappas, J. M., & Wooldridge, B. 2007.** Middle managers' divergent strategic activity: An investigation of multiple measures of network centrality. *Journal of Management Studies*, 44(3): 323-341.
- Piderit, S.K., 2000.** Rethinking resistance and recognizing ambivalence: A multidimensional view of attitudes toward an organizational change. *Academy of management review*, 25(4), pp.783-794.
- Pratt MG. 2009.** For the lack of a boilerplate: tips on writing up (and reviewing) qualitative research. *Academy of Management Journal* 52: 856-862.
- Rogers, E. M. 1995.** *Diffusion of Innovations*, 4th ed. London: Free Press.
- Schein, E. H. 1992.** *Organizational Culture and Leadership*, 2d ed. San Francisco: Jossey-Bass.
- Stewart, R., 1976.** To understand the manager's job: consider demands, constraints, choices. *Organizational Dynamics*, 4(4), pp.22-32.
- Sunstein, C.R. and Hastie, R., 2015.** *Wiser: Getting beyond groupthink to make groups smarter*. Harvard Business Press.
- Suddaby R. 2006** From the editors: what grounded theory is not. *Academy of Management Journal* 49: 633 – 642.
- Taylor A., Helfat, C.E., 2009** Organizational Linkages for Surviving Technological Change: Complementary Assets, Middle Management, and Ambidexterity." *Organization Science* 20(4):718-739. Thousand Oaks, CA: Sage.
- Taylor, S.E., 2006.** Tend and befriend: Biobehavioral bases of affiliation under stress. *Current directions in psychological science*, 15(6), pp.273-277.
- Tidhar R, Eisenhardt KM. 2020,** Get rich or die trying... finding revenue model fit using machine learning and multiple cases. *Strat Mgmt J.* 2020;41: 1245–1273
- Tucker, J.S., Gunther, K.M. and Pleban, R.J., 2010.** The mediating effects of adaptive skill on values-performance relationships: Erratum.
- Van Dam, K., 2013.** Employee adaptability to change at work: A multidimensional, resource-based framework. *The psychology of change: Viewing change from the employee's perspective*, pp.123-142.
- Westley, F. 1990** Middle managers and strategy: Micro dynamics of inclusion. *Strategic Management Journal*, 11: 337-351.

Wooldridge, B. and Floyd, S.W., 1990. The strategy process, middle management involvement, and organizational performance. Strategic management journal, 11(3), pp.231-241.

Wooldridge, B., Schmid, T., and Floyd, S.W. 2008 The Middle Management Perspective on Strategy Process: Contributions, Synthesis, and Future Research. Journal of Management Vol. 34 No. 6

Zingoni, M and Corey, C. M. 2017. How Mindsets Matter – The Direct and Indirect Effects of Employees' Mindsets on Job Performance. Journal of Personnel Psychology

INDUSTRY REPORTS

Briggs, B. and Buchholz, S., 2019. Deloitte Insights, Tech Trends.

Briggs, B., Buchholz, S. and Sharma, S., Tech Trends 2020, Deloitte insights.

Deloitte Millennial Survey, 2018. Millennials Disappointed in Business, Unprepared for Industry 4.0.

Deloitte, 2018. The Adaptable Organization: Harnessing a networked enterprise of human resilience

Forbes 2022 Leadership in an Ecosystem Age: Secrets for success

<https://www.forbes.com/sites/billfischer/2022/04/01/leadership-in-an-ecosystem-age-secrets-for-success/?sh=4c9266f241bc>

Indian Brand Equity Foundation (IBEF), Infographics on IT Industry & ITeS in India October 2019.

<https://www.ibef.org/download/IT-ITeS-October-2019.pdf>

Indian Brand Equity Foundation (IBEF), Infographics on IT Industry & ITeS in India, January 2020

<https://www.ibef.org/industry/information-technology-india/infographic>,

NASSCOM “Industry Performance and What lies ahead, 2018-19

https://nasscom.in/sites/default/files/Industry-Performance2018-19-and-what-lies-ahead_0.pdf

NASSCOM Deloitte GCC Value Proposition for India, 2021

<https://www2.deloitte.com/content/dam/Deloitte/in/Documents/Consulting/in-consulting-gcc-value-proposition-for-india2-noexp.pdf>

NASSCOM Zinnov GCC India Landscape, 2021

<https://nasscom.in/knowledge-center/publications/gcc-india-landscape-2021-beyond>

NASSCOM Zinnov Tech Start-up Report, 2021

<https://community.nasscom.in/communities/productstartups/nasscom-tech-start-report-2021-year-titans>

NASSCOM Technology Sector in India – New World: The Future is virtual/Strategic Review, 2021

<https://nasscom.in/knowledge-center/publications/technology-sector-india-2021-new-world-future-virtualstrategic-review>

Volini, E., Schwartz, J., Roy, I., Hauptmann, M., Van Durme, Y., Denny, B. and Bersin, J., 2019. Leading the social enterprise: Reinvent with a human focus. Deloitte Global Human Capital Trends.

World Economic Forum, October 2020. The future of jobs report 2020. Geneva, Switzerland: World Economic Forum.

NEWS ARTICLES

Business Standard, July 2019. Indian IT has a talent challenge as engineers flock to global tech centres https://www.business-standard.com/article/companies/indian-it-has-a-talent-challenge-as-engineers-flock-to-global-tech-centres-119051601302_1.html,

https://www.business-standard.com/article/pti-stories/it-companies-may-shed-30-000-40-000-mid-level-staff-pai-119111800954_1.html

ETtech, October 2018. Almost 50% IT professionals quit learning new technology mid-way: Report <https://tech.economictimes.indiatimes.com/news/people/almost-50-it-professionals-quit-learning-new-technology-mid-way-report/66403309>,

<https://economictimes.indiatimes.com/jobs/india-inc-facing-middle-manager-hiring-challenge-survey/articleshow/49152774.cms>

<https://economictimes.indiatimes.com/tech/ites/a-techie-and-above-30-you-are-most-likely-to-be-fired/articleshow/57509522.cms?from=mdr>

<https://economictimes.indiatimes.com/tech/ites/mid-level-employees-in-indian-it-sector-facing-an-uncertain-future/articleshow/57503104.cms?from=mdr>

Fortune, 2019. <https://www.fortuneindia.com/technology/2019-will-be-challenging-for-indian-it-ites-industry/102863>

ETNow Digital, November 2019. Infosys lays off up to 10,000 employees in mid, senior level; Capgemini cuts workforce by 500 <https://www.timesnownews.com/business-economy/companies/article/infosys-lays-off-up-to-10000-employees-in-mid-senior-level-capgemini-cuts-workforce-by/511615>,

Livemint, December 2019. After a strong run in 2019, a sober year awaits the Indian IT services industry <https://www.livemint.com/market/mark-to-market/after-a-strong-run-a-sober-year-awaits-indian-it-11577694256402.html>,

The Economic Times, November 2018. Here's how Indian IT firms are overhauling employee training process https://economictimes.indiatimes.com/tech/ites/heres-how-indian-it-firms-are-overhauling-employee-trainingprocess/articleshow/66550859.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst,

The Economic Times, February 2019. IT firms find new ways to reskill senior and mid-level managers <https://economictimes.indiatimes.com/tech/ites/it-firms-find-new-ways-to-reskill-senior-and-mid-level-managers/articleshow/68040920.cms?from=mdr>,

The Economic Times, February 2019. IT firms find new ways to reskill senior and mid-level managers <https://economictimes.indiatimes.com/tech/ites/it-firms-find-new-ways-to-reskill-senior-and-mid-level-managers/articleshow/68040920.cms?from=mdr>

The Economic Times, October 2019. Cognizant to cut 7000 mid-senior level jobs, exit content moderation <https://economictimes.indiatimes.com/tech/ites/cognizant-to-cut-7000-mid-senior-level-jobs-exit-content-moderation/articleshow/71829299.cms>,

The Economic Times, September 2020. Future of Work: Welcome to the era of 21st century artisans, says TCS CEO Rajesh Gopinathan <https://economictimes.indiatimes.com/jobs/future-of-work-welcome-to-the-era-of-the-21st-century-artisans/articleshow/78352367.cms?from=mdr>

Times of India, January 2020. Virtual bosses may oust middle managers in 10 yrs. <https://epaper.timesgroup.com/Olive/ODN/TimesOfIndia/shared/ShowArticle.aspx?doc=TOIM%2F2020%2F01%2F22&entity=Ar02314&sk=63331B20&mode=text#>

The Economic Times, April 2022. From Infosys to HCL, employee costs are squeezing IT margins. So, why is TCS setting its bar high? <https://economictimes.indiatimes.com/prime/technology-and-startups/from-infosys-to-hcl-employee-costs-are-squeezing-it-margins-so-why-is-tcs-setting-its-bar-high/primearticleshow/91061120.cms>

The Economic Times, April 2022. Tech demand cycle has good five-year visibility, says TCS chief Rajesh Gopinathan <https://economictimes.indiatimes.com/tech/information-tech/tech-demand-cycle-has-good-five-year-visibility-says-tcs-chief-rajesh-gopinathan/articleshow/91023648.cms>

INDUSTRY PERSPECTIVES ON THE ISSUE

Industry has been conducting its own research into the issue of how organizations are adapting to this change, viewing it through the lens of work, workplace, and workers. I have chosen three that capture the flavour of industry-led research.

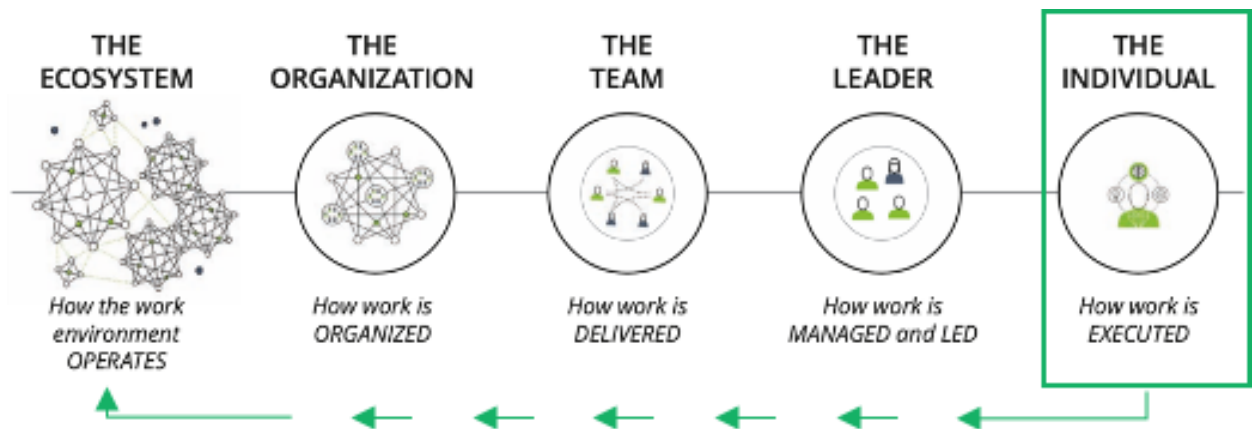
The adaptable organization framework:

One comprehensive framework that offers a good structure around which organizations can build disruptive solutions is Deloitte's Adaptable Organisation Framework. Defined as "a fundamental shift in operating and management philosophy that enables large-scale global organizations to operate with a start-up mindset and drive modern people practices that enable enterprise agility through empowered networks of teams."

Traditionally companies have striven to improve their products, processes, and operations to get better at whatever they do. However, in times of radical change, survival depends on the understanding that the organization functions within a larger ecosystem united in a common purpose--satisfying ever-changing customer needs. Deloitte's work with its clients has shown that an adaptable organization's vision is backed by the understanding that they exist within an ecosystem; they are more competitive, as they position themselves better to leverage external resources via partnerships. On the one hand, such organizations have greater visibility into customer behavior, quickly detect shifts in the external environment, and change accordingly. On the other, the sense of being anchored in an ecosystem with a larger purpose motivates employees. Teams work more effectively without interfering with each other while also being united by a common overall purpose.

Figure# 12 Deloitte's Adaptable Organization Framework

Highlights the importance of an Individual and their importance to shape the emergent growth strategies of the organization



While organizations generally work with a purely functional intent, the adaptable organization understands how teams work together, how teams interact with each other and the customer, and build multi-disciplinary teams with informal and formal communication channels that support human interactions. Flexible governance models, limited bureaucracy, transparent decision-making, and empowered individuals are necessary to enable such teams.

Adaptable organizations enable individual performance through team structure and new ways of working. They understand that individuals thrive when placed in teams that bring together diverse perspectives, experiences, and skillsets. Execution is "agile" and based on a "fail fast" mentality with frequent touchpoints and iteration reviews. Flexible communication enables true collaboration, which unlocks latent productivity. While having their mission or focus, these teams are ultimately aligned with their larger purpose.

In a business environment of constant change, leaders too must be versatile. Leadership in an adaptable organization is different from the traditional role-based view in that leaders exist at all levels of the organization, not just at the top. They are not appointed merely because of their tenure or technical expertise but their ability to energize, empower, and connect. In the adaptable organization, leaders create an atmosphere that embraces vulnerability and psychological safety, building a safe space where ideas and diversity of thought thrive.

Human Capital Trends 2020 and Global Millennial Survey 2020

While most enterprises in the face of disruption turn first towards the organization and leaders, the most integral building block of an adaptable organization is the individual. Individuals on the ground partake in the outcome and its execution. The traditional approach to change-management thinking is that the individual is afraid of and resistant to change while the organization drives change even as it provides stability. However, in an adaptable organization, resiliency and acceptance of change become part of the individual worker's personality, and the job of human resources management is to enable and nurture this natural resiliency.

Figure# 13: Deloitte studies further validate existence of the 'Frozen Middle' challenge

The two longitudinal studies highlight inability of organizations to provide direction to individuals due to lack of real time people insights and individual in middle management are worried about their future.

Insights on organizations preparedness	Insight on individual's preparedness
Global Human Capital Trend 2020: The Social Enterprise at work • Purpose: Belonging – 79% respondents agree it is important – 93% agree it drives organizational performance – 13% agree they are ready to address this trend • Potential: Beyond reskilling – 53% respondents say between half all of their workforce will need to change their skills in 3 years – 17% can anticipate the skills needed – 16% expect their organizations to invest in this area • Perspective: Governing workforce strategies – 97% respondents need additional information – 53% say increase in workforce related information – 11% can produce real time information Global HC Trend 2020: https://www2.deloitte.com/us/en/insights/focus/human-capital-trends.html	Global Millennial Survey 2020: Resilient generations hold the key to creating a "better normal" • Over 40% of respondents are stressed all or most of the time; their key concerns are – The welfare of my family – Long-term financial future – Job and career prospects – Day-to-day finances • Increased appetite to accept the new norm, over 60% of the respondents are more comfortable delivering work remotely Global Millennial Survey 2020: https://www2.deloitte.com/global/en/pages/about-deloitte/articles/millennialsurvey.html

While the Human Capital Trends 2020 highlights factors that can help organizations capitalize on the transformation, another Deloitte research article, the Global Millennial Study 2020, studied the attributes that can help individuals thrive in this environment. This study of the younger generations of workers shows that in the wake of the pandemic, resilience and determination will hold the key to creating the new normal. The picture that emerged, though complicated, was hopeful. Over 40% of both Gen Z and millennials are under stress, though anxiety levels have fallen over time, hold out hope for the future. Key concerns include their family's welfare, long-term financial prospects, job and career prospects, and day-to-day finances. However, while they expressed anxiety and pessimism, the pandemic does not seem to have worsened their outlook. Surprisingly, the overall survey results showed higher optimism issues ranging from the environment to financial prospects to their organizations' and governments' response to the pandemic. In short, while they are deeply affected by the pandemic, they are hopeful about the future.

One more finding is that the younger generations are keen on working from home or a remote location. They believe their organizations did an excellent job of managing the virtual workforce and had policies to protect them and allow them to be productive. This trend has cost benefits for organizations in terms of savings on office space and the cost of amenities. Employees too can save on commuting and other such costs. They could also choose to live outside major cities, with lower living costs. Other benefits include a better work-life balance, bringing their "true self" to work, and stress relief.

These two longitudinal studies highlight the factors organizations need to focus on to succeed in the new reality. They need to provide direction to individuals trying to balance their aspirations for finding purpose in their work, managing their lives, and personal aspirations such as taking care of their family and maintaining a standing in society with the demands of the ongoing change. Middle management has a significant role in helping the organization manage this situation.

INTERVIEW QUESTIONS

Junior Management	Middle Management	Senior Management
Candidate profile: (populate this information ahead of the interview) • Size of the organization: • Gender: • Tenure with the firm/Industry: • Local/MNC organization: • Listed/Private held organization: In the last 3 – 5 years, the pace of change has been rapid, and, above all, the last 6 – 7 months of the pandemic have thrown new challenges and opportunities. • How has your middle management's work and work context changed? (pre-pandemic/post-pandemic)? • What are some of the challenges they have to deal with? (As an individual contributor, subject matter expert, project manager, transformation lead – define clearly)? • How have they grown professionally? (by level, span, responsibility, individual skills)? • In terms of preparing for the future, what do you feel they are doing right (and not so right) (personal/professional – define clearly: quality time, brainstorm about future)? • What formal or informal investments has your	Candidate profile: • Size of the organization: • Gender: • Tenure with the firm/Industry: • Local/MNC organization: • Listed/Private held organization: In the last 3 – 5 years, the pace of change has been rapid, and above all, the last 6 – 7 months of the pandemic has thrown newer challenges and opportunities as: • How has your work and work context changed? (Pre pandemic/Post pandemic) • What are some exciting and challenging projects that you have dealt with? (As Individual Contributor, Subject Matter Expert, Project Manager, Leading Transformation – define clearly) • How have you grown professionally? (Level, Span, Responsibility, individual skills) • In terms of preparing for the future, what are the things you feel upbeat (and not so positive) about? (Personal/Professional – define clearly: quality time, brainstorm about future) • What formal or informal investments has your organization done on you? (project/experts) • Proactive efforts you have made on yourself? • In the context of your preparedness for the future	Candidate profile: (populate this information ahead of the interview) • Size of the organization: • Gender: • Tenure with the firm/Industry: • Local/MNC organization: • Listed/Private held organization: For the last 3 – 5 years, the pace of change has been rapid, and above all, the last 6 – 7 months of the pandemic has thrown newer challenges and opportunities as: • How has your middle management work and work context changed? (Pre pandemic/Post pandemic) • What are some of the challenges they have dealt with? (As Individual Contributor, Subject Matter Expert, Project Manager, Leading Transformation – define clearly) • How have they grown professionally? (Level, Span, Responsibility, individual skills) • In terms of preparing for the future, what are the things that you feel they are doing right (and not so right)? (Personal/Professional – define clearly: quality time, brainstorm about future) • What formal or informal investments has your

organization made for them (project/experts)? • What proactive efforts do they have for their development? • In the context of the preparedness of your middle managers for the future and organizational growth, on a scale of 1 – 5 (1: low – 5: high), how would you rate them on the following parameters? Why would you assign this rating? Which element is most important to you? – Education: – Exposure (diversity, stretched projects, clients): – Experience: – Environment (boss/team members): – Your network within the organization: – What would be the rating from your team members: – Your initiatives (goals pursued): – Your organization's growth plan : Global mindset: Openness to and awareness of diversity across cultures with a propensity to leverage differences and find common ground • Share an example of an engagement where you have worked with members from diverse cultures. • What was the role of your manager in assembling this team? Growth mindset: Thriving on the challenge and seeing failure as a springboard for growth and stretching existing abilities • Share an example of an engagement where you have failed; how has your manager reacted to the situation?	and your ability to grow in the organization; on a scale of 1 – 5 (1: low – 5: High), where would you rate yourself on the following parameters, why would you assign this rating, which element is most important to you: – Education: – Exposure (diversity, stretched projects, clients): – Experience: – Environment (boss/team members): – Your network within the organization: – What would be the rating from your team members: – Your initiatives (goals pursued): – Your organization's growth plan : Global mindset: Openness to and awareness of diversity across cultures with a propensity to leverage differences and find common ground • Share an example of an engagement where you have worked with members from diverse cultures • What was a challenge that you faced arising from the diversity of cultures among team members? What did you specifically do? • What learnings have you gained from working on this engagement? • How do you plan to use these learnings in your future engagements? Growth mindset: Thriving on the challenge and seeing failure as a springboard for growth and stretching existing abilities • Share an example of an engagement where you started with little or no background or faced setbacks and failures. What did you specifically do to cope with the situation? How did you mitigate the situation?	organization done on them? (project/experts) • Proactive efforts they have made on themselves? • In the context of your preparedness of your middle managers for the future and to grow your organization; on a scale of 1 – 5 (1: low – 5: High), where would you rate them on the following parameters, why would you assign this rating, which element is most important to you: – Education: – Exposure (diversity, stretched projects, clients): – Experience: – Environment (boss/team members): – Your network within the organization: – What would be the rating from your team members: – Your initiatives (goals pursued): – Your organization's growth plan : Global mindset: Openness to and awareness of diversity across cultures with a propensity to leverage differences and find common ground • How often do your clients ask for the constitution of your teams that cut across cultures? • Are there a few team members who manage cultural diversity better than others? What do they specifically do? What enables them to be more effective? • Do you have an organization-wise inclusion policy/guideline? • How do we reward and recognize people who
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• How has your manager guided you to prepare for future engagements post the event? • How often do you and your team members come together to think of future opportunities for change and growth? Diversity of thinking mindset: Looking for and leveraging different perspectives and approaches to solve problems and seize opportunities • What practices does your manager follow to bring diverse or new thinking to client engagements? • How does your manager make decisions about the composition of their engagement team? • How does your manager make decisions about rewards and recognition? Design thinking mindset: Using logic, imagination, intuition, and systemic reasoning to explore possibilities and design outcomes that benefit customers • Share an example of an engagement where you and your team members have used logic/imagination/intuition/systemic reasoning concepts to create a new product/solution for your engagement. What was your manager's reaction? • What role has your manager played in adopting this change across the organization? • How often do you and your team members come together to think of possible value-adds you can create for your customers? What role does your manager play? What additional information (personal and professional	• What learnings have you gained from working on this engagement? In specific terms, how did those learnings come about? • How do you plan to use these learnings in your future engagements? Diversity of thinking mindset: Looking for and leveraging different perspectives and approaches to solve problems and seize opportunities • Share an example of an engagement where you have worked with team members from diverse backgrounds. • What was a challenge that you faced arising from diverse backgrounds and preferred approaches? What did you specifically do? • What learnings have you gained from working on this engagement? • How do you plan to use these learnings in your future engagements? Design thinking mindset: Using logic, imagination, intuition, and systemic reasoning to explore possibilities and design outcomes that benefit customers • Share an example of an engagement where you came up with a new and innovative approach to solve a customer problem or create a new product/solution. Please narrate all the details (in sequence) of how you did this. What kind of a process (rational or intuitive) did you go through? • What learnings have you gained from working on this engagement? • How do you plan to use these learnings in your future engagements? What additional information (personal and professional journey) would you like to share	showcase inclusive behaviors at work? Growth mindset: Thriving on the challenge and seeing failure as a springboard for growth and stretching existing abilities • How do you select the manager to lead an engagement? If there is a relatively new project and non-routine, so you need fresh thinking and innovation, what kind of team and team leader do you put together? What specific personal characteristics and work methods do you look for? • What is your approach to dealing with new challenges when there are setbacks and failures? Please give a specific example. • What processes or approaches your organization follows to deal with people when they make mistakes on engagements? Diversity of thinking mindset: Looking for and leveraging different perspectives and approaches to solve problems and seize opportunities • Share an example of complex client engagement; and the role of people from different backgrounds coming together to solve the problem. What challenges did you face? What were the benefits and downsides of having very diverse perspectives on a problem within a team? • Does your organization have a formal policy/guideline on diversity? How adept are your team members and team leaders in navigating the complexity arising from diversity?
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journey) would you like to share that I missed asking you in this conversation? How do you feel about the questions?	that I missed asking you in this conversation? How do you feel about the questions?	• Do you have a knowledge management system to capture this information? How often do you review this with information with your managers? Design thinking mindset: Using logic, imagination, intuition, and systemic reasoning to explore possibilities and design outcomes that benefit customers • How often do you engage with your teams to ideate and develop new ideas? How do you go about the process? If there are new ideas, how do you nurture those ideas? Please give a specific example and describe the details in sequence – from the start to completion. • What benefits have you seen to the bottom-line growth or in your client feedback based on implementing these ideas? What additional information (personal and professional journey) would you like to share that I missed asking you in this conversation? How do you feel about the question?
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RESEARCH ENABLERS

MAXQDA:

MAXQDA: <https://www.maxqda.com>

MAXQDA Code: <https://www.maxqda.com/help-mx20/codes-2/the-code-system>

MAXQDA Lexical Search: <https://www.maxqda.com/help-mx20/lexical-search/the-extended-lexical-search>

I leveraged the machine learning capability powered by MAXQDA to identify statements from the interview that align with the 29 parameters I had identified as necessary for my study. MAXQDA is a software package for qualitative and mixed methods research to analyze all kinds of data—from texts to images and audio/video files, websites, tweets, focus group discussions, survey responses, and more.

I uploaded the transcripts of all 41 interviews into the tool, used the lexical search function, and applied words from the code/parameters in each study to identify a segment of the interview data that explains the task or the situation the professional talked about during the interview. Using this process, I identified over 3,090 statements that matched the 29 codes identified across the three studies. Statistical analysis (one-way ANOVA) confirmed unique voices by level. The analyzed/identified comments from the tool can be downloaded as numbers or segmented statements, by management level or by interview.

Of the 3,090 statements, 2,116 were from middle management, 700 senior managers, and 274 junior managers. Going by experiment, 1,176 aligned with the first experiment, which explored mindset parameters, 544 aligned with the second experiment, which studied the managerial activities parameters, and 1,370 aligned with the third experiment, which studied the study framework parameters.

JMP One Way ANOVA:

To validate the statistical significance of my data set, I conducted a one-way analysis of variance (ANOVA)--using the JMP software for statistical analysis--to understand if the three levels of management are intrinsically different. The results establish that these three sublevels are not drawn from the same population and are significantly different statistically (p-value less than 0.05, at 95% confidence level). The test conducted for the three different studies had a statistically significant result, establishing that the sublevels are intrinsically different and that the sample size of each level was adequate. Therefore, the inference is that senior management, middle management, and junior management are three different entities with different perceptions and opinions.

JMP One Way ANOVA: https://www.stat.purdue.edu/~lfindsen/stat511/04_one_way_anova.pdf

Vader Sentiment Analysis:

To draw insights from the data, I reviewed the number of responses for each parameter across three studies and normalized response numbers by management level to study patterns of responses by each parameter. To understand the sentiment of the professionals' responses across different levels – how vociferous they are on the spectrum ranging from positive to neutral to negative – I conducted sentiment analysis using VADER (Valence Aware Dictionary and Sentiment Reasoner). VADER is a lexicon and rule-based sentiment analysis tool specifically attuned to sentiments expressed in social media. VADER uses a combination of a sentiment lexicon to generate a list of lexical features (e.g., words) labelled according to their semantic orientation as either positive or negative. I then aggregated and identified the critical issues against each parameter and identified voices from 3,090 comments identified through a lexical search on MAXQDA. I employed a theory-building approach requiring multiple iterations between data description and emerging concept and research from the publication of thoughtware of leading professional services firms. Finally, I drew on relevant literature to enhance the plausibility of a conceptual model of mindset shifts (Golden-Biddle and Locke, 1993). In this experiment, most voices are neutral for all three experiments.

Vader Analysis: <https://www.geeksforgeeks.org/python-sentiment-analysis-using-vader/>.

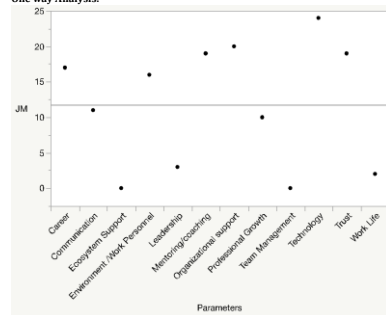
ONE-WAY ANOVA RESULTS

I used the one-way ANOVA to validate whether the voices we heard were unique or not, and as can be seen in the figure below, the voices did come out as unique.

Experiment 1: One-way Anova table

Junior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	11.75
Observations (or Sum Wgts)	12

Analysis of variance:

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	11	820.25000	74.5682	-	-
Error	0	0.00000	-	-	-
C. Total	11	820.25000	-	-	-

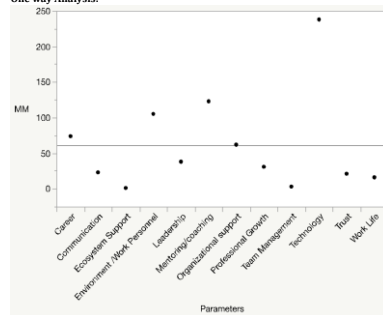
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Career	1	17.0000	-	-	-
Communication	1	11.0000	-	-	-
Ecosystem Support	1	0.0000	-	-	-
Environment /Work Personnel	1	16.0000	-	-	-
Leadership	1	3.0000	-	-	-
Mentoring/coaching	1	19.0000	-	-	-
Organizational support	1	20.0000	-	-	-
Professional Growth	1	10.0000	-	-	-
Team Management	1	0.0000	-	-	-
Technology	1	24.0000	-	-	-
Trust	1	19.0000	-	-	-
Work Life	1	2.0000	-	-	-

Fit Group > One-way Analysis of JM By Parameters > One-way Anova

Middle Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	61.25
Observations (or Sum Wgts)	12

Analysis of variance:

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	11	50740.250	4612.75	-	-
Error	0	0.0000	-	-	-
C. Total	11	50740.250	-	-	-

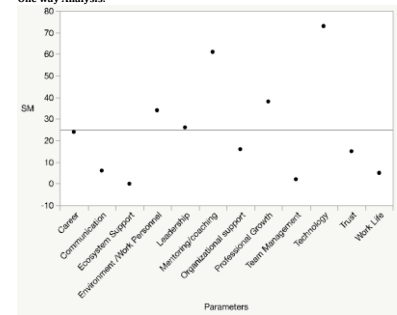
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Career	1	74.0000	-	-	-
Communication	1	23.0000	-	-	-
Ecosystem Support	1	1.0000	-	-	-
Environment /Work Personnel	1	105.0000	-	-	-
Leadership	1	38.0000	-	-	-
Mentoring/coaching	1	123.0000	-	-	-
Organizational support	1	62.0000	-	-	-
Professional Growth	1	31.0000	-	-	-
Team Management	1	3.0000	-	-	-
Technology	1	238.0000	-	-	-
Trust	1	21.0000	-	-	-
Work Life	1	16.0000	-	-	-

Fit Group > One-way Analysis of MM By Parameters > One-way Anova

Senior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	15.0000
Observations (or Sum Wgts)	12

Analysis of variance:

Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	11	5948.00000	540.727	-	-
Error	0	0.00000	-	-	-
C. Total	11	5948.00000	-	-	-

Parameter estimates:

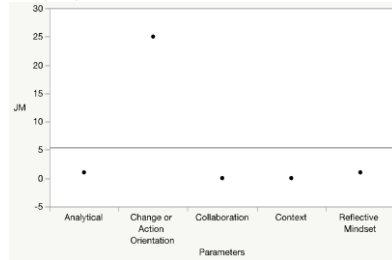
Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Career	1	24.0000	-	-	-
Communication	1	6.0000	-	-	-
Ecosystem Support	1	0.0000	-	-	-
Environment /Work Personnel	1	34.0000	-	-	-
Leadership	1	26.0000	-	-	-
Mentoring/coaching	1	61.0000	-	-	-
Organizational support	1	16.0000	-	-	-
Professional Growth	1	38.0000	-	-	-
Team Management	1	2.0000	-	-	-
Technology	1	73.0000	-	-	-
Trust	1	15.0000	-	-	-
Work Life	1	5.0000	-	-	-

Fit Group > One-way Analysis of SM By Parameters > One-way Anova

Experiment 2: One-way Anova table

Junior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	5.4
Observations (or Sum Wgts)	5

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	4	481.20000	120.300	-	-
Error	0	0.00000	-	-	-
C. Total	4	481.20000	-	-	-

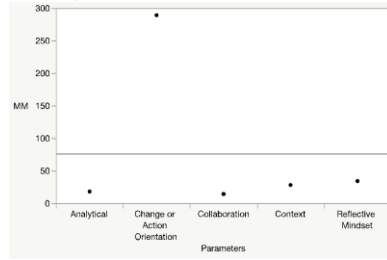
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Analytical	1	1.0000	-	-	-
Change or Action Orientation	1	25.0000	-	-	-
Collaboration	1	0.0000	-	-	-
Context	1	0.0000	-	-	-
Reflective Mindset	1	1.0000	-	-	-

Fit Group > One-way Analysis of JM By Parameters > One-way Anova

Middle Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	76.6
Observations (or Sum Wgts)	5

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	4	56643.200	14160.8	-	-
Error	0	0.000	-	-	-
C. Total	4	56643.200	-	-	-

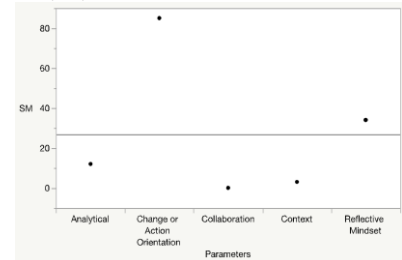
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Analytical	1	18.000	-	-	-
Change or Action Orientation	1	289.000	-	-	-
Collaboration	1	14.000	-	-	-
Context	1	28.000	-	-	-
Reflective Mindset	1	34.000	-	-	-

Fit Group > One-way Analysis of MM By Parameters > One-way Anova

Senior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	26.8
Observations (or Sum Wgts)	5

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	4	4942.8000	1235.70	-	-
Error	0	0.0000	-	-	-
C. Total	4	4942.8000	-	-	-

Parameter estimates:

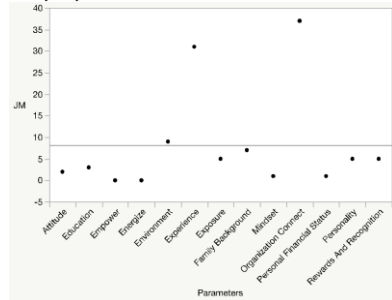
Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Analytical	1	12.0000	-	-	-
Change or Action Orientation	1	85.0000	-	-	-
Collaboration	1	0.0000	-	-	-
Context	1	3.0000	-	-	-
Reflective Mindset	1	34.0000	-	-	-

Fit Group > One-way Analysis of SM By Parameters > One-way Anova

Experiment 3: One-way Anova table

Junior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	8.153846
Observations (or Sum Wgts)	13

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	12	1685.6923	140.474	-	-
Error	0	0.0000	-	-	-
C. Total	12	1685.6923	-	-	-

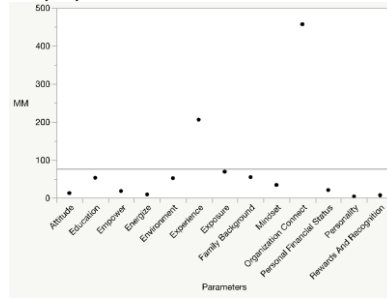
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Attitude	1	2.0000	-	-	-
Education	1	3.0000	-	-	-
Empower	1	0.0000	-	-	-
Energize	1	0.0000	-	-	-
Environment	1	9.0000	-	-	-
Experience	1	31.0000	-	-	-
Exposure	1	5.0000	-	-	-
Family Background	1	7.0000	-	-	-
Mindset	1	1.0000	-	-	-
Organization Connect	1	37.0000	-	-	-
Personal Financial Status	1	1.0000	-	-	-
Personality	1	5.0000	-	-	-
Rewards And Recognition	1	5.0000	-	-	-

Fit Group > One-way Analysis of JM By Parameters > One-way Anova

Middle Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	76.76923
Observations (or Sum Wgts)	13

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	12	190204.31	15850.4	-	-
Error	0	0.00	-	-	-
C. Total	12	190204.31	-	-	-

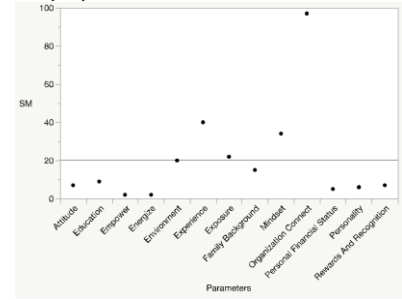
Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Attitude	1	13.000	-	-	-
Education	1	53.000	-	-	-
Empower	1	18.000	-	-	-
Energize	1	9.000	-	-	-
Environment	1	52.000	-	-	-
Experience	1	206.000	-	-	-
Exposure	1	69.000	-	-	-
Family Background	1	55.000	-	-	-
Mindset	1	34.000	-	-	-
Organization Connect	1	457.000	-	-	-
Personal Financial Status	1	21.000	-	-	-
Personality	1	4.000	-	-	-
Rewards And Recognition	1	7.000	-	-	-

Fit Group > One-way Analysis of MM By Parameters > One-way Anova

Senior Management

One way Analysis:



Summary of fit:

Rsquare	-
Adj Rsquare	-
Root Mean Square Error	-
Mean of Response	20.46154
Observations (or Sum Wgts)	13

Analysis of variance:

Source	Df	Sum of Squares	Mean Square	F Ratio	Prob > F
Parameters	12	8079.2308	673.269	-	-
Error	0	0.0000	-	-	-
C. Total	12	8079.2308	-	-	-

Parameter estimates:

Level	Number	Mean	Std Error	Lower 95%	Upper 95%
Attitude	1	7.0000	-	-	-
Education	1	9.0000	-	-	-
Empower	1	2.0000	-	-	-
Energize	1	2.0000	-	-	-
Environment	1	20.0000	-	-	-
Experience	1	40.0000	-	-	-
Exposure	1	22.0000	-	-	-
Family Background	1	15.0000	-	-	-
Mindset	1	34.0000	-	-	-
Organization Connect	1	97.0000	-	-	-
Personal Financial Status	1	5.0000	-	-	-
Personality	1	6.0000	-	-	-
Rewards And Recognition	1	7.0000	-	-	-

Fit Group > One-way Analysis of SM By Parameters > One-way Anova

EXPERIMENT 1

PARAMETER DESCRIPTION

With excerpts from the interview statements

Technology: The Indian IT industry is at an inflection point, where it is moving from scale to scope. Individual mindsets need to keep up with this transition, and middle managers can play a role in helping teams make this switch. More creative solutions and value addition means not just technology upgrades but also learning to work in tandem with artificial intelligence, figuring out which tasks are best left to machines, and which ones call for human intervention. This requires professionals to be in a mode of constantly learning new things.

From the fact that most of my interviewees' responses in this experiment aligned with the technology parameter, it is clear that technology is on Indian IT middle managers' minds. This is not a surprising finding, as most of them are immersed in technology day in and day out, and their minds tend to immediately seize on technology as both the saviour as well as the biggest pain point when it comes to managing a difficult situation.

It is on their minds when it comes to hiring..."So, beyond that, during the interviews, what I will really look forward to is, is this person really flexible enough to learn the new technologies, learn the new challenges that the product might pose in terms of his journey, because those conditions, those situations are quite dynamic."

...upskilling..."One thing that comes to my mind immediately is in terms of spending very religiously at least one hour per day in learning new things, and learning need not be sitting and trying to technically learn something that is not what is necessary. At the mid-level management perspective, trying to develop a perspective towards an upcoming technology or a technology that is in demand, that is what my definition of learning would be."

...and training their teams..."My manager keeps upgrading herself in recent technologies such as Docker and GitLab CI/CD. She herself learns and then conducts a few sessions when she shares the knowledge and asks us to do work on it in the next project or do some homework on it, or some small task, so that's a good thing."

However, organizations' focus on the cost game means that most professionals, including managers, are so tied up with their work and daily routine that they have no space or time to do anything beyond the scope of work. "They take the personal initiative, but if we are confined to one project, and if that does not require the new technology, then we will not be given any chance to learn anything new."

Middle managers are faced with the challenge of trying to figure out how to learn while delivering to tight deadlines. One of the professionals I interviewed said it's a struggle: "Our Indian managers say, yes, yes, go learn something and do something. That is okay, but we have so much on the plate that we first finish the task, and then start to think of technology disruption. But what my US manager says is we have this project and I have to deliver it in this new technology. Let's learn it and then work on it. We don't have time to learn, but then he is like start and learn. So that way he gives us a chance to learn on the project. But it doesn't happen on the Indian side. They say, okay, let's do a POC but not that much."

Learning on the job may work to some extent, but all managers at all levels consider the focus on volume as a speed bump when it comes to technology upskilling. One of the senior management highlights the need to change as the Indian IT industry transitions from being a handler of high volumes of IT projects to high-value work: "The IT giants like Mr. R Narayan Murthy and Tatas have done as well as companies that have come up later, including the technology company started by BVR Mohan Reddy. These leaders were visionary to bring technology related work to the country. They were so visionary that only a few people were able to catch up with their speed, and then they got so busy trying to sell and bring new ideas and new services from clients all over the world. But the growth was so tremendous, it was so fast that they didn't have time to make others more enlightened about what made them think in that direction. In my opinion, it's all about the right timing."

Middle managers themselves find it a struggle to upskill: One interviewee said, "I think it is just that when we grew professionally in an environment that demanded a lot from us in terms of work, the disadvantage was that we have lost touch with technology to a great extent, which is a shame because of the industry we are in."

The problem is not just about pressure from clients and overseas partners. The Indian IT worker's mindset is also frozen in this mode to some extent, and a change of state will take some effort. As one middle manager told me, "We constantly have to remind them that, you know, they are the owners, they're not vendors, and this is a problem because when we hired a lot of people from different organizations, we had baseline expectations. We do that part of onboarding, but it doesn't work."

Some of the middle managers are aware of the need for a change in how work is done on the ground and are thinking around solutions to a shift in mindset from. "Technologists will be struggling with this because generally their mindset is that they will be able to tell me two plus two is four, but can't tell me two plus different combinations, but people will be much more open to understand and discuss, so generally they're learning more about people."

Overall, my interviews show that technology is one factor that all levels of managers think is important for the success of middle managers in charge of implementing change on the ground. Upskilling in this area is a priority, but the situation is such that they find little time for it, unless they take a break from their careers or are fortunate enough to find themselves in a job that facilitates learning on the go.

Mentoring: Anxiety levels among individual workers can be high in times of change; this could lead to low morale and depression, resulting in paralysis that affects work. Middle managers are close enough to the ground to be able to manage this anxiety. One way is through mentoring their team members. My interviewees demonstrated an understanding of the importance of mentoring and realized that they are in a position to groom their teams, and that it is important for their own success. "What I feel positive about is my investment in people because my success is dependent on my team's success and if I am not empowering my team, if I am not standing up to them when they are going through a rough time in life, obviously they will not back me while I am going through the same situation, which means I will not be successful if I do not see them succeed."

Junior team members in turn, appreciate this kind of mentorship: "I had a lot of a lot more mentorship where, you know, my manager and her manager ensured that I was taken care of and given guidance."

Another role that middle managers could play in terms of nurturing and promoting the interests of their team is educating clients about the value professionals add to projects. One senior management interviewee said, "If you don't coach your own colleagues in the US, who will coach them, because they are comparing you with the other offshoring companies like TCS and Infosys. Hence, they don't really trust you to the level they should or they don't make you sit at the right meetings where they should make you sit."

The same applies to senior leaders: "First coach your senior leaders irrespective of the level they are, that India is not offshore."

Responses reflected a focus on the need for leadership skills training (which includes mentoring skills), something that organizations should take note of, as middle managers, being involved in the daily workflow are in a position to influence operational change as well as employee attitudes towards change.

Environment: Many feel that the Indian IT organization is beset by a work environment where failures are not favoured, experimentation has little room, there is a loss of touch with technology, and the age gap between team members is low. What professionals look for from a manager is openness to ideas.

However, the view from the trenches is that Indian managers are not open to ideas from their juniors, as one interviewee described the difference between his US manager and Indian managers: "So, I come up with the ideas stating that, okay, if we have this kind of work environment, it is going to suit us and he definitely encourages it and even adopts most of the ideas that we suggest. Moreover, in that way, they are very encouraging, compared to Indian managers, saying yeah, yeah, yeah, we will think of it." As another of my interviewees put it: "We are in an environment or work culture where failure is seen with a magnifying glass."

It is essential that the work environment supports risk-taking, creativity, and professionals' personal needs. As one middle manager said, "You are creating that environment when it is (generating) more imagination from the people who are working." However, the perception is that this is not the case: "Unfortunately, we are in an environment or work culture where failure is seen with a magnifying glass."

There seems to be a need to create an environment that nurtures learning and offers flexibility: "And what I also felt like, you know the difference that I saw between the previous organization and Oracle was like, there, it being a closed ODC my physical presence was needed, but here you know, in Oracle, it was not a closed ODC, I had an open, you know kind of environment to work on, flexibility to work."

In this context, it is essential to note that a woman professional's life is different from that of her male counterparts. The organization needs to take this into account when it considers the kind of ecosystem that needs to be put in place to enable the success of women professionals. Some of the unique challenges a woman professional faces include balancing career and professional growth with the need to be there for the family, as child care and elder care are still a woman's domain as far as society is concerned.

This sometimes calls for more flexibility from the organization. Take, for instance, the case of one of my interviewees: "So I think those are the challenges where you always think, am I able to give the best based on the environment that I work with and after working in that role, probably for three-and-a-half years, and then I decided to expand my family and go ahead with my second child. I did not want to get into a role that is demanding like this and wanted to have a little more flexibility in terms of what I want to do, being accountable only for my work."

Along with this comes the need to manage the perceptions of colleagues around equality and equity: "So I think while we talk about equality, while we talk about opportunities and availability, I still see there are certain set of people who are not very friendly on that matter...so I think the comments that you listen to very openly on the floor, like, oh, she got it even though she's not working, she goes home at this time, but they do not look back, look at the fact that I come early in the morning and I work till late even though I'm away for two or three hours when I'm attending to my family and kids."

However, the journey towards more flexibility has already begun, and with the pandemic-induced drive toward the hybrid work model, women professionals may find the right environment to balance their professional and family responsibilities. As one of my interviewees said, "I think the environment had become much, much more flexible compared to when I started my journey, and I think that has been one of the major drivers for me to continue with my professional journey."

My research into this area finds that middle managers' thinking revolves around pre-pandemic concerns, with its hierarchical structure and on-the-floor job performance. They will now need to adapt their thinking to what could be the new reality of hybrid work and how to maintain morale and ensure wellbeing, even as they focus on productivity and team cohesion.

Career: Career growth is an important factor in ensuring individuals' morale at all times. "Where will I be five years from now, ten years from now?" is a common question employers face at the time of hiring. In a fast-growth industry, professionals expect exponential progress of their careers as well. Middle managers need to balance the need to grow their own careers with helping junior team members achieve their own career goals and not come across as being solely focused on their own careers, as for example, I found in some of my interviews: "What I believe I have seen very few people are focused on others' career in office. What they are focused on is their own career, because though they are a manager, they also want to become AVP, senior managers, and VP."

Middle managers are in a position to steer the career of their juniors, and this is a basic expectation from them: "So, when you come into the IT industry as a fresher, obviously you will have many things to learn, and you will be very enthusiastic at the beginning of the career, anybody's career actually."

The point is to make sure they take their team along as they progress; as one senior manager put it, "I think one thing I had observed is that it is important that when they grow in the system, they also ensure that the team that is supporting them also sees that kind of career progression or success."

With the IT industry in India moving from scale to scope, career growth often calls for a new set of skills: "Over the last four or five years, I think the transition has been for me more towards a strategic or design-oriented solutioning, rather than the fixing part. That is one aspect that's pretty personal to my career journey, but at the same time, I also see that there has been a significant amount of evolution in the software industry."

Reskilling, upskilling, and life-long learning are, therefore, going to be the norm: "It's about making peace with it and then understanding if they would like to upskill, gain that additional exposure, or probably take on additional responsibilities or look at alternate careers."

Managers can make a difference in a junior-level professionals' career through mentoring—"He has guided me in my IT career as well, and he has asked me to join MS. So, I am doing MS with Purdue University, from America." – and by nurturing homegrown management talent: "That brings me to a very good point that, you know, probably 70 to 75% of her direct reports are homegrown."

They also need to take into account the need for work-life balance, as some professionals may be going through a personal situation: "If I am not taking care of my ailing parents, if I keep my professional career as my top most priority, then I am not, I am not being human being, right." The need is to be flexible as required.

Middle management statements from my interviews often reflect a keen anxiety about their career growth, mostly through upskilling (in technology). This, balanced with a focus on nurturing their team members' talents as a path to their own professional growth and their development as leaders, could power the implementation of change management measures at the team level.

Organizational support: While organizational support finds a fair amount of mention in statements from every level, surprisingly, they reveal few concerns at the strategic level—what kind of support is needed to upskill professionals or manage emotional response to change, for instance. Middle management focused mostly on themselves and their need to progress in the hierarchy or concerns about the misdemeanours of their seniors.

Women professionals focused on the need for more organizational support to succeed. As one manager put it, "And I started getting more and more responsibilities and accountability, but you know, everything has a but to it because there is something on the family front. Obviously, it meant being able to spend a little less time always being occupied with work...and without a support system, that is always a challenge."

Some did find the support they needed from the organization: "I always try to learn a lot of things and I'm currently pursuing a data science course from IIM Lucknow for that matter, but then the organization always supports me in that or any other initiative that I want to take or they want me to get involved in, they always try to ensure that they give me those opportunities."

Junior management is divided in its opinion of support from their managers or organizations. According to one junior manager I interviewed, "There is no respect for the manager because they think that the manager is there just as a hanger-on. They are not there to support them, but to actually show their power and get artificial respect."

One more area where the managers feel there organizational support and intervention is required is the prevention of unprofessional behaviour: "When the organization sees that the person, even though he is misbehaving at a senior level, is being well supported by the system, they will lose faith and confidence in the company."

Leadership: For middle managers to lead change management at the team level—and as Quy Huy's work shows they stand in an ideal position to do so—they themselves need to play the role of a leader and also be treated by senior management as leaders, instead of compliant implementers of orders. One of my interviewees aptly described this role: "'I feel that I provide the meaning and definition for that change in terms of or with respect to the team on the ground or the workforce on the ground. I'm in middle management or the change leader who is going to carry that message for my team. I'm not only going to be their coach and mentor, but also the person who is going to make them understand what the change is about, what the process is about, what they do on the ground, why it is important and how it is affecting them.'"

The middle and senior managers are also in an ideal place to change client perceptions as the Indian IT business model moves from scale to scope. As one of my interviewees said: "I think this is where managers and senior leadership come in, where they should go and actually make the clients believe, okay, let's stop doing the monotonous work that we are doing."

In the course of my research, I came across middle and senior managers who believe there is a lacuna in this area, mainly because of a focus on day-to-day technical tasks: "Then, I realized that okay basic leadership attributes are not there in the IT field, because people are so (committed) to the computer from day one." Moreover, as another interviewee put it: "And I knew that only technical skills would not help. Leadership skills are something that will take me on a longer and faster journey."

Some may be good at managing clients while still lagging in leadership: "I do not see any good leadership behavior from them, but they were very successful in bagging so many contracts and bringing millions and millions of dollars for the company."

Developing the leadership pipeline calls for a learning strategy that spans across the professional's career and covers a spectrum of skills such as conflict management and managing difficult conversations. Another focus area would be enabling women professionals aspiring to leadership positions, as they feel left out in a professional world designed for men. As one woman professional perceives it: "You don't find many females in leadership roles because every time they come up with an excuse that, you know, I have this thing to cater to."

These statements (a total of 67), ranking around the midpoint of the stack, show a general awareness of the need for leadership in change management, but show that there is room for middle management to explore this role further and develop the skills required. Senior management and executives could also consider ways in which they can empower the middle manager to play the role they are suited to play: That of a leader, who nurtures their teams and shows them the way in time of radical change.

Professional growth: Professional growth, defined as the development of the competencies that result in career advancement, a powerful incentive at any level. Apart from skills that can be acquired through formal training, some skills are more nuanced. For example, understanding professionals' emotional states, motivating them to adopt the altered day-to-day routines that organizational change can bring about, building and using micro-networks within and outside the organization. Many of these nuanced skills that middle managers require to lead their teams through change can come only from hands-on experience. However, this parameter ranked only in the middle order among my interviewees. This was one area where more senior managers' statements reflected it than any other level (38 responses vs. middle managers' 31).

The main concern expressed is that professional growth in the IT industry is structured around the hierarchical structure. While this has its uses, it is at cross purposes with the need for diverse thinking, failing fast and learning, experimenting, and thinking creatively. One of my interviewees summed up the situation as follows: "I think as an industry, and especially in India, we are in the transition phase of having that hierarchical growth, going from one layer to the next. While I respect the reasons why it is there, I think whoever goes through the process of failing faster and then showing results and the effort, if they pick the right boss, I think they are going to grow."

It is essential for them to get promotions periodically as it is a way to show their progress. If not, they leave because societal pressure is such that their social standing and prestige are dependent on their career growth, as clearly articulated by one of my interviewees: "And I think culturally, we all want promotion, whether we get a raise or not is secondary, but you want to be known as a senior guy." My interviewees are aware of the gaps in this kind of thinking. While the wish to get promoted is strong, there is little appreciation of what it takes to prepare for senior roles. As one of the interviewees said, the attitude is such that it is "Not like, okay, you have to learn so many things to get to the next level; they just spent five hours a month, that is enough for you to get to the next level."

Middle management faces the challenge of balancing their growth expectations with organizational requirements for moving to the next level. The view is that a good rating does not translate into promotions, and they do not understand the reason for this: "Though I get a good rating on each appraisal every year, when I speak about promotion, the answer would be, okay, I was not prepared for this, right now with this discussion, let us have it in another discussion and then when another discussion comes, maybe it would happen when the time comes."

However, from an organizational point of view, developing the right skills is essential. In particular, managers cited technical skills, the ability to communicate effectively, and the inclination to take risks as keys to success: "So, two points, which most of the middle management or at least I have seen, can take it to the next level. One is being able to communicate their ideas and strategies better, second willingness to take the additional risk to make the strategy work or prove that another strategy works."

Some of the statements that aligned with the professional growth parameter did reflect thinking around what's needed in terms of professional growth and a supportive process during times of radical change, thinking that stepped out of conventional ideas—for instance the need to experiment and take risks vs. climbing the professional ladder.

Trust: As mentioned above, in times of change, professionals are expected to experiment, take risks and fail fast in order to succeed, all of which require a certain level of trust in the organization and

management. As one manager said, "I have taken a good number of calculated risks to get to the next level, because the calculated risks meant growth has been witnessed... and there is trust, the perception has been created that there is someone who could take a risk and come up with results as well."

Trust in professionals' skillsets and abilities also matter. An interviewee told me, "Moreover, if the US does not coach your own colleagues, who will coach us. Because they are comparing you with the other offshoring companies like TCS and Infosys, they do not really trust you to the level they should, or they do not make you sit at the right meetings where you should sit."

Moreover, mid-level professionals have to live up to the trust that both upper management and lower management place in them. "So, it has been challenging. I think every day there is some new challenge that comes up, and then I think the complexity of the mid-level manager role says we will constantly have to ensure that we will live up to the trust that folks have in us or empower us with, as well as ensure that the folks who are working with us have a good experience."

Trust concerns ranked low, with just 55 statements revolving around the parameter. Besides, it seems to be on the minds of a bigger percentage of junior management than any other level. This could be because juniors look towards the middle management to navigate the organization and the changes happening in it. Whether to open up about their worries and goals to their manager is a daily concern, and trust plays a major role in whether they choose to do so or not. Middle managers on the other hand, might assume that they have the best interests of the team in their mind and, so trust is not a major concern.

As trust is a major factor on which acceptance of change is dependent, it is something that middle managers need to give more thought to. Given the potential of this role to keep teams together, keep them satisfied and enthusiastic, organizations will need to consider educating this level about the importance of earning the trust of their teams to perform their jobs well—especially important for managing team-members' emotional response to change and convincing them about the need for the changes to their day-to-day work.

Communication: Implementing change requires clear and compelling communication at every level. QN Huy's research shows that middle managers are uniquely suited to communicate change proposals. Their social networks place them in a good position to get everyone on board and translate the organization's strategic proposals into how it will affect the day-to-day work of individual professionals.

Trust and communication go hand in hand when it comes to motivating professionals to take change in their stride and progress in the new work environment. For middle managers to take their teams along, they need to communicate effectively with the two levels between which they are sandwiched. Are middle managers thinking about this parameter? If yes, what are they focusing on? Are they thinking deeply enough on this and have they considered varied angles?

My research shows that managers agree that the world is moving into an ecosystem of organizations, where teams work round the clock across countries, and communication skills can be a significant hurdle that needs to be crossed for the Indian IT industry to succeed, "because there are lots of changes that are happening around the world and also in the organization where everybody should feel like the same communication is cascaded."

My interviews revealed that the prevalent belief is that middle management needs communication skills for day-to-day work: "Communication skills when you don't have enough resources to complete a particular project or you don't have a project design in place, instead of asking bluntly or instead of saying that you don't know." While studies show that communication is a significant parameter for change management, and is capable of inculcating a shared understanding of vision and purpose, statements from my research focus on language skills and articulation instead of the more complex functions it can perform, as this sample statement shows: "I think that communication and actually passing the message

or communicating to their teams in front of 20 people, especially when speaking in English trying to articulate it, is one of the challenges that I have seen."

So, apart from ranking low in my experiment, thinking around this parameter revolves mainly around the immediate and the tactical, such as language skills or tone of voice, instead of more strategic concerns, such as how information trickles down or how change is communicated to the team in such a way that it motivates them to work towards organizational success.

Work-life: With the pandemic changing the way work is being done and the hybrid work model likely to be the dominant mode of work, middle managers will need to rethink management styles and how to inculcate team spirit and instill the organization's work culture remotely. At the time I conducted my interviews, when the pandemic was well underway, professionals expressed apprehensions about how the hybrid model would pan out, having experienced the downsides of working remotely. For instance, one interviewee said, "With work from home, though we are having meetings for teams and we are using the whiteboard and all that, I personally feel that we are still not able to mimic that environment of having everybody physically together 100%."

They will also have to handle the feeling of alienation that a remote work culture could bring in if not handled effectively. As one professional said, "For me, because of one disadvantage that I faced, as soon as I joined, as you know, the lockdown started. Face-to-face time is completely gone. The first few months I was at least able to go to the office, meet a few people, but not after March. With most organizations planning to continue work from home until the middle of next year, that's definitely taken some momentum off. I can still network, but I think it's just a matter of attitude."

There is also the issue of dealing with client concerns regarding a remote workforce. One interviewee summed it up: "I think this was the first and foremost change that my customer faced; suddenly the workforce that was going to deliver the business value for them was shifting from traditional conservative office work to work from home and we had to give back confidence to the customer."

With organizations moving toward alternative work models, middle managers will need to find ways to manage remote teams effectively. This calls for flexibility and the ability to deal with ambiguity—especially when closely monitoring the work process is not an option. My research shows that this is considered an issue that middle managers will be required to deal with, and they themselves are giving these issues a thought. As the situation is still evolving and the hybrid model itself is still to be incorporated in most organizations, it is only natural that currently, problems seem to be more on their mind than solutions. However, with just 23 statements, this parameter ranks towards the bottom of the list, something that needs to change given the rapid pace at which workplace models are evolving post pandemic.

Team management: Surprisingly, for a role whose identity is defined by team management, the topic finds a weak echo among my interviewees' statements. Just five statements reflected their thinking around this subject, and the most insightful ones involve feedback on their immediate bosses, whether it is middle management or senior management.

The belief is that managers do a decent job of regular project management, but when it comes to a technology-heavy task, they struggle: "The only differentiation I was speaking is the technology, but apart from that, the process point of view, the regular project management, client management, team management, they do a decent job, but when a task is heavy in technology, that is where they will struggle a bit." While the role of the middle management in changing times is and will continue to be "management," rather than handling technology-heavy tasks, this kind of thinking among Indian IT professionals is not uncommon. After having spent years and a lot of effort in learning technologies, they expect to be led by equally technology-savvy managers. Trust and respect for managers is often based on their technology skills. The steps organizations will take to handle these perceptions could affect how well middle management is equipped to handle their teams and lead them through change.

Some of my interviewees were, however, aware of the greater role managers can play in terms of empowering teams: "Definitely diversity of thought, it actually depends on the team and the team leader... My experience says, if your immediate boss is very open and empowering, then it is done." But the low ranking of this parameter and the fact that this point of view is an outlier indicate that a mindset change is required among individuals, and organizations need to pay more attention to this area of the middle management role.

Ecosystem support: Teams no longer work in silos. Ecosystems of various workers who bring different skills to the table are the norm now. Besides, organizations themselves no longer rely entirely on a permanent workforce. Both employees as well as external parties, such as consultants and contractors, are integral to their success. Middle managers need to deal with this new reality, especially post-pandemic, as the world of work has shifted towards a more informal structure—the hybrid work model. And as Huy Quy says, middle managers, with their tenures and their daily interactions to get their job done, are in the best position to develop ecosystem relationships that can give their teams an advantage.

How can Indian IT middle managers strategize around these ecosystems to help the organization deliver its best? What kind of support do their teams need to succeed in this ecosystem?

Important as it is to manage ecosystems in order to navigate change, my research shows that my interviewees have not reflected on this aspect of their work. It echoes with one of the managers I interviewed: "In order for us to do that, we need to be much more broad-based as a firm and we need to have a better ecosystem of industry, vertical experts, and technology specialists to come together to solve a problem."

EXPERIMENT 2

FIVE MINDSET PARAMETER DESCRIPTION

With excerpts from the interview statements

Managing change – The action mindset: Experiment 2 reveals that this is the dominant mindset among Indian IT middle managers. But how much of the actions their thinking revolves around is relevant to the current situation? The interviewed middle managers' thinking is clearly biased towards energized action, with an overwhelming majority of the statements identified for the mindset parameters falling under this category. Statements such as this one reflect this finding: "The best way to learn is to show that the management, the company, and the managers, are taking quick actions on non-performers or any of the behavioural things that call for zero tolerance, quickly firing people. Immediately, the message goes off that if I need to survive, either I change or I leave."

Even what can be considered reflective statements are decidedly action-oriented, as is reflected in statements such as: "But one of the things is tracking of things because the world is changing at a fast pace and tracking becomes very, very critical." Tracking is necessary, as this professional points out, but it is more important to reflect on what tracking can achieve in terms of identifying a range of actions from which to choose, which seems to be missing in my interviewees' thought process, as is evident in their statements.

They are, however, aware of the need to take on the role of a playing captain who takes care of the team's needs and keeps them motivated, as is reflected in statements such as: "So we keep them motivated by saying, focus on what you have, because it keeps telling them that, you know, do not focus on the changes, which are not under your control." or "So, what I feel is a major change is that previously, managers used to be more controlling and commanding, but that definition is now changing with the time where they are being more empathetic, or we can say more considerate and supporting their employees, understanding the main challenges of the growing industry." A mindset such as this is one step closer to reflection on the choices available to them to perform these functions of a middle manager, but the gaps are wide and organizations need to consider how to inculcate a mindset that is reflective, analytical, collaborative, and global mindset—not just inculcate it, but in fact bring about awareness of the need for such modes of thinking.

Managing self – The reflective mindset: Only 69 statements echoed the reflective mindset in my interviews vs. 399 for the action mindset, and that too mostly from senior managers. As discussed earlier, most managers are geared toward action as they deal with dynamic situations on the ground. This leaves little room for stepping back and reflecting on their situation and experiences. In the current context of radical change, only some of the managers I have interviewed were aware of the need to develop a reflective mindset, understand what is needed in the future of work, and what actions are needed at the individual and organizational level to adapt to this change.

My interviews revealed that there is an awareness among managers about the need to reflect on the context in which the IT industry stands today, particularly about the changing scope of work, from

volume to value-add. This is reflected in statements such as the following: "They have certain ways of looking at things because obviously the mindset is different between onshore and offshore here in India. But then the flexibility is there for you to execute and that gives a better opportunity to work unlike in earlier days, when it was difficult." Statements such as this show that some managers are aware that they have room to make choices that can help them steer their teams through change.

It mostly translates into the realization of the need for life-long learning: "We look for specialization in technical skillset, but with my own journey, I believe that if the person is having that attitude and is having the right mindset to learn things, you can quickly learn any technology." Moreover, the understanding that career progression and survival in an organization depends on more than just getting promoted at regular intervals: "I think the fundamental idea that one skill could help us survive has changed; individuals need to be multitaskers, and not necessarily be experts of something, but rather they should process either technical skills or the ability to communicate properly what they know and so on and so forth are some of the things that have changed."

Managing organizations – The analytical mindset: My interviews revealed an awareness of the need for both number crunching – "So, if I really do well only in my role, probably, I might not achieve much. I want to head an analytics group or something because the hard work, whatever I am putting in, it is not just like doing very good in day-to-day life." – and a deeper analytical mindset, reflected mostly in the context of a change in focus from volume of IT projects to working on more client-centric, value-added work – "Over the last few years, things have changed so much – the messaging, the way of teaching it to a customer, understanding the specifics of a customer – became much, much more critical."

Managing context – The global mindset: A few of my interviewees were aware that the world of work is now an ecosystem of global workers getting together to achieve a common mission. They expressed the need for workers to make some tweaks in how they perceive and think through this scenario – "So firstly, I think there's no question about it that working in a company like an MNC global mindset is like very, very important and keeping myself abreast of what is happening around the world is very important, though it's not just about the company, it's probably just about the country, just about the world, the people that you talk to from other regions. It is very, very important to understand their culture."

Managing relationships – The collaborative mindset: This translates into a need for middle managers to be a playing captain, innovating on the ground rather than a team lead remote from day-to-day happenings, as reflected in some of my interviewees' discussions. It also translates into an awareness of the need for middle managers to lead change in perspective from their organization being an offshoring unit that handles large volumes of routine work to one that adds value by providing creative solutions to clients' problems: "So apart from traditional management skills I would say if there's more stressing on people management and behavioural management and influencing, I think these are the key areas in which now this particular role is focusing – how can I use my networking skills to propagate the change, how I can influence the customer to undergo transformation, which will not only benefit them, but benefit my organization?"

EXPERIMENT 3 (A)

INDIVIDUAL PARAMETER DESCRIPTION

With excerpts from the interview statements

Family background: Work and life are necessarily intertwined, and the family plays a significant role in the individual's success and performance in the workplace. There are two ways in which family contributes toward work-life: Support and conflict. From my interviews, when the work world is moving toward an ecosystem of organizations, professionals need to look for sources of support from across organizations and work fields. Support often comes in the way of mentorship, as in one manager's case: "A lot of my family members are people who have been in touch with who know my journey; so I am in touch with some of my older managers know me for a while and have seen my career grow or some of my relatives. I look up to them and ask them for insights." Or, in the case of another, "I kind of bounce off my little midterm ideas to my family so that they can keep me honest that I am progressing on it; to be accountable to someone."

As I had mentioned before, the work-life of a woman manager is different from that of a man. For some of the women managers I interviewed, balancing work and family responsibilities becomes a source of conflict: "And these days, since we are all more like a nuclear family, looking up to child and family and work was always a challenge." One of them said, "So I think those are the challenges where you always think, am I able give my best based on the environment that I work in and after working in that role, probably for three-and-a-half years I decided to expand my family and go ahead with my second child, I did not want to get into a role which was demanding like this and wanted to have a little more flexibility in terms of what I want to do, being only accountable for my share of work." So a compromise is struck between professional growth and managing family responsibilities.

Education: When it comes to education in the IT field, two skills are essential—technical and managerial. In India, where technical skills are usually in the spotlight in the education field, managerial skills might get less attention, which will come into play once the professional reaches the junior and mid-management levels, especially during times of change when the manager is expected to don the role of a playing captain. As one of my interviewees explained: "So, from an education perspective, they have sound technical know-how, but they do not have managerial or people management skills."

Moreover, while education may be necessary at the entry-level, many professionals believe they learned much more on the job: "So, education probably I think they would help to some extent, but not necessarily once they're into that role." How much of the skill-set a professional acquires in higher education is helpful on the ground is also uncertain. As another of my interviews said, "I studied mechanical engineering, but I'm not using many of those concepts, not much of the mechanical engineering skills. One skill which I am utilizing more than anything else in mathematics."

This calls for life-long learning, which puts the burden of educating the workforce on the organization, though there are cases when mid-career managers quit their jobs to pursue a course that can help them hone the skills they will need in their professional life. One of the managers I interviewed revealed, "And

that's when I switched, to formal education, investing in myself, taking that plunge after working for six or seven years and you know, investing in a very expensive education and also looking at the opportunity cost because I quit my job and it is a full-time program."

Others look toward the organization to provide that education: "...extended education and ...exposure to certain managerial skills or interactive, collaborative skills helps me do my job better on the ground." More than technical skills, middle managers are looking for soft skills such as managing teams, communication, increasing their emotional quotient, and so on: "So definitely any kind of education that helps you not only technically gear up, I think such transformation, but also increasing anything which increases your emotional quotient toward change and disruption is the education that I would recommend because I have seen many times that the middle manager has the technical capability to implement the change, but does not have the emotional quotient to understand and adapt to that change."

Personality/attitude: While education and skill-set play a significant role in surviving change, a much larger proportion of higher management professionals than middle management or junior management believe that attitude plays a key role. As one of them put it, "We look for specialization in the technical skill-set, but with my own journey, I believe that if the person has that attitude and the right mindset to learn things, you can quickly learn any technology." It is only when the professional comes to the table with an attitude to learn and continue learning throughout life, to be open to new ideas, that organizational change can occur smoothly. Change itself and change management techniques are of little use if the person experiencing the change is not open to change, as reflected in one of my interviewees' statement "So, I, I feel that they should be, you know, developing the attitude of being okay to take that risk."

Financial position: Individuals' financial background and current position also have an influence on their performance at work. One set of professionals come from families with a robust financial background and do not need to hold a job to see them through. They are in a good place as far as their investment in career goes, as they are in it out of interest in the work, as one professional told me: "I have the right support from the organization and on the personal side too, fortunately. Financially I do not need to worry." At the other extreme are individuals who come from not so strong family backgrounds but want to prove themselves by putting in their best performance. There are others who see holding their jobs as a way of meeting their living expenses and savings targets. As long as these goals are met, they may hold their jobs, but if the earnings are not what they expect, they turn to entrepreneurship.

EXPERIMENT 3 (B)

ORGANIZATION PARAMETER DESCRIPTION

With excerpts from the interview statements

Experience: The organization provides a hands-on environment for learning and gaining experience. One of my interviewees said, "If I reflect on that today, the product or the project that we delivered to the customer was to stay with them for about 15-20 years because of the diversified thinking that we brought together to the table, both in terms of the architectural principles, all the way through the implementation experience and the way we have envisioned the project to be supported."

However, by experience, I do not mean only work experience but the entire gamut of culture, technology, and physical/virtual workspace experience. However, my research shows that experience can have both a positive and negative effect on people's work. As one interviewee said: "There is an ego that sets in, you know. When you are junior, you are probably going to be asking these questions, or it is okay for you to have that, but as you grow with age and with your experience, there is an ego portion that sets in, and some people either become complacent saying, you know what, I am not going to ask because my ego hurts or I do not want to be the first person to ask."

Moreover, it often falls upon middle managers, whose work life is deeply integrated into everyday tasks of the team and whose role calls upon them to lead by example, to provide that experience: "So, it is challenging I think every day there is some new challenge that comes up and then I think the complexity of mid manager role says we will constantly have to ensure that will live up to the trust that folks put in us or empower us with, as well as ensure that the folks working with us have a good experience."

Exposure: In a work world that depends on an ecosystem of interconnected organizations, the workplace also gives professionals exposure in "terms of traveling, learning the culture, understanding what a client says, certain jargon, what does it mean, understanding their tone..." as one interviewee put it.

Interviewees appreciated the exposure that the organization provided them, as is evident from one of my interviews: "In my entire career span as part of the middle management, I feel that I was given lots and lots of exposure in terms of trying, given a free hand on anything to reach out to anybody. No hierarchy. Wherever or whatever knowledge I could bring to the table, whatever best I could bring the table."

However, sometimes, there are barriers to this exposure: "Quite often what happens is when you are cocooned in your delivery role or whatever role that you perform, your exposure points are limited, and you think that that is the world." Moreover, much depends on leadership style, as is expressed by this interviewee: "I am not talking about any organization, what I am saying, in general, is that organizations have a very myopic view and it is the individual who has to break the higher-ups sometimes, the myopic view of the higher-ups and not only for yourself but for your team members also to create that opportunity of exposure."

With Indian IT organizations aspiring to move from scale to scope, the outsourcing environment brings its own challenges in terms of exposure: "And why I say this is because, you know kind of traditionally or historically, we have been a low-cost centre and the companies have looked upon us as resources to

outsource some work, you know, push that work to India and being a technical guy and a technical architect. I have seen this challenge where to gain good experience and to be among the top-notch people in the IT industry where you have to be technical enough and hands-on enough you have to get good exposure and good experience."

Environment: An open environment where professionals find it easy to open up and express their thoughts is required for today's fast-changing IT organization. Do our organizations provide this environment? Some do find this kind of environment at their workplace: "So, I come up with ideas stating that, okay, if we have this kind of work environment, it is going to suit us and he definitely encourages and even adopts most of the ideas that we suggest so in that way they are very encouraging, compared to Indian managers, who say yeah, yeah, yeah, we will think of it."

However, it takes effort as one interviewee said, "So other than monetary benefits, creating the value because of which the employee would want to be with the team and creating that kind of positive environment we can try, despite certain goals, to take time to achieve something, that is very challenging. We need to face this daily, and we have to put in much effort."

Rewards and recognition: At present, much of the reward for work and achievements is tied to promotions, though as one interviewee said, "The challenge is to make them understand that the promotion is not just a reward for what they have done, but we also have to prepare them for the new position." However, on the whole, I came back from my research with a sense that recognition, however small a gesture it is expressed with, is the crucial thing: "The recognition of what you do, even if it is a small thing, that recognition is very important."

EXPERIMENT 3 (C)

ROLE PARAMETER DESCRIPTION

With excerpts from the interview statements

Mindset shift: The responses point toward the need for a mindset shift, as in the case of this middle manager who said, "The companies that had a traditional mindset of running business a certain way had to adapt to the new way of doing business."

As one interviewee said, "It is all about connect. I can work. Am I in a position to empower and enable them?" As per the grounded theory, both individuals and organizations, when empowered to connect with the teams, are in a position to perform in their roles effectively? Where is their mindset on that? Moreover, the thinking of middle managers I interviewed is tuned toward a change in mindset from being an outsourcing hub, "So I think that is what I keep hearing from people is that you know, this whole thing of services organizations working with that vendor mindset: if I am doing that managed service right, how do I add bodies to the work and not add real quality work?" to building something unique that would thrive in this environment of change: "I think the middle managers now need to get into this adaptive mindset and they need to be the key enablers and key change drivers in order to get the particular thing growing."

Connect: Being the middle layer, middle managers are responsible for connecting the senior management with the junior management. In the words of one middle manager: "All I'm doing is helping people connect one dot with the other - that's what I'm confined to in my role as a middle management." They are also the layer of managers who are closest to the ground and know both professionals and their day-to-day work best.

For the organization of the future, this is not sufficient. Connecting also means mentoring and grooming and supporting—being a playing captain, in short: "The manager should also be a mentor...a manager knows the positives and negatives and all, but then maybe in certain activities the manager has also to be a mentor because they will groom you, nobody knows you more than a manager in an organization." It also means fostering a feeling of being one team. As one junior manager put it, "So, I am not saying that any organization in this world has a perfect performance evaluation or perfect answer on how to handle failure, but as an organization, if I can bring in that culture of...saying...okay, we are in it together."

Empower: When employees feel empowered at work, they perform better, are more satisfied with their jobs, and are more committed to the organization. Middle managers can play a crucial role in ensuring that employees feel empowered. As the HBR article "When Empowering Employees Works, and When It Does not" says, while employee empowerment does not lead to improvement in the performance of routine tasks, leaders who empower their subordinates motivate more creativity and citizenship behavior, such as helping colleagues. These leaders are more likely to be trusted by their subordinates. Two parameters are essential in the quickly transitioning landscape of the IT industry and the Indian IT industry, which aims to move from being an outsourcing hub to sculpt an identity for itself – one that is based on value-add and quality rather than volume work.

Junior management professionals in my study expressed the need for empowerment: "More than actually sharing anything new, I think it's a good validation for you on what ...people are doing it, that is making

people feel connected and inspired to work with someone, and the feeling that they're a part of the organization with a lot of empowerment, what sets it apart from an organization with too much hierarchy."

Middle managers, too, see the empowerment of juniors as essential for their success. As one interviewee put it: "So, what I feel positive about...is the investment I have made in people because my success is dependent on my team's success. If I am not empowering my team, if I am not standing up for them while they are going through tough situations in their lives...if I am not supporting them as a leader they will not back me while I am going through the same situation. Which means I won't be successful if I don't see them being successful."

How to empower people while ensuring the nitty-gritty of daily tasks are not affected is the challenge that middle managers face today.

Energize: Energetic employees are vital for an organization's success, especially in times of change, as one of the professionals I interviewed said: "How quickly you adapt to that change becomes extremely important to be dynamic because most of the time all their thoughts and energies are focused on resisting the change or the existing facts on the ground asking the questions which are no longer relevant. For example, if the organization changes, if you do not adapt to it, if you do not work towards it, ultimately those are the sets of parameters on which your value is going to be measured, whether you like it or not."

Middle managers, who are close to the ground and in touch with employees on a day-to-day basis, have the best opportunity to energize them. How are they faring on this front? A mindset change is required, as one interviewee explained, "See it is like the new generation of people, they have the enthusiasm and energy levels and everything, but there is a slight difference between the previous generation's way of thinking and current generation's way of thinking, that is what I observed particularly the millennial generation people."

