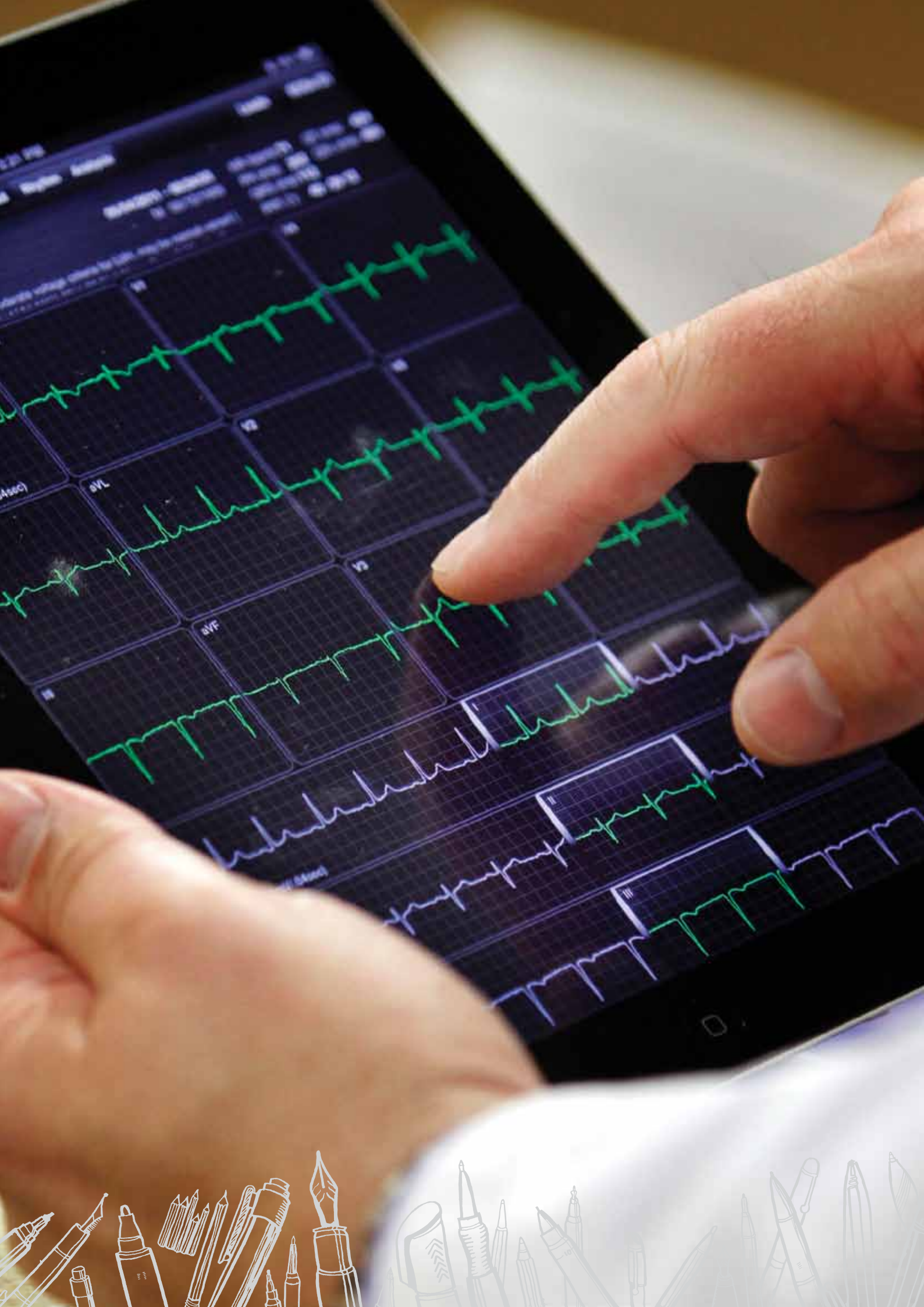


PMI - EY Study on Perspectives of Indian Organizations on Project Management Skills

2014





Foreword

India, with one of the youngest populations in the world, enjoys a unique demographic advantage. It has the potential to supply skilled manpower for both domestic and global markets. India's growing economy demands trained and certified skilled manpower to address the challenges of growth. However, local organizations are currently struggling with the scarcity of skilled labor and inadequate skills of their existing employees. This challenge is likely to assume greater proportions, given that every three out of four new job opportunities would be "skill-based"¹.

To resolve the stated issue, the Government of India (GoI) has placed strong emphasis on upgrading peoples' skills by laying down a framework under the National Policy on Skill Development (2009). The framework goes on to define the role of various stakeholders – government, industry and the civil society – in creating a skill development ecosystem in India. The private sector is also playing a vital role by undertaking several initiatives to augment the government's efforts to develop skilled manpower. Across sectors, companies are implementing initiatives to boost their in-house training approach, as well as to develop the skill sets of their employees through external interventions.

It is with this background, Project Management Institute (PMI), along with Ernst & Young (EY), conducted this study to highlight the key skill sets required by six crucial industry sectors of the Indian economy, the role of project management in developing these skills and the associated challenges and success stories of adopting project management in Indian organizations. For the study, PMI and EY contacted 72 Indian business leaders across six critical sectors – IT-ITeS, infrastructure, energy, telecommunication, automotive and financial services.

We thank all the respondents for taking time out to talk to us and share their invaluable insights and experiences.





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1

Executive summary

Skilled manpower – a major growth challenge for Indian organizations

In the last two decades, India has emerged as one of the fastest-growing economies in the world, with local organizations now competing on a global scale. India is expected to continue to grow at 8%² in the next 10 years. To fuel this growth, adequate availability of skilled human resources is imperative. Globally, one in three employers cites lack of industry-specific skills as a reason for the inability to fill vacant jobs. In India, particularly, almost 48% of employers are facing difficulties in filling up vacant positions³. One of the key differences between high and low-performing organizations would be defined by their ability and attempt to re-engage with internal stakeholders – the “in-house talent pool”. An EY global survey highlights that high performers are almost 70% more focused on improving and broadening their workforce’s skills and 56% more focused on equipping their teams to be more productive⁴. Attracting and retaining skilled talent would, thus, become a major priority area for organizations.

The GoI recognizes this challenge and has earmarked skill development as one of the priority agendas for the Twelfth Five-Year Plan (2012-17). It has doubled funds for skill development under the National Skill Development Fund (NSDF) by INR10 billion in the Union Budget 2012-13. Furthermore, it has identified 20 high-growth sectors with the potential to absorb the newly generated skilled workforce⁵.

In this context, PMI and EY commissioned this study to map skill requirements in six critical sectors: IT-ITeS, infrastructure, energy, telecommunication, automobiles and financial services (FS). Out of the 20 high growth sectors identified by the GoI, these six sectors contribute to more than 40% of India’s GDP⁶. They cumulatively require more than 72 million additional skilled resources over the next decade⁷.

2 “The skill development landscape in India and implementing quality skills training,” FICCI, August 2010, pg. 4

3 2012 Talent Shortage survey, Manpower Group

4 “Competing for growth - Winning in the new economy”, Ernst & Young, 2010

5 “Skills is the future,” The Times of India website, http://articles.timesofindia.indiatimes.com/2012-04-30/news/31506351_1_soft-skills-vocational-education-sectorkills-council, accessed 2 August 2012

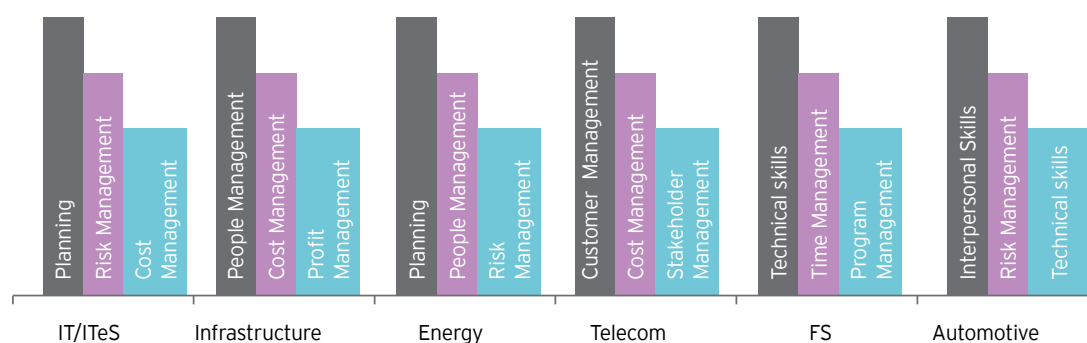
6 EY Research; “Economic Survey of India 2012-13,” Union Budget website, www.unionbudget.nic.in, accessed 15 April 2013

7 “NSDC sector reports,” NSDC website, www.nsdcindia.org, accessed 18 April 2013; “Report of The Working Group on Power for Twelfth Plan (2012-17),” 2012 Talent Shortage survey,” via Manpower Group

Organizations are striving to address their skill/competency challenges

This study clearly indicates that business leaders across the six sectors acknowledge the fact that adequate availability of skills (related to cost, time, risk and people management) is of critical importance to ensure the success of their respective teams/organizations (as shown in the chart below).

Three most important skills in the six sectors



Source: EY PMI Research

More than 90% of the business leaders recognized a direct co-relation between an employee's professional growth and the possession of these skills. The study revealed that as a professional manager grows within an organization in any sector, management emphasizes on skills pertaining to people, stakeholder, cost and profit management, as against core technical skills. In acknowledgement of these concerns, leaders are setting up intervention through steps including:

- ▶ Customized internal training modules
- ▶ On-the-job learning and mentorship
- ▶ External certifications for areas such as project management

Growing acceptance of formal project management training as a means to improve skills and competency

At the managerial level, most organizations desire proficiency in project management. Our study revealed the growing acceptance of a focused training program around project management as a means to address skill-related challenges.

The study highlighted that organizations across the six sectors have initiated project management training programs, though the degree of adoption and the maturity of implementation varies. Early adopters have started reaping benefits in terms of better execution, efficiency and costs. Across sectors, business leaders envisage project management training playing a greater role in ensuring employee development in future.



2

Project management study – approach and methodology

Research objective

The study aims to develop a qualitative understanding of the perceived skill gaps and assess the perception of project management in the six key sectors of the Indian economy.

This study focuses on identifying the key competencies desired by the six industry sectors and the role of project management in developing and providing these competencies, the extent of project management adoption in Indian organizations and the associated challenges and success stories.

Scope

The study aims to answer the following key research statements:

- ▶ To understand the perceived skill gaps across key business functions in the six focus sectors and identify the role of project management in addressing these skill gaps
- ▶ To understand the role of project management across various functions in the focus sectors
- ▶ To identify the key decision factors and stakeholders in project management practice adoption
- ▶ To identify methodologies and resources, including training and certifications, employed by organizations to drive project management adoption
- ▶ To enlist critical challenges faced by and success stories of organizations adopting project management practices

Methodology

This study is based on findings from primary research, expert interviews, consultative meetings and secondary research. Primary research and expert interviews entailed in-depth face-to-face communication or telephonic conversations. We contacted representatives from public sector units and corporate organizations, both publicly listed and privately held, across the focus sectors.

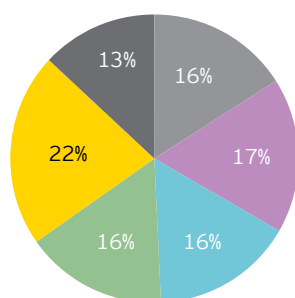
The questionnaire for primary research was framed jointly by EY and PMI, and in-depth interviews (both face to face and telephonic) were conducted with 72 industry leaders employed as:

- ▶ Managing Director/C-suite executives
- ▶ HR Heads/Senior HR executives
- ▶ Business Heads/General Managers/Directors
- ▶ Vice President/Senior Project Managers/Senior Managers

Interviews were conducted by senior representatives from Ernst & Young, India – Advisory practice specializing in the focus industry sectors.

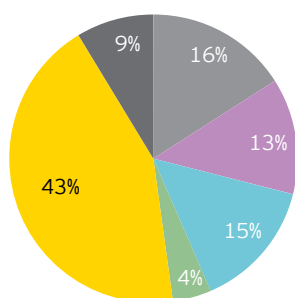
For secondary research, we utilized our in-house data bank, publicly available research reports from government and private sources, and annual reports of relevant ministries and statistical bodies.

Participant sector breakup



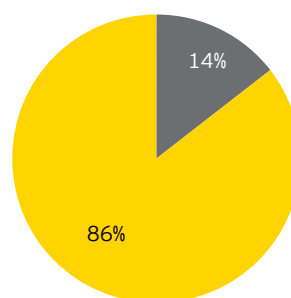
■ Auto ■ Energy ■ FS
■ Infra ■ IT ■ Telecom

Participant's company annual turnover (INR million)



■ 10000-25000 ■ 25000-50000
■ 50000-100000 ■ 5000-10000
■ Greater than 100000 ■ Less than 5000

Participant organization – type



■ Private organization
■ Government organization

Source: EY-PMI Research

Limitations

Primary research data is representative of large organizations, typically industry leaders in the respective sectors. Respondents are from large organizations of varied size and scale, and thus, the research does not capture inputs from relatively smaller organizations and the unorganized sector.

3

Perspective of Indian organizations about project management skills – key insights

This study focuses on six major sectors of the Indian economy: IT-ITeS, infrastructure, energy, telecommunications, automotive and financial services.

“Project management can be defined as a way of developing structure in a complex project, where the independent variables of time, cost, resources and human behaviour come together.”

– Rory Burke, author



IT-ITeS



Infrastructure



Energy



Telecommunication



Automotive

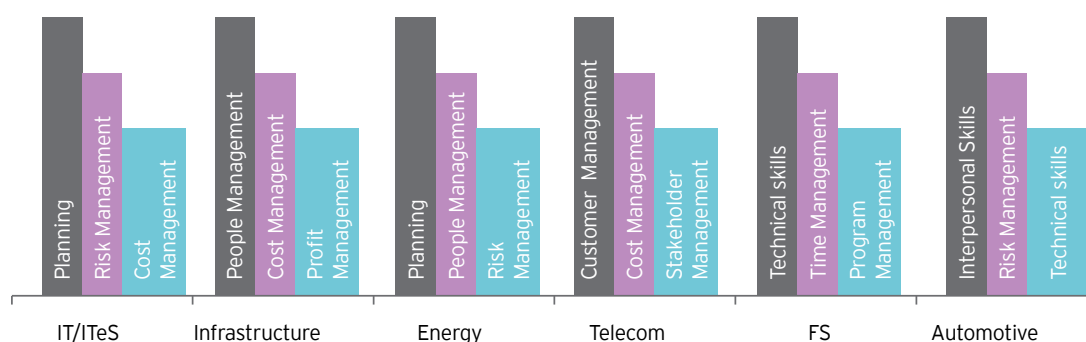


Financial Services

Skills required to succeed in each sector – a snapshot

From our interaction with industry leaders across the six focus sectors on the most desired competencies, we identified the three most important skill sets for each:

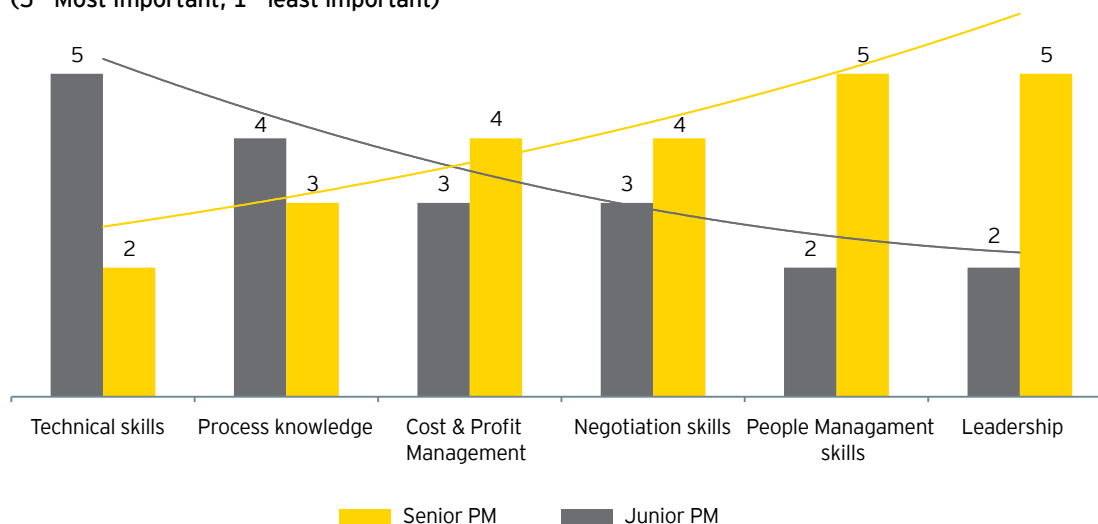
Three most important skills in the six sectors



Source: EY PMI Research

The study also highlights the desired skill sets sought in employees at the managerial level that would enable them to successfully carry out their senior management responsibilities. The following graph depicts the relative importance of six key skills desired at different managerial levels, as revealed by the study:

Change in skills profile - Junior PM to Senior PM (5 - Most Important, 1 - least important)



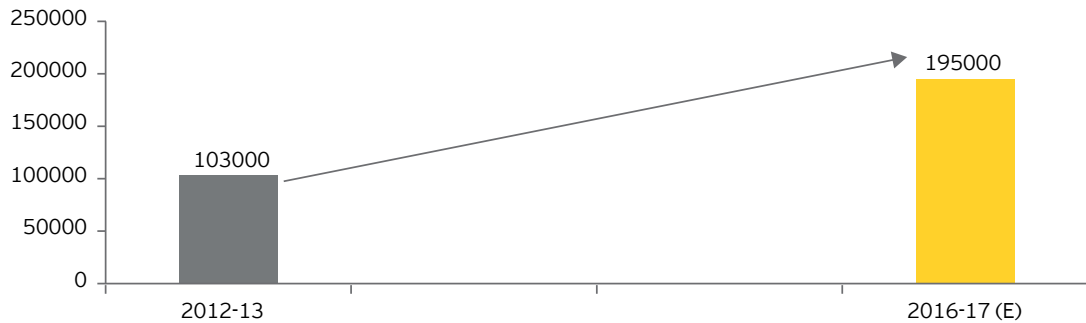
Source: EY-PMI Research

The importance of project management in the development of these skills is evident from the fact that of the growing demand for skilled professionals, a fair share is for skilled project managers. Currently, about 100,000⁸ project managerial jobs are vacant in India across the six identified sectors. **By 2016-17, these sectors would require about 200,000⁹ project managers, leading to an incremental demand of close to 100,000 staff. The number of trained project managers in India would, thus, need to grow at a proportionate rate over the next four to five years.**

⁸ EY Analysis, "NSDC sector reports," NSDC website, www.nsdcindia.org, accessed 18 April 2013

⁹ EY Analysis, "NSDC sector reports," NSDC website, www.nsdcindia.org, accessed 18th April 2013

Number of project managers in the six identified sectors



Note: Projected figures for 2016-17 are shown

Source: EY Analysis - NSDC sector reports

“The demand for project managers in our organization has gone up due to new projects. This is typically met by both internal movements and lateral hiring. The pool of trained project managers has also gone up by around 10%-15%.”

– Dean, project management academy of one of the largest technology, engineering, construction and manufacturing companies of India

More than 90% of the organizations surveyed indicated that they are investing time and effort to develop the skills of professionals, including those of project managers, through a set of interventions, including internal training modules and external certifications.

In-house training modules provide organizations with the flexibility to modify content to suit their business and sector context, while being relatively economical. External certifications, on the other hand, provide a measure of standardization of competencies for industry professionals. A large part of these training interventions are focused on specific skill sets, including project management ones. The responsibility for driving these initiative lies with the following stakeholders in an organization:

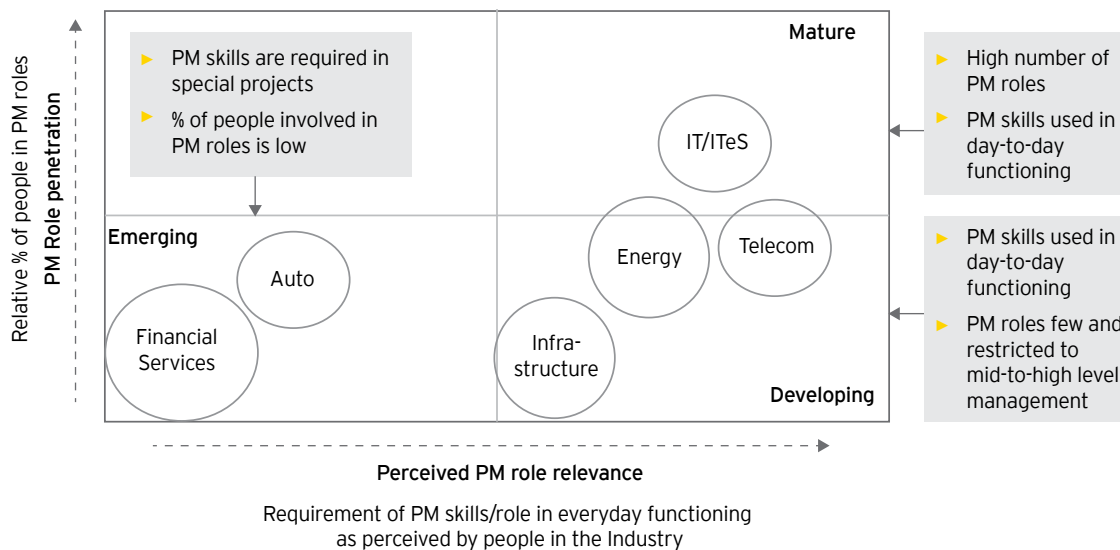
- ▶ Human Resources (HR) department
- ▶ Business unit heads/top management
- ▶ Immediate managers
- ▶ The employee

Project management penetration and relevance – categorization of sectors

The six focus sectors can be categorized into three distinct groups on the basis of penetration and perceived relevance of project management roles:

- ▶ **Mature:** Industries with high project management penetration, where project management skills are critical in everyday job execution (IT-ITeS)
- ▶ **Developing:** Industries where project management skills are critical for everyday execution but penetration of these roles is limited (Infrastructure, energy and telecommunication)
- ▶ **Emerging:** Industries where project management skills are considered specialized and are required only in case of critical projects, hence, the penetration of project management roles is low (automotive and financial services)

Categorization of sectors based on perceived project management role relevance and project



Note: Categorization based on discussion with Industry, EY Analysis

Source: EY-PMI Research

Apart from the penetration and perceived project management role relevance, the three industry groups differ on the basis of industry standards for project management, the prevalence of professional project management certifications and organizational policies driving training and certification initiatives. The table below depicts these factors in detail across the three industry categories:

	"Mature" industries	"Developing" industries	"Emerging" industries
Industries	<ul style="list-style-type: none"> ▶ IT ▶ ITeS 	<ul style="list-style-type: none"> ▶ Infrastructure ▶ Energy ▶ Telecommunications 	<ul style="list-style-type: none"> ▶ Automotive ▶ Financial Services
PM role relevance	<ul style="list-style-type: none"> ▶ Everyday project execution 	<ul style="list-style-type: none"> ▶ Frequent project execution 	<ul style="list-style-type: none"> ▶ Special projects only. Not involved in everyday execution
PM role requirements	<ul style="list-style-type: none"> ▶ Managing cross-functional teams ▶ Client expectations 	<ul style="list-style-type: none"> ▶ Efficient used of capital and labour 	<ul style="list-style-type: none"> ▶ Speedy execution of critical projects
Industry standards in Project Management	<ul style="list-style-type: none"> ▶ Defined industry standards along the lines of PMP certification guides 	<ul style="list-style-type: none"> ▶ There is a need for defining project management standards in industry 	<ul style="list-style-type: none"> ▶ Project Management is not identified as a focus/core skill here
Industry value attached with PM certification	<ul style="list-style-type: none"> ▶ "Industry Buzz" associated with PM certifications influencing career and clients of companies 	<ul style="list-style-type: none"> ▶ No "Industry Buzz" attached to certifications, experience is critical for job execution 	<ul style="list-style-type: none"> ▶ Project management skills more relevant than certifications
Organizational policies driving PM certification	<ul style="list-style-type: none"> ▶ Focused training and certification policies which are mature and clearly defined 	<ul style="list-style-type: none"> ▶ Well-defined policies on PM certifications missing 	<ul style="list-style-type: none"> ▶ Sporadic instances of policies around PM training

Source: EY-PMI Research

4

Focus sectors – Mature

In industries identified as “Mature”, project management methodology forms the core of project delivery solutions and is perceived to be critical for day-to-day functioning. The penetration of project management roles in the sector is also quite high. Out of the six sectors identified for this study, IT-ITeS sector can be categorized as “Mature” on the parameters discussed earlier. In this sector, project management roles are prevalent even at the mid-management level, wherein organizations entrust their employees with project management responsibilities relatively earlier in their careers. The IT-ITeS sector has the maximum percentage of employees in project management roles and employs the maximum number of certified project managers to execute projects as compared to the other five sectors.



IT-ITeS

Project management is like juggling three balls - time, cost and quality. Program management is like a troupe of circus performers standing in a circle, each juggling-three balls and swapping balls from time to time'

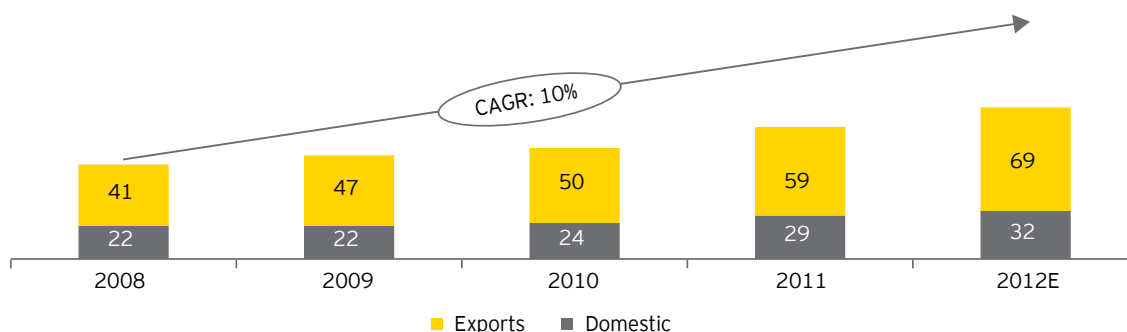
– Geoff Reiss, author



IT-ITeS industry – growing at 10% annually

The year 2012 was a phenomenal one for the Indian IT-BPO industry, with aggregate revenues crossing the USD 100 billion mark and exports contributing USD 69 billion¹⁰. India increased its market share by 7% to capture 58% of the global sourcing industry in 2011¹¹. Software and services contributed approximately USD 88 billion to overall revenues, with IT services accounting for 58% and BPO accounting for 23% of overall revenues. The IT services segment grew by 19%, whereas the BPO segment grew by over 12%¹².

IT-BPO revenue aggregate



Source: Strategic review 2012 - IT - BPO Sector in India, NASSCOM

The IT and ITeS industry is a major employer, with about 2.8 million staff directly employed by the industry¹³. The industry would employ close to 7.5 million persons directly by 2022¹⁴, translating into an incremental human resource requirement of about ~4.7 million employees in the coming decade. The majority of this demand is expected from the ITeS/BPO exports sector (>50%), followed by IT exports and the IT domestic market.

10 "Strategic review 2012 - IT - BPO Sector in India," NASSCOM report

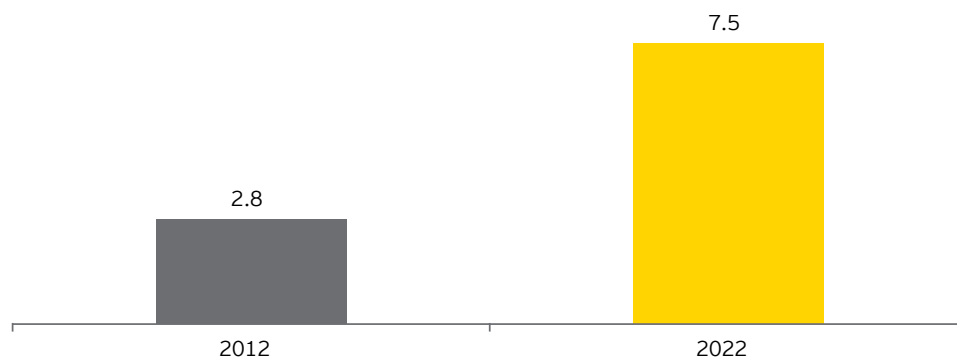
11 "Strategic review 2012 - IT - BPO Sector in India," NASSCOM report

12 "Strategic review 2012 - IT - BPO Sector in India," NASSCOM report

13 "Strategic review 2012 - IT - BPO Sector in India," NASSCOM report

14 "Human Resource & Skills requirement in the IT and ITeS Industry Sector (2022)," via National Skill Development Corporation

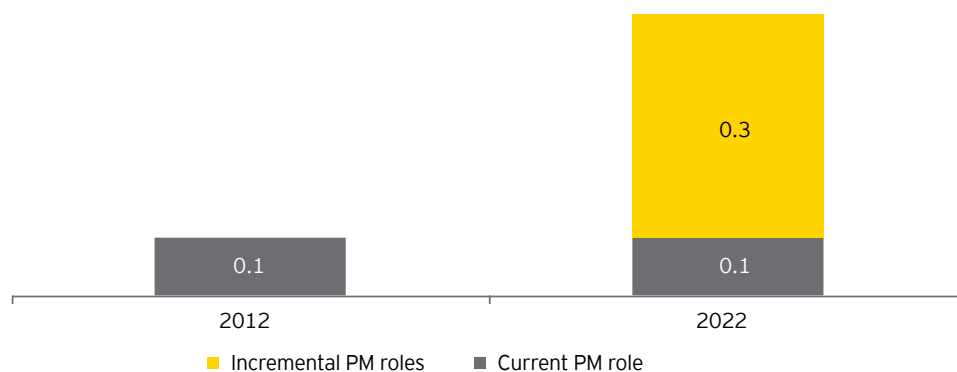
No. of people directly employed by IT/ITEs sector by 2022 (million)



Source: Strategic review 2012 - IT - BPO Sector in India, NASSCOM, Human Resource & Skills requirement in the IT and ITES Industry Sector (2022), National Skill Development Corporation

An important constituent of this 7.5 million resources to be employed by the IT-ITeS industry by 2022 would be project leads (5-8 years of relevant experience) and project managers (9-14 years of relevant experience) to handle multiple projects of varying ticket sizes. Out of the incremental requirement of close to 5 million employees, more than 5% employees, i.e., **close to 3 lakh employees, would be needed to fill project manager positions in the IT/ITeS sector.**

No. of PM roles in IT-ITeS (millions)



Source: Human Resource & Skills requirement in the IT and ITES Industry Sector (2022), National Skill Development Corporation

The IT-ITeS sector is and would continue to be the largest driver of project management roles in India, with a relatively high percentage of people in project management roles and a greater perceived project management role relevance in everyday functioning.

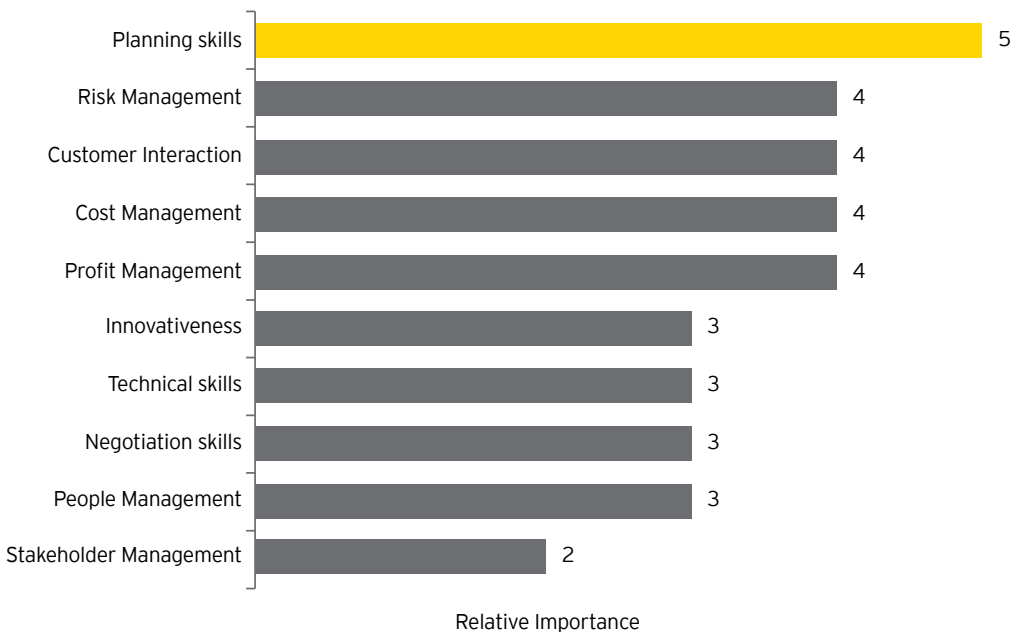
15 "Human Resource & Skills requirement in the IT and ITES Industry Sector (2022)," via National Skill Development Corporation

16 "Human Resource & Skills requirement in the IT and ITES Industry Sector (2022)," via National Skill Development Corporation

IT-ITeS – key competencies and skill gaps

Through our discussion with industry leaders in the IT sector, we identified the following competencies required to succeed in the IT-ITeS industry:

Competencies needed to succeed in IT-ITeS industry



Source: EY-PMI Research

The top five skills are planning, risk management, customer interaction, cost management and profit management.

Ironically, industry experts believe that these competencies are not a strong suit of industry professionals. Discussion with industry leaders clearly depicts that organizations need to spend more time and effort on training people on these skills, with emphasis on planning and cost management. Many of these skills are a part of the gamut of skills included in project management. Project management is core to the delivery solutions of the IT-ITeS industry. To remain competitive in the market, respondents believe that companies would need to put in place intensive training modules around such skills.

Current skill gaps in IT-ITeS sector relative rating (5 – high 1 – low)



Source: EY-PMI Research

Customers now demand project management skills in their technical experts. As a result, IT organizations are increasingly looking for techno-managers who will play a hybrid role of managing both technical and project management functionalities.

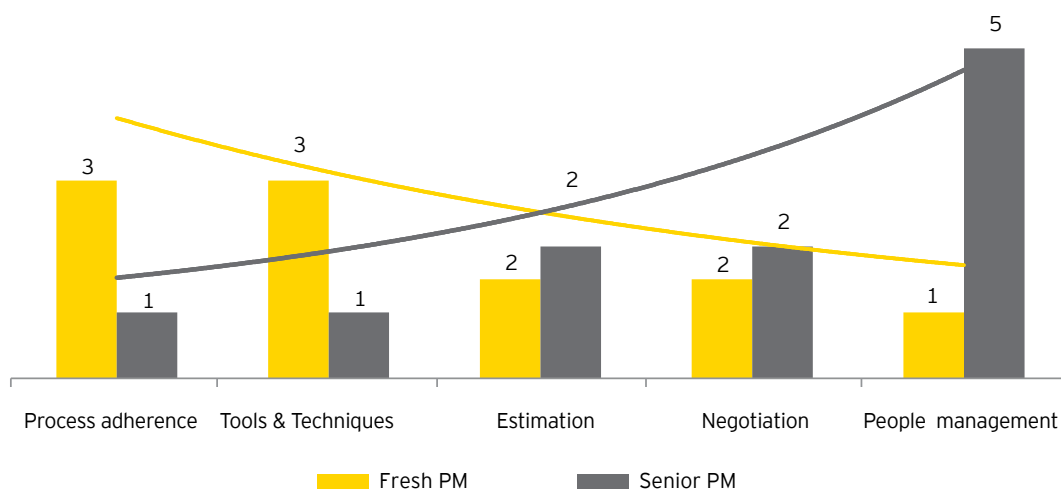
“Unfortunately as an industry we have not put in enough effort to address the project management issues sufficiently, top management of companies talk about project management a lot but do very little to address issues related to it.”

– Global head of a business unit for a leading global information, communications and technology company

The typical experience profile for a fresh project manager in IT-ITeS is 6-7 years, with a strong technical background and some experience in people management. A senior project manager, on the other hand, would have close to 10-12 years of experience, with at least 4-5 years of prior project management experience. Organizations would entrust the responsibility of handling a team of 30-40 employees to a senior project manager, with multiple project managers reporting into him/her.

The study revealed that companies in the IT-ITeS sector place great emphasis on process adherence and the use of project management tools for early project management roles. However, in the case of senior managerial responsibilities, the focus shifts to people and customer management.

Change in Skills Profile - Fresh PM to Senior PM
(5 - most important, 1 - least important)



Source: EY-PMI Research

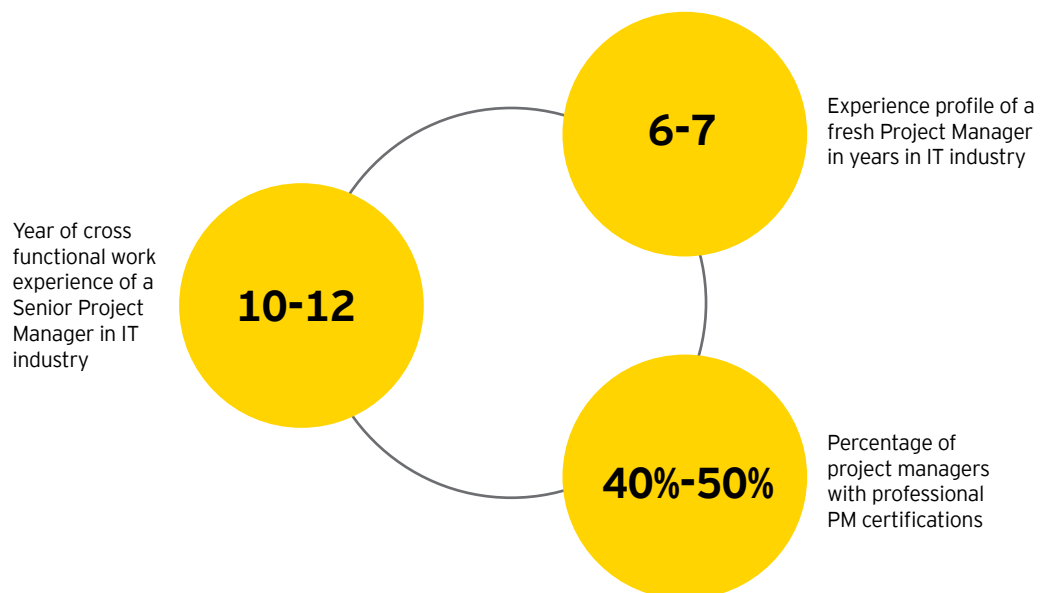
Project management - training and certification

Within the IT sector, policies and perceptions about project management vary significantly across companies. Tier 1 IT companies and MNCs have well-established policies for project management training and external certification owing to a large budget allocated for learning and development. On the other hand, owing to the cost factor, most of the tier 2 IT companies encourage but rarely sponsor their employees for third-party certifications. The preferred mode of project management learning in tier 1 companies is a mix of internal training and external certifications. Tier 2 companies, on the other hand, focus solely on internal training programs. In fact, almost all IT giants now have their own internal training and certification modules, tailor made for their specific requirements to complement external certifications. Moreover, tier 1 IT companies usually sponsor or reimburse the cost of certification and training of an employee on completion of the course, whereas smaller IT companies follow a selective reimbursement policy.

An important driver for third-party certifications in the IT sector is customer demand for certified project management professionals. The key certifications in demand are PMP and Prince 2 certifications. While PMP certificates are preferred in India and the US, Prince 2 certificates are in vogue for European accounts.

In the case of tier 1 IT companies, 6%-10% of the employees are in project management roles, with 40%-50% of these project managers being third-party certified.

The study revealed that the key influencers in IT organizations with respect to training and certification of employees on project management modules are primarily HR and the BU heads. In most companies, HR/L&D drives the budget for project management training and certifications (including internal trainings) and coordinates with BU leaders for effective implementation. The typical training budget per person in a tier 1 IT company or an MNC is INR 20,000-25,000¹⁷ annually.



Source: EY-PMI Research

17 EY-PMI Research

Project management adoption – challenges and success stories

Organizations in the IT sector are driving project management adoption through the implementation of robust systems for monitoring projects and by making project management adoption a part of a manager's KRA.

However, the sector continues to face challenges in project management adoption due to the following reasons:

- ▶ Project management is still not central to every firm's business strategy. Top management needs to realize that investment in Project Management practices would improve bottom line.
- ▶ Lack of trained and certified project management professionals

In line with this theory, respondents affirmed that companies, which have been successful in driving project management philosophy in their organizations, have reaped substantial benefits:

"Project management is about values that people follow within an organization. Project management is an intrinsic part of our value system. We have seen measurable improvements in our performance, client satisfaction and bottom line by ensuring adherence to our value system."

– Director, Delivery Excellence, a global technology, innovation and consulting corporation

"We initiated a dedicated program aimed at creating project managers focusing on India, Middle East and South Africa. Program has been very effective in training people on skills such as risk management, planning etc. and the results have clearly shown in their work outputs."

– ADM, Operations, a leading global systems integrator and business transformation consulting organization

Summary:

The IT and ITeS industry is a major employer in the Indian economy and is expected to employ close to 7.5 million persons directly by 2022. A major percentage of the incremental human resource requirement will be for project manager roles.

The study identified that planning, risk management and customer interaction skills are crucial to succeed in the IT-ITeS industry. Customers now demand project management skills in their technical experts. Tier 1 IT companies and MNCs have well-established policies for project management training. They have customized internal training modules and sponsor employees for external certifications.

The IT-ITeS sector would continue to be a large driver of project management roles in India, employing a relatively high percentage of people in project management roles and envisaging a stronger role for project management practices.

5

Focus sectors – Developing

Infrastructure, energy and telecommunication can be classified as “Developing” sectors on the basis of penetration and perceived relevance of project management roles. These sectors have recognized project management’s importance for their daily operations and the high requirement of project management skills in everyday functioning. However, the relative percentage of people in project management roles is low, with such roles being mostly restricted to mid-to-high level management. Out of the three mentioned sectors, infrastructure has been laying special emphasis on project management methodology in the past few years. As a result, project management roles are becoming increasingly important in the sector. Overall, the percentage of employees in project management roles in the classified sectors is between 10% and 12% with percentage of Project Managers having professional PM certifications varying from 3%- 5% in infrastructure and telecommunications sector to about 40% -50% in PSU energy companies.



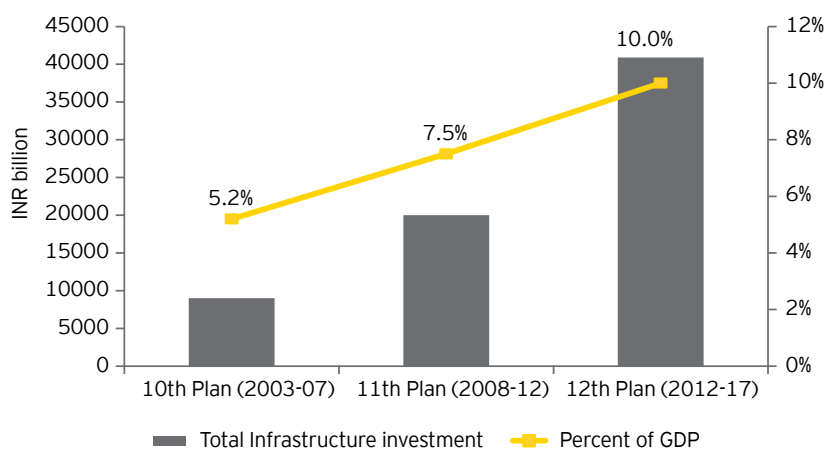
Infrastructure



"The P in PM is as much about 'people management' as it is about 'project management'."
- Cornelius Fichtner,
Public Speaker and
PMP trainer

Infrastructure sector – two fold increase in investments in the 12th FYP

The infrastructure sector comprises industrial construction, residential construction and infrastructure construction (roads, bridges, etc.). Overall, the Infrastructure sector is projected to grow aggressively in coming years. The Govt, on its part, is taking steps to accelerate investments in the sector to boost the country's slowing economy. The government has set a massive target for doubling investment in infrastructure construction from INR 20.5 trillion to INR 40.9 trillion from 2012 to 2017¹⁸.



Source: EY-PMI Research

Given the demographics of our country, the real estate sector is poised to grow significantly in coming years. The young demographic profile, coupled with strong economic growth, has led to sharp income generation. This trend has also brought about an increase in the middle class segment, which has played a significant role in residential growth in India.

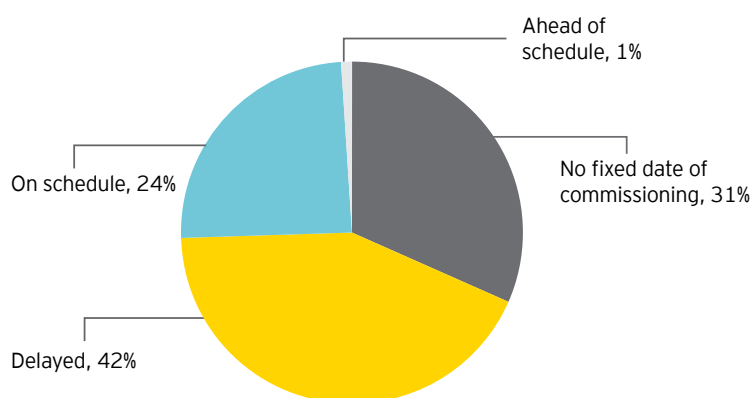
The rapid growth of the Indian economy is set to boost demand for commercial properties such as offices, warehouses, hotels and retail chains.

¹⁸ EY-FICCI Infrastructure Summit, Ernst & Young

Challenges – time and cost overrun

Time and cost overruns are the key challenges for the infrastructure industry. About 40%¹⁹ of the ongoing infrastructure projects are running behind schedule. As per project managers, most of the delays are due to extraneous reasons that can be avoided by adhering to appropriate risk management, time management and change management processes. In fact, leading EPC players have already started monitoring their projects through a centralized Project Management Office (PMO). This enables them to execute and review their projects in a more structured manner.

Project status of 564 infrastructure projects as of May 2012



Source: Ministry of Statistics and Program Implementation, Government of India

“Project management is necessary as it brings a scientific approach to running of a project with professionals trained in different stages of project like planning, conceptualization, coordination, execution, delegation, monitoring and review. We thrive to drive a structured project management methodology across the entire firm as it helps in quality execution of projects for our clients.”

- HR Head of a leading Indian energy and infrastructure conglomerate

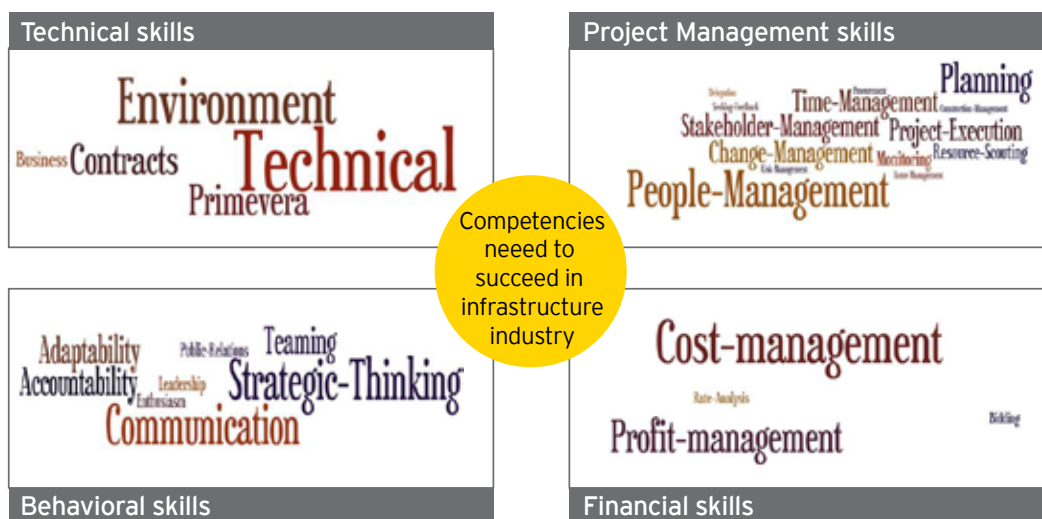
Infrastructure – key competencies and skill gaps

Project management is the core of the construction business and the backbone of its execution arm. Project management skills are particularly important for mega-projects, where time and cost are of utmost importance. We spoke with various stakeholders in the infrastructure value chain to understand skill gaps existing in the industry and methods of addressing them.

All of the business heads were of the opinion that it has become imperative for companies to hire highly skilled employees and train them on various technical and project management aspects. With an increase in the complexity of the projects being executed, firms will need to focus on addressing project management skill gaps to improve productivity.

Skill requirements, as identified by the survey, were categorized into the following four broad buckets: **technical, project management, behavioral and financial skills.**

¹⁹ Ministry of Statistics and Program Implementation, Government of India



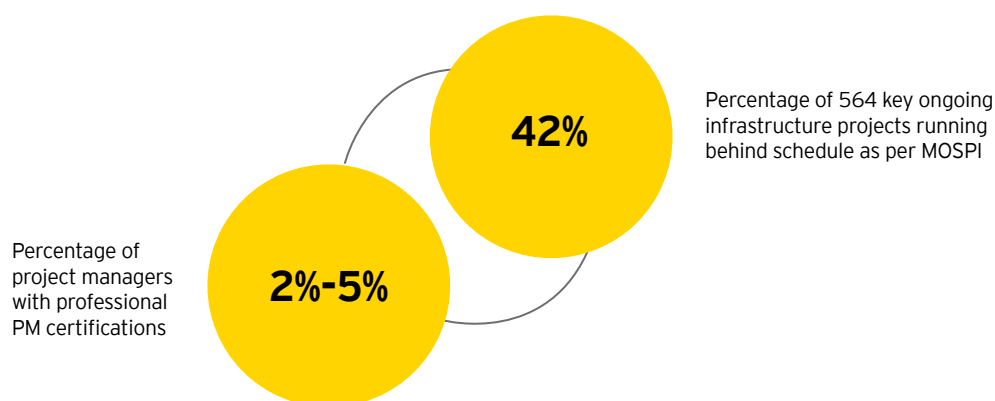
The top four key competencies desired by the industry are those of people management, planning, cost management and profit management.

As per our discussion with study participants, employees in the infrastructure industry are technically adept and possess strong people skills. However, there is a need to train employees on project financial skills such as cost management and profit management. This would help ensure that their organizations remain competitive in the era of shrinking margins.

Project management – training and certification

Respondents stated that the industry had traditionally looked to address project management skill gaps through on-the-job learning. Companies are now turning to a mix of on-the-job training and third-party certifications. Several global players are encouraging employees to opt for third-party certifications by reimbursing the cost of certification upon successful completion.

However, the availability of certified project managers in the industry remains low, with less than 5%²⁰ of the project managers having a professional project management certificate.



Source: EY-PMI Research

Apart from external certifications, firms are adopting various other initiatives to train project managers. These measures include tying up with institutes such as IIMs and NICMAR to allow managers to spend time on the campus and learn about various nuances of project management and attend mentorship sessions with senior project managers.

Adoption of Project management – challenges and success stories

Qualitative discussions highlighted that the rapidly changing dynamics of the infrastructure industry are giving rise to a number of fundamental challenges in adopting project management methodology. These are as follows:

- ▶ Resistance to change among employees toward adopting a project management framework
- ▶ Vendors/Sub-contractors are not well versed in project management and project management tools and techniques
- ▶ Driving project management in a difficult political and social environment becomes challenging at site locations

Despite these challenges, companies have been aggressively promoting project management methodology to improve their overall efficiency and, in turn, giving a boost to their profitability. Many companies indicated that they have built internal tools to drive project management adherence across the organization. Companies believe that project management would be essential to stay competitive in coming years, and infrastructure companies must focus on integrating it into their core philosophy.

“Project management is nothing but breaking down a complex task into numerous simple tasks which can then be executed on the field. Project management skills are required at all hierarchical levels across the board. In fact, project management must be imbibed in the culture of the organization. Project management philosophy needs to be driven down to the last mile executioner and all employees must be trained on such skills.”

– Managing Director, a leading Indian EPC player

Summary:

Infrastructure has been identified by the government as a focus area over the next five years. The sector's development would help improve the country's slowing economy with both government and private institutions expected to make huge investments.

In the backdrop of increasing complexity of infrastructure projects and shrinking timelines, the use of project management would become crucial in the sector. To successfully execute these projects on time, project managers must possess and develop planning, cost management and profit management skills. However, the availability of certified project managers in the industry remains low.

Companies are now starting to invest in sponsoring certification for employees and building internal tools to build project management competencies in their organizations.

Energy



"It must be considered that there is nothing more difficult to carry out nor more doubtful of success nor more dangerous to handle than to initiate a new order of things."
– Machiavelli,
Italian historian,
philosopher and diplomat

Energy – huge capacity expansion planned by the government as part of the twelfth Five Year Plan (FYP)

The energy sector can be broadly divided into three categories in the value chain: power generation, power transmission and power distribution. As a part of this study, we spoke with stakeholders across the following categories:

- ▶ PSUs involved in power generation through conventional sources of energy
- ▶ Private firms involved in the generation and transmission of power through conventional and renewable sources

India currently accounts for about 5% of the world's primary energy consumption. Its share is expected to increase to 6% by 2025²¹. Also, as per the International Energy Agency (IEA), India will need between 600 GW and 1,200 GW of new power generation capacity before 2050²². Currently, India has an installed capacity of only about 210.94 GW, and captive power plants have the potential to generate another 51.5 GW annually²³. There is a clear need to boost generation capacity to meet energy demand.

To address this gap between demand and supply, the GoI has set very ambitious targets for electricity generation, including 2,800 MW of nuclear power, 63,780 MW of thermal power and 9,200 MW of hydro power as part of the twelfth FYP²⁴. Another 1,09,440 km of transmission lines would be added during Twelfth plan. To achieve these targets, the ministry has cited an immediate need for an accredited training institution for skill building.

21 "Emerging markets insights report on Utilities sector in India, January 2013," via EMIS accessed 28 February 2013

22 "Emerging markets insights report on Utilities sector in India, January 2013," via EMIS accessed 28 February 2013

23 "Emerging markets insights report on Utilities sector in India, January 2013," via EMIS accessed 28 February 2013

24 "Working group report on power- 12th plan," via Working group, Planning commission

Projected manpower requirement as per the Twelfth Plan

Area	Capacity addition (MW)	New Recruitment (in thousands)			Total manpower		
		Tech	Non- tech	Total	Tech	Non- tech	Total
Thermal	82211	42.18	13.06	55.24	151.97	51.05	203.02
Hydro	9204	12.20	3.44	15.64	59.19	21.94	81.13
Nuclear	2800	3.07	1.31	4.38	13.03	5.84	18.87
Power Transmission		5.98	2.09	8.07	30.83	9.95	40.78
Power Distribution		249.49	74.85	324.34	828.86	253.13	1081.98
Total	94215	312.92	94.75	407.67	1083.88	1425.79	1425.79

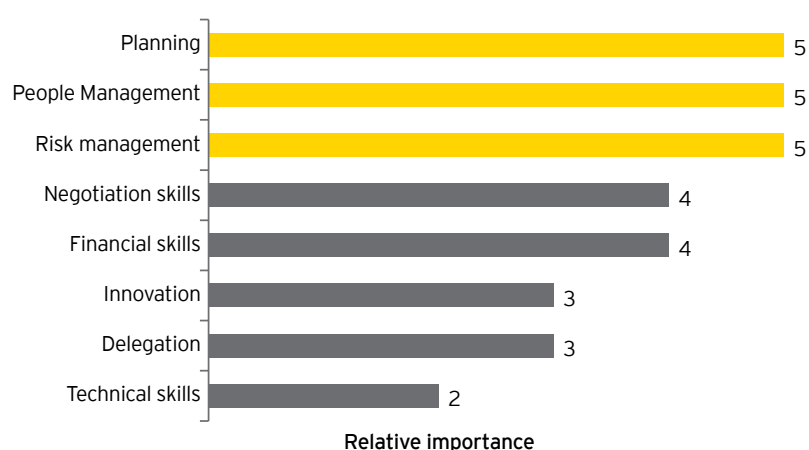
Source: The working group on power for twelfth plan, Planning commission

Energy sector – key competencies and skill gaps

The study revealed that the key skills desired in the energy sector can be classified into four broad categories. The top three skills under each category are mentioned below.

- ▶ Technical skills: domain expertise, process knowledge, knowledge of contracts
- ▶ Project management skills: risk management, planning and people management
- ▶ Behavioural skills: negotiation skill, delegation and innovation
- ▶ Financial skills: cost management, profit management, cost estimation

Competencies needed to succeed in energy sector



Source: EY-PMI study

As depicted in the figure, project management competencies of planning, people management and risk management are the most desirable skill sets for managers working in the energy sector. Respondents opined that organizations look for strong technical skills among fresh managers. As a manager steps up the growth curve, project management and financial analysis skills assume a greater importance.

Surveyed firms acknowledged the importance of project management and the need to institutionalize project management principles across respective organizations. This would form the backbone of the execution strategy in the energy sector in coming years.

“For huge organizations like ours, project management needs to be institutionalized so that it is followed uniformly across the board. As the complexity of the projects increases and competition increases, it will become imperative to follow a structured approach towards project execution. Employees must possess adequate project management skills so that we remain competitive in the market.”

– Assistant General Manager of a leading public sector energy company

Project management – certification and training

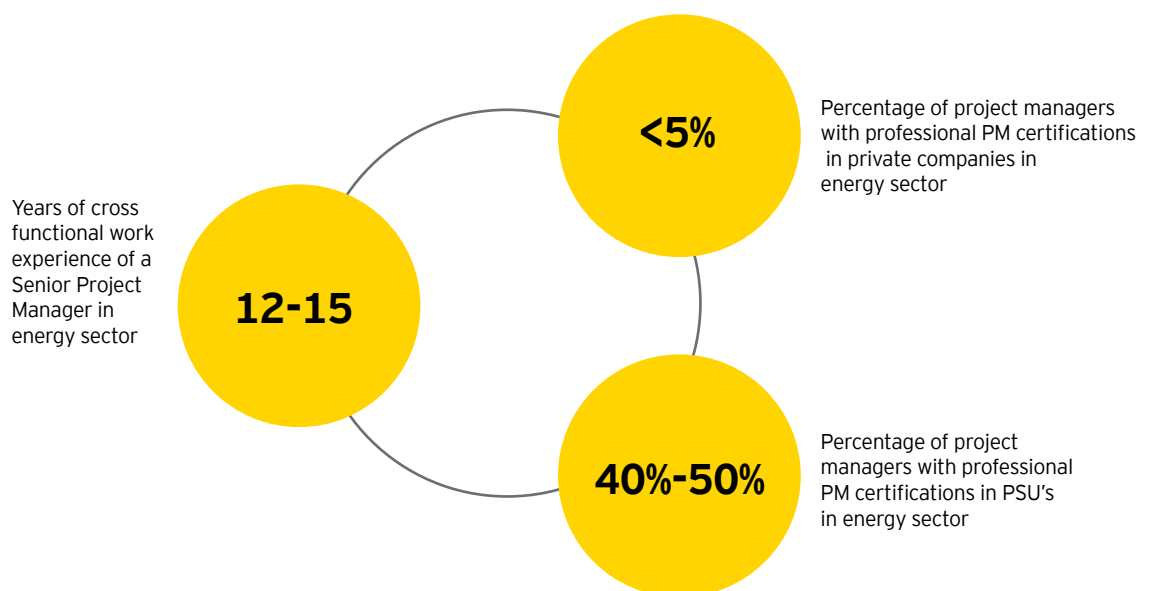
The industry recognizes the need for developing project management skills and is employing various methods to the same effect. The human resources and top management teams of major energy sector companies have identified project management as a priority training area. Companies now prefer that their contractors and sub-contractors should update their project management skills to meet industry standards. Although external certifications have not been made mandatory, they are certainly desirable, and a large number of people are enrolling for such certifications.

Less than 5%²⁵ of the project managers have a professional project management certificate, as is the case in the infrastructure segment. However, unlike the infrastructure sector, many of the giant public sector energy conglomerates in the energy sector encourage their employees to opt for project management certifications by sponsoring/arranging these certifications or reimbursing cost upon successful completion. As such, PSUs are far ahead in the maturity curve in developing trained project managers, with close to 30%-40% of their project managers being certified professionals. Also, many of the PSUs have an in-house PMO that promotes project management adoption throughout the organization and guides project managers on techniques to perform their roles more efficiently. These trained professionals, in turn, help their organizations in executing bigger and more complex projects successfully.

The industry believes that professional certifications have played an integral role in bringing about a structure and maturity in terms of PM in the industry. Until project management is taught as a formal course at the undergraduate or graduate level, third-party certifications would be the most reliable way to impart project management knowledge.

"We currently prefer PMP certification over any other certification because PMP is highly prevalent in US & Europe and these places are considered best in project execution and management. Moreover, just like IIT's/IIM's are considered best in their respective domains, similarly PMI is the best in its class."

– General Manager of a leading energy public sector enterprise



Source: EY-PMI Research

Adoption of project management - challenges and success stories

Our discussion with survey respondents revealed that companies in the private space in the energy sector need to invest more time and effort in driving project management adoption as compared to their counterparts in PSU's.

Organizations that have invested their time and money in developing project management competencies and promoting project management adoption have achieved greater success as compared to their competitors who have failed to do so.

“We were trying to execute a bussing field project which involved installing of an offshore platform. This was a unique exercise as instead of lifting and installing an offshore platform we tried a float over method of installing the offshore platform. This method was never tried before and as such was a challenge to execute considering the environmental conditions in our scenario and the lack of relative experience. But under the guidance of our Chairman and by diligently following a scientific project management approach to manage this project, we successfully completed this project. Ultimately, our project management capabilities helped us succeed in this case.”

- General Manager of an Indian multinational oil and gas company

Summary:

In the backdrop of India's economic growth, respondents predict a large demand-supply gap in the Indian energy sector, leading to the establishment of a number of power plants and projects. This would require a large number of qualified project management professionals to manage complex high-value projects.

PSUs and private institutions are looking for skilled project managers with key competencies of people management, planning and risk management for successful execution of these projects. The industry believes that professional certifications have played an important role in bringing about a project execution structure. Organizations that have followed a project management approach have been successful in executing complex projects.

Although external certifications have not been made mandatory to date, major energy PSUs are encouraging project management training for employees by sponsoring their certification needs. As such, PSUs are far ahead in the maturity curve in developing trained project managers, with close to 40%-50% of their project managers being certified professionals.



Telecommunication

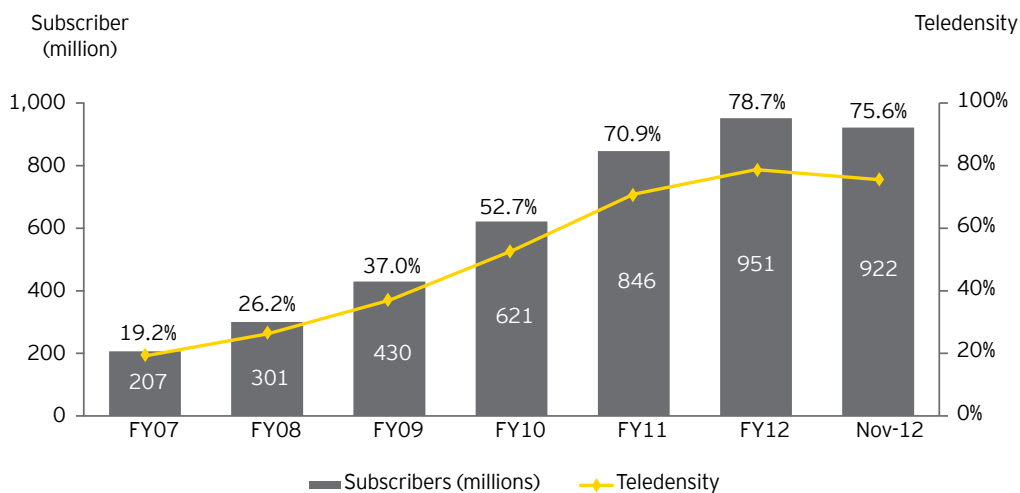
“A project is complete when it starts working for you, rather than you working for it”
– Scott Allen,
 author and professional speaker



Telecommunication sector – an unparalleled growth story

The Indian telecommunication sector has grown tremendously in the first decade of this millennium. It continues to have strong growth potential, with majority of the rural population remaining untapped. India is currently the world's second-largest telecom market in terms of subscriber number (close to 1,000 million)²⁶. Total tele-density is above 75%, with the figure expected to increase in coming years²⁷.

Subscriber base and teledensity



Source: TRAI

²⁶ Telecom Regulatory Authority of India website, www.train.gov.in (<http://www.train.gov.in>), accessed 15 March 2013

²⁷ Telecom Regulatory Authority of India website, www.train.gov.in (<http://www.train.gov.in>), accessed 15 March

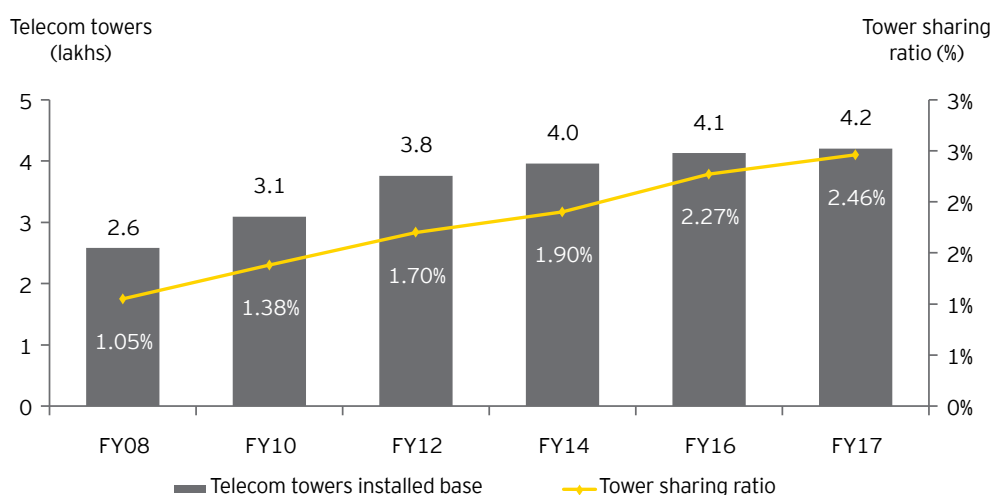
The National Telecom Policy 2012 (NTP 2012) envisages, among other things, the following:

- ▶ To achieve 100% rural wireless tele-density by 2020
- ▶ To cover 175 million broadband connections by 2017 and 600 million by 2020
- ▶ To provide high-speed and high-quality broadband access to all village panchayats through a combination of technologies by 2014 and progressively to all villages and habitations by 2020

Value and volume growth envisaged for telecom infrastructure players

Industry focus on enhanced reach and increased tele-density signals the need for significant investments in India's wireless network. As of FY12, approximately 3.5 lakh telecom towers and more than 4.5 lakh base transceivers (BTS) exist in India. The country is set to witness addition to tower number. Moreover, companies are looking to upgrade and improve the utilization of the existing infrastructure²⁸.

Telecom towers installed base and tenancy in India



Source: Analysiss Mason

The number of towers is expected to increase at an annual rate of 17% until 2017-18²⁹. The trend is expected to be driven by technological advancements such as an increase in 3G capacity and the introduction of 4G coverage, resulting in an incremental tower deployment of 44,000 towers by March 2017³⁰.

In this backdrop, the complexity and scale of the Indian telecommunication sector is set to increase with the launch of 3G and BWA services, global expansion and increased focus on enhanced technology to achieve the next level of growth.

²⁸ Analysis Mason

²⁹ Analysis Mason, EY Analysis

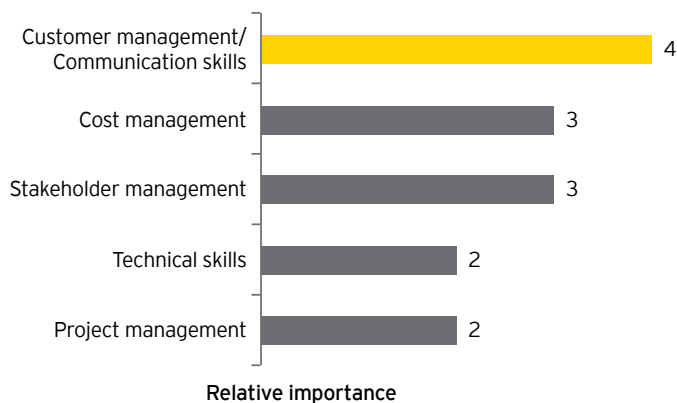
³⁰ Analysis Mason, EY Analysis

Telecommunication sector – key competencies and skill gaps

Certain key competencies are required across the telecommunication value chain, i.e., communication service providers, and active and passive infrastructure providers. The top five competencies mentioned by respondents as critical for success in the telecom industry are as follows:

- ▶ Customer management/communication skills
- ▶ Cost management
- ▶ Stakeholder management
- ▶ Technical/Analytical skills
- ▶ Risk management

Competencies needed to succeed in telecommunication sector



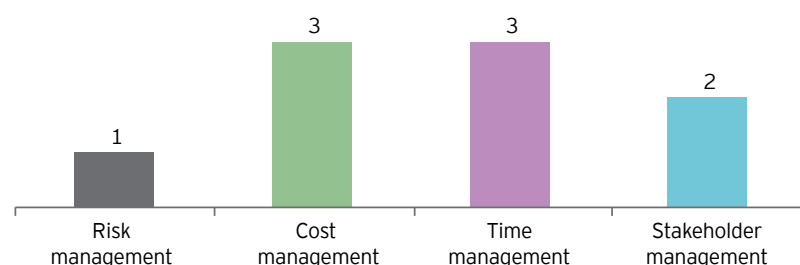
Source: EY-PMI Research

Communication service providers have now adopted an operating model that entails the outsourcing of key functions to partner organizations. As per respondents, this operating model makes it imperative for operators to coordinate with various service providers and target a common goal. In such a scenario, the three complementary skills of customer interaction, cost management and stakeholder management received the highest ratings from telecom companies.



Out of the skills mentioned above, cost management is a critical one for telecom professionals.

Current Skill Gaps in Telecommunication sector - relative rating (5-high, 1-low)



Source: EY-PMI Research

Project management – training and certification

Many of the skills needed to succeed in the telecom industry fall under the purview of a dedicated project management approach. It was interesting to note that the study revealed variation in skill sets required of project managers depending on the role of their respective organizations in the value chain. The need for qualified project managers is much greater in companies providing infrastructure services (passive and active). Typically, 25%-40%³¹ of the managers working in these organizations are in a project management role as compared to only 2%-5%³² of the managerial staff working as project managers for a service provider.

Communication service providers suffer from a crunch of certified professional project managers, with only about 1%-3% of the managers having project management certifications before taking up a project manager role. Companies providing passive infrastructure for telecom services are relatively mature on this parameter, with some of the leading passive infrastructure organizations having as many as 12%-15% of their managers certified for project management roles. However, respondents from the passive infrastructure space are working toward increasing the ratio of certified project managers, as effective project management forms the operational core of these companies.

A telecom company would entrust a manager with at least 5-7³³ years of experience with a fresh project managerial role. Organizations in the telecommunication sector would allow only project managers with more than 10³⁴ years of experience to handle complex and big budget projects.

In the current scenario, the training and certification of an employee before taking up project management responsibility is purely recommendatory in nature. Also, telecommunication companies rarely sponsor/refund certification, and employees opting for such initiatives mostly bear the cost personally.

Leaders in the sector have taken initiatives on this front and have started making project management certification and training mandatory for all project managers. Others have designed in-house training modules based on on-the-job training, web-based learning and mentoring from senior project managers. These companies have further defined internal criteria for passing these training and certifications before hiring or promoting an employee to a project managerial role.

31 EY-PMI Research

32 EY-PMI Research

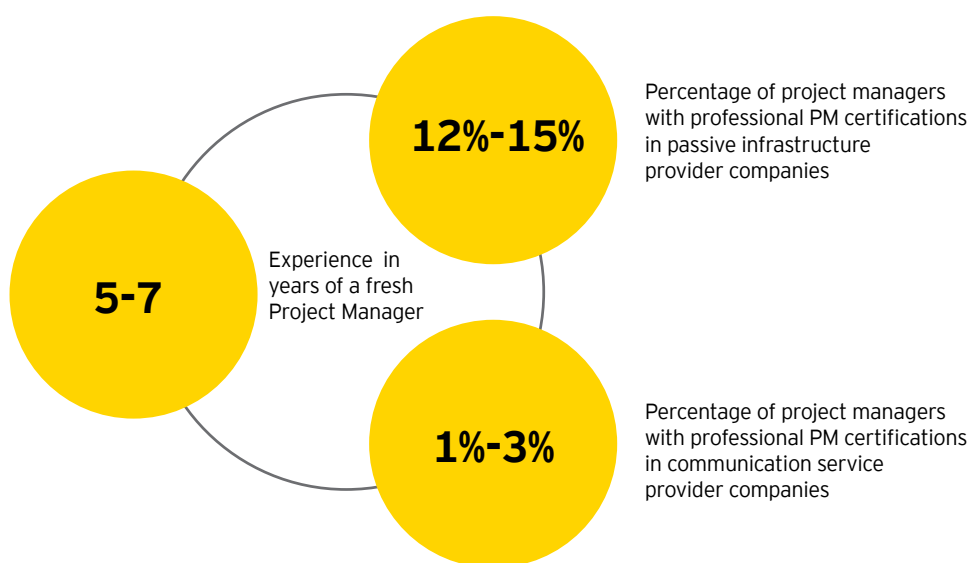
33 EY-PMI Research

34 EY-PMI Research

Demand for certified project managers in active and passive infrastructure organizations is also driven by communication service providers preferring that their vendors employ certified project managers. The industry is beginning to view project management certifications positively and believes that these add value to the overall skill set of employees and prepares them better for a project management role.

"Overall the PM trainings and certifications are useful as they ensure the journey of process excellence of an organization through PM practice and adherence."

– Director of one of India's top telecom tower company



Source: EY-PMI Research

Adoption of project management – challenges and success stories

Sector leaders in telecommunication are driving project management adoption through a series of techniques including:

- ▶ Linking project management certification and training to individual performance reviews and promotion
- ▶ Deploying project management tools to drive and manage projects across an organization

In spite of the challenges faced in driving project management adherence such as tight customer deadlines, cost of project management adoption, time and money needed for training and certification and maturity of the team driving project management adoption, many success stories have emerged out of project management adoption in the telecom sector.

“Through PM adoption we have managed record installment of BTS at a rate of one BTS per hour and ensured impeccable adherence to customer requirements.”

– Head, PMO, of a leading active infrastructure provider

“Both our customer satisfaction index and our employee satisfaction index have increased since we have adopted PM methodology and initiated training our managers on the same. We have observed lower attrition rates of managers and greater transparency between teams and our add on sales on various projects have also increased.”

– Business Transformation Officer of one of the top five Indian telecom operators

Summary:

In the backdrop of an increasing subscriber base, re-farming of spectrum and the advent of new technologies such as 3G and BWA, the telecommunications sector in India is expected to grow tremendously with operations becoming more complex. The study revealed that companies would require project management skills of customer management, stakeholder management and cost management to succeed.

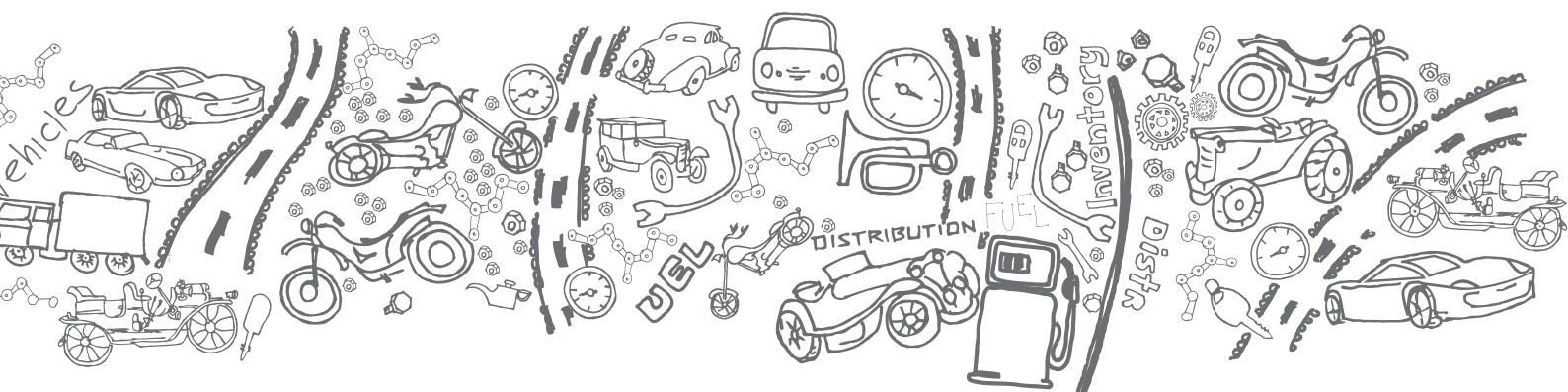
Communication service providers suffer from a crunch of certified professional project managers, with only 1%-3% of the managers having project management certifications. On the other hand, companies providing passive infrastructure for telecom services have as many as 12%-15% of their managers certified for project management. Demand for certified project managers is also driven by the preference of communication service providers for certified and trained project managers being employed by their vendors and suppliers.

Overall, the industry is beginning to view project management certifications positively and believes that these add value to the overall skill set of the employees and equips them for a project management role.

6

Focus sectors – Emerging

The sectors classified as “Emerging” have relatively low requirement of project management skills in everyday functioning and a relatively low percentage of employees staffed in project management roles. The automotive and financial services sector can be classified as “Emerging” sectors under the developed framework. These sectors utilize project management skills only in the case of special large scale projects, such as for rolling out of a banking system or for setting up a manufacturing plant or developing a vehicle platform. The percentage of employees in project management roles in “Emerging” sectors is between 1% and 2% with percentage of project managers having professional PM certifications varying from less than 2% in Financial Services sector to 1%- 5% in automotive sector.



Automotive



“Operations keep the lights on, strategy provides light at the end of the tunnel, but project management is the train engine that moves the organization forward.”

– Joy Gumz,
leading PMP trainer
and public speaker

Automotive sector - Indian market growing faster than the global average

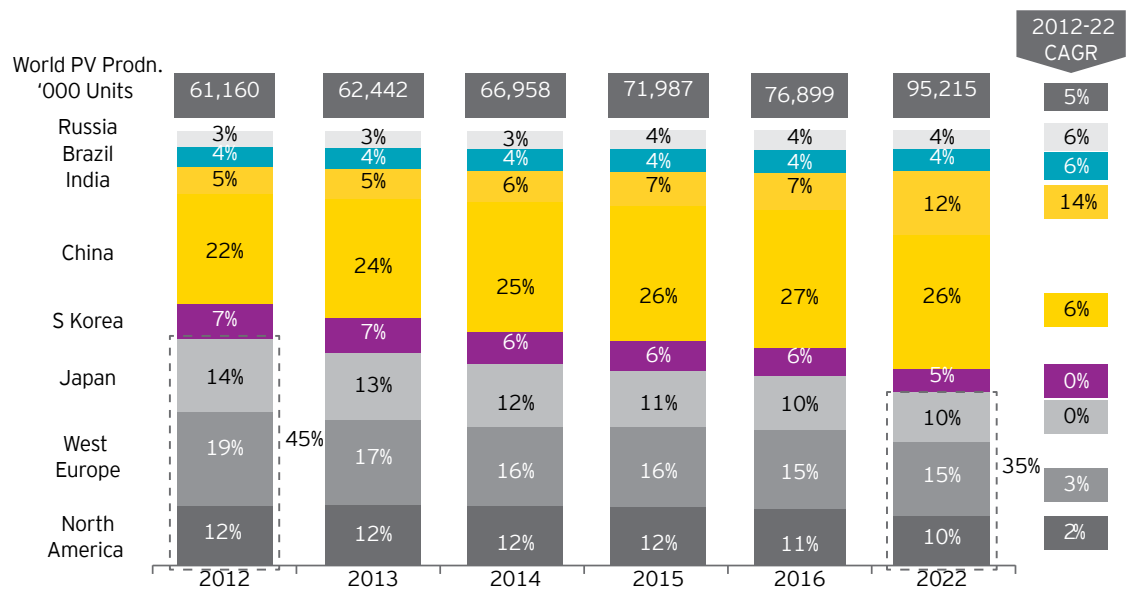
The global automotive market is recovering from the slump in 2008-09, with India and China projected to capture a significant share of global automotive production in the next 10 years³⁵.

India is likely to gain share from other markets, given that it is growing faster than the global automotive market in both the passenger vehicles (PV) and two-wheeler segments. The production of PV and two wheelers in India is likely to grow at 12% until FY16³⁶, with the key drivers being:

- ▶ Increase in household income
- ▶ Expected increase in vehicular density
- ▶ High rural market potential
- ▶ Vehicle export potential

35 Prowess, 28 February 2013, Centre for monitoring Indian Economy; SIAM website, www.siamindia.com, accessed 27 February 2013 ; “LMC Automotive Forecast Q4 2012,” via LMC Automotive; EY Analysis

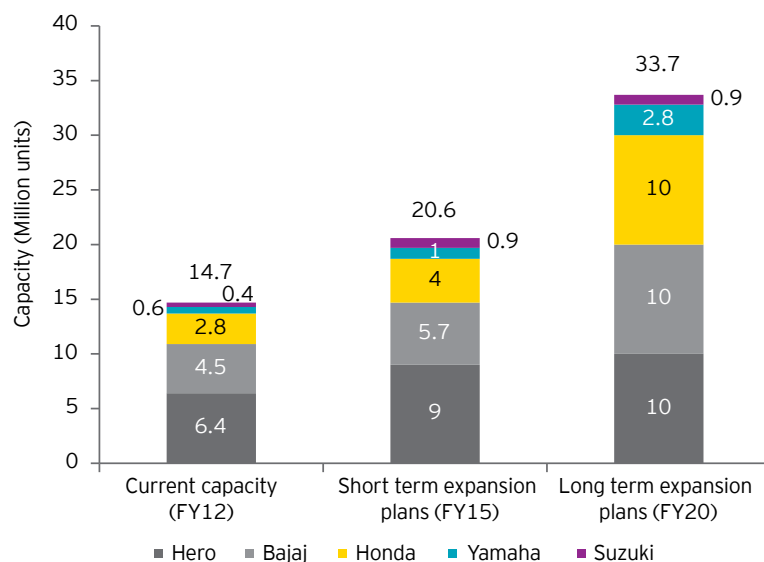
36 Prowess, 28 February 2013, Centre for monitoring Indian Economy; SIAM website, www.siamindia.com, accessed 27 February 2013 ; “LMC Automotive Forecast Q4 2012,” via LMC Automotive; EY Analysis



Note: 2012 - 2022 volumes are forecast (Estimated in the 4th quarter of 2012, 3 quarters actual and 4th quarter forecast)
Source: LMC Automotive Forecast Q4 2012

To cater to the trend of increasing production, industry players are setting up vehicle and engine manufacturing capacity in India.

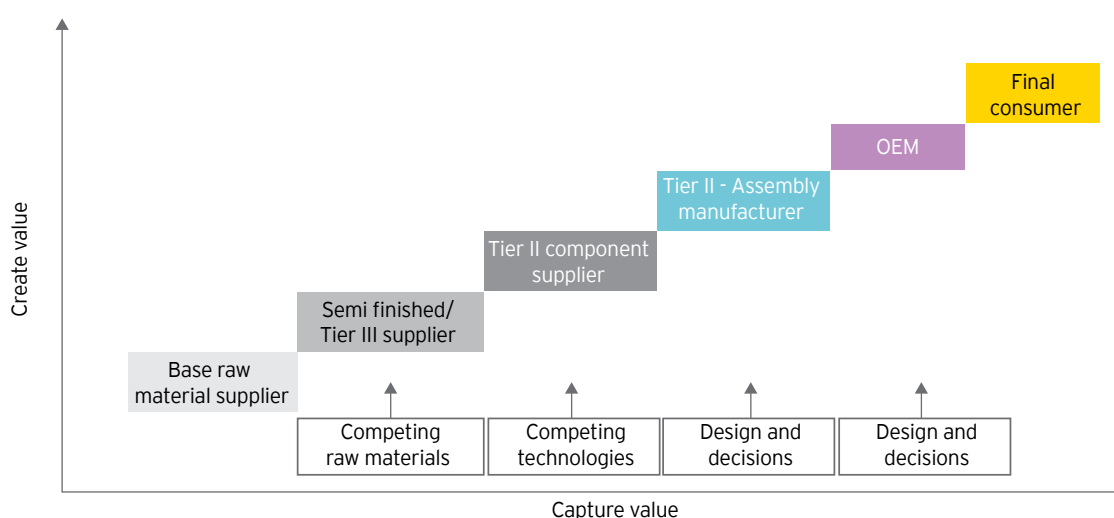
Capacity expansion plans of leading two-wheeler OEMs



Source: SIAM Flash Report - Mar 12, Oct 12, EY Analysis, Media reports

A major proportion of the growth in the Indian PV market would be driven by the introduction of new models and variants across car segments. **More than 35 new PV models would be launched until 2016 by industry majors such as Maruti, Tata, Honda, Ford and Volkswagen³⁷.** The envisaged increase in capacity and the associated complexities in launching models highlight the need for professional project and program managers in the automotive industry.

As a part of this study, discussions were carried out with automotive business and human resource leaders across the value chain.



Automotive sector – key competencies and skill gaps

This study highlights key competencies required to succeed in the automotive industry. The four key skill sets most desired in the auto sector are:

- ▶ Technical/Manufacturing skills
- ▶ Time management skills
- ▶ Program management skills
- ▶ Man management skills



³⁷ "LMC Automotive Forecast Q4 2012," via LMC Automotive, EY Analysis

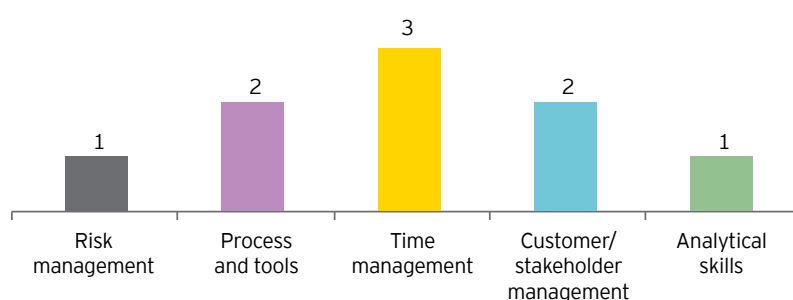
Competencies needed to succeed in Automotive sector



Most respondents emphasized the importance of technical and people management competencies in the manufacturing-dominated auto sector. OEMs and tier 1 suppliers actively look to develop program management skills of their employees to successfully launch new models and variants of passenger vehicles.

Surveyed organizations stated that there is a pressing need to invest more time and effort to develop critical competencies lacking in the skill sets of managers in the auto sector. The three most visible skill gaps are those of time management, stakeholder management and knowledge of program management process and tools.

Current skill gaps in automotive sector - relative rating (5-high, 1-low)



Source: EY-PMI Research

Project management encompasses many of the competencies identified as critical by industry leaders. Through our discussion with auto sector leaders, it is evident that basic project management skills will be required across all business functions to succeed in the automotive industry. In fact, in recent years, companies have been looking for “techno-managers” – people who have good managerial skills, in addition to strong technical skills. However, project management has not been identified as a critical skill set in the automotive industry. This trend, though, is changing with the growing demand for a comprehensive project management approach. This would mean that organizations would develop a program, define milestones and manage stakeholders for a desired outcome.

Project management – training and certification

Employees with an average experience of 3-5 years and exposure across multiple functions are entrusted with a project management role in an automotive organization. For complex projects such as platform development or facility establishment, companies prefer senior project managers with a minimum of 10-12 years of experience across various functions of an automotive entity.

On the training and certification front, most of the project management training in the automotive sector is conducted internally and through on-the-job experiential learning. Additionally, training modules from auto sector industry bodies are implemented to enhance soft skills such as team building, communication and time management. Stakeholders for any of these internal training sessions are the HR function, top management and business unit leadership.

“There are no structured training programs. We believe in on-the-job training. Experiential learning is much more important than professional certifications in our industry.”

– Business Unit Head, Japanese multinational automaker

“Automotive industry doesn’t have much margins and hence, spend on PM trainings/certifications is very less. Moreover cross-functional teams are very rare in auto industry, which makes PM skills less critical.”

– Senior VP, leading tier 1 component supplier

As such, the lack of certified project managers is visible from the fact that the number of project managers in an auto firm is only about 2%-10%³⁸ of the managerial staff and only 1%-5%³⁹ of its managers are certified professionals in project management. This does not fare strongly when compared to project management-mature industries such as IT and ITeS.

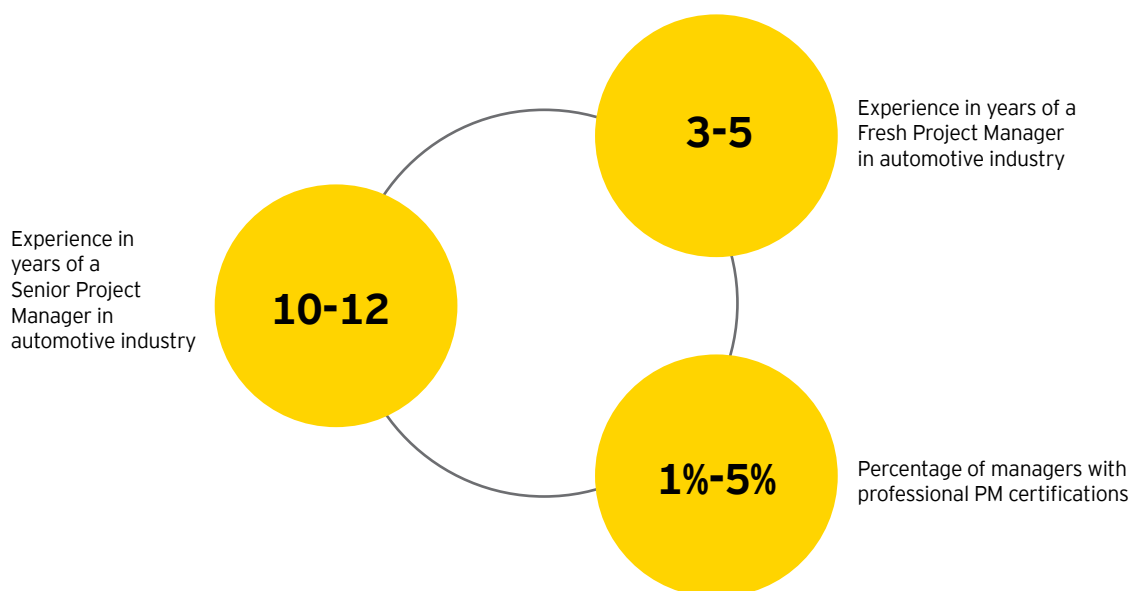
Employees are rarely sponsored for external training or certifications, even though project management certificates are deemed desirable. Employees who choose to attempt any professional certifications mostly have to borne the cost personally. Moreover, demand for professional project management training and certifications is more prevalent in American and European OEMs as compared to Japanese and Korean companies, which lay more emphasis on experiential learning. Many of these firms have their own modules and programs to train people on project management skills.

Top reasons for reluctance toward third-party certifications are:

- ▶ Sufficiency of internal training
- ▶ Different philosophy/method of project management
- ▶ Cost of certifications/training
- ▶ Lack of enthusiasm in employees from a technical background
- ▶ Certifications/Training not relevant to the automotive sector

38 EY-PMI Research

39 EY-PMI Research



Source: EY-PMI Research

Adoption of project management – challenges and success stories

Besides the reluctance for professional training and certification, the top three reasons attributed for the lack of project management adoption in the automotive sector are lack of understanding of project management tools by managers, difficulty in relating the theoretical aspects of project management to the practical shop manufacturing scenarios and the absence of integrated IT systems to drive project management practice.

Nevertheless, sector leaders credit project management with key competitive advantages as follows:

- ▶ Task completion is on time and in a planned manner with an expected output
- ▶ Smooth communication of objective to various stakeholders
- ▶ *"Increase in output from manufacturing lines and increased ability to introduce newer products."* – **Director of a tier 1 component supplier on improvements from the adoption of project management**

Success story

"We undertook a comprehensive project management approach when we launched project "xxx". An ambitious organization wide project for cost reduction and enhanced profitability. Dedicated project management approach for entire duration of this project which lasted for 3 years, helped us increase our after tax profitability by close to 1%. A definite proof of success of project management in manufacturing heavy set up like ours."

– Vice President, Operations, a leading tier 1 component supplier



Summary

The Indian automotive industry is recovering from the slump witnessed in the last few years. Furthermore, it is likely to beat the global automotive average growth. In such a scenario, for many OEMs and tier 1 suppliers, the skills of program management, people management and time management would gain importance. Auto companies are already looking for “techno-managers” – employees equipped with technical and managerial skills.

Project management encompasses skill sets mentioned above and is used extensively in US and European automotive companies. However, the concept has not picked up as much steam in the Indian automotive sector.

Much of the current training for project managers in the auto sector is internal and is focused on on-the-job learning due to a lack of certified project managers in the industry. Furthermore, only 1%-5% of the managers are certified project management professionals.

Nevertheless, the industry believes that project management offers competitive advantages such as increased manufacturing output and greater ability to introduce new products based on the latest technology.

Financial services

“Project managers function as bandleaders who pull together their players each a specialist with individual score and internal rhythm. Under the leader’s direction, they all respond to the same beat.”

- L. R. Sayles, author



Financial services sector – moving toward greater financial inclusion

Although, the penetration level of the financial services sector continues to be low in India, the rising purchasing power of middle class consumers due to increasing income and improved affordability would ensure tremendous growth for the financial services industry. Companies need to make a concentrated effort to tap the actual potential of India’s savings, which stands at 34% of the GDP currently⁴⁰. Some of the key developments expected to strengthen the financial sector are:

- ▶ Greater commitment by the Indian Government toward financial inclusion
- ▶ Increasing FDI in various economic sectors
- ▶ Increasing levels of disposable income power and ongoing transformation of the country into an consumption economy

For the purpose of this study, we have focused on three sectors of the financial services market:

- ▶ Commercial Banks – public and private
- ▶ Insurance companies
- ▶ Non-banking financial companies (NBFCs)

The banking sector has been the biggest beneficiary of the growing financial services industry. Amid the growing banking industry and changing industry dynamics, both public and private sector banks are faced with the challenge of attracting and retaining talent. Shortage of skilled workforce may make it extremely difficult for banks, especially those in the public sector, to remain competitive. Thus, financial sector firms are constantly looking out to train their employees adequately and undertake efforts to retain them.

⁴⁰ “Indian Financial Services Sector Outlook 2012: Perspectives from Experts” via city of London

Financial services sector – key competencies and skill gaps

The survey indicates the five top skills that employees must possess to contribute to an organization's success in financial sector. These skills are presented below in the order of importance.

- ▶ Interpersonal skills
- ▶ Risk management
- ▶ Domain expertise/ knowledge of financial markets
- ▶ Innovation
- ▶ Analytical skills

Most of these are related to project management and can be imparted to employees through a project management training and development module.

Our discussion with industry leaders indicates that project management as a concept is quite nascent in the commercial banking sector. The scenario seems to be changing, as financial institutions are beginning to follow a project management approach for:

- ▶ New product/service launches
- ▶ Geographical expansion
- ▶ System integration/IT implementation projects

Following our discussion with industry leaders, a competency profile in the financial services sector can be drawn, highlighting the top three skills across hierarchical levels as follows:

	Entry Level positions	Mid- management Level positions	Top management Level positions
Execution skills	✓		
Analytical skills	✓		
Domain expertise	✓	✓	
Planning		✓	✓
Interpersonal skills		✓	✓
Risk management			✓

At an entry level position, organizations look for employees with good technical skills, and products and services knowledge. Companies also desire good analytical and problem-solving skills. For mid management and senior management positions, organizations demand skills such as people management, risk management and strategic thinking from their managers. The study revealed that the most crucial skill desired by financial service companies in their top managers is strong interpersonal skills. Many of these skills form part of a comprehensive project management methodology. Most of the newer financial institutions have recognized this fact and have formally started implementing an institutionalized project management strategy across the company.

In India, external consultants are mostly hired for the project management role, primarily because of the lack of project management skill set within financial organizations. In financial services, project management is used only for large and complex projects such as rollout of core banking system, overhauling of the entire IT infrastructure and the launch of multiple branches. Most of the financial institutions do not use a project management methodology in their daily operational activities.

Recently, some financial institutions have constituted central PMOs to monitor and assess various ongoing projects in the organization. Such PMOs typically constitute two types of groups:

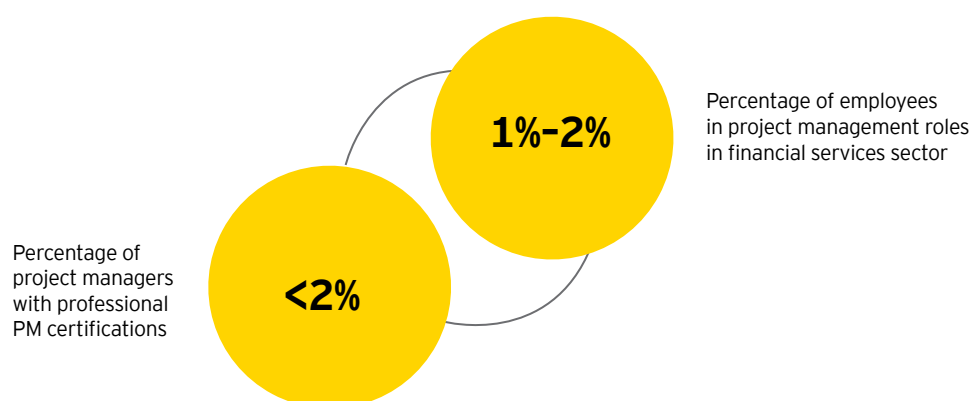
- ▶ A solutions delivery group, which acts as a bridge between business and operations; it consists of people who have worked in both support and front-end functions.
- ▶ A functional expertise group, which consists of the respective heads of various business functions with strong domain/functional expertise

In addition to PMO, a few firms have appointed individual project managers to handle very large and complex projects. These people typically report directly to the steering committee, which consists of C-suite executives.

Project management – training and certification

Although financial services organizations regularly undertake a mix of classroom, e-learning and on-the-job training for functional knowledge, they do not place adequate emphasis on training employees on various aspects of project management.

According to the survey, only ~1%-2% employees are placed in project management roles in the financial services industry, and a handful of these project managers have professional certifications. Companies are currently focused on training employees on functional expertise. Although most of the desired skills identified by the study fall under the project management purview, the industry is currently not focusing on widespread usage of project management as a tool.



Source: EY-PMI Research

Adoption of project management – challenges and success stories

One of the major challenges expressed by financial services organizations in adopting project management methodology is the low receptiveness among their employees with regard to project management tools and processes. Since project management is not practiced as a standard procedure across the industry, employees are not aware of its effectiveness. This impedes the adoption of these techniques.

With more greenfield projects coming up in the banking industry, and newer products and services getting introduced in the sector, the industry predicts a stronger need to adopt project management practice. In line with this, a few of the newer banks have started integrating project management techniques with their daily operations. These banks aim at institutionalizing project management into their way of functioning.

“Project management is crucial for the success of multiple stakeholders working with a common vision. In our industry, the key to adopting good project management methodology will be as follows: getting the right people together, providing proper training and resources to these people and the rigor of monitoring diligently followed. In the coming years, Project management will be very crucial for our firm and everyone in the organization should be aware of it as it touches every part of the organization.”

– COO of one of the top 5 private commercial banks

“When we rolled out a core banking system the entire project was handled by a central project management office which directly reports to the top management. We rigorously followed the project management methodology to execute this large and complex project and were able to successfully complete the project on time.”

– COO of one of India’s top commercial bank

Summary

The Indian financial sector is among the first sectors to recover from the global meltdown. It is expected to be on a growth trajectory over the next five years. Interpersonal skills, risk management skills and domain expertise are the most crucial competencies for a senior manager in a financial organization.

In India, external consultants are hired in a project management role, primarily because of the lack of project management skill sets in-house. Only ~1%-2% of employees in the financial services sector are in project management roles, and less than 2% of them have professional certifications. Companies have started employing central project management teams to keep track of large, transformational and cross-functional projects. Respondents stated that companies would create functional project management offices in future to drive project management adoption in daily operations.

7

Questionnaire

EY-PMI Questionnaire: Study on perspective of Indian organizations on project management skills

General:

1. Which industry does your company belong to?
 - ▶ IT/ITES
 - ▶ Infrastructure/Construction
 - ▶ Energy
 - ▶ Auto & auto ancillary
 - ▶ Financial services
 - ▶ Telecommunication
 - ▶ Engineering
2. What is the number of employees in your organization?
 - ▶ 0-500
 - ▶ 500-2,000
 - ▶ 2,000-10,000
 - ▶ 10,000-25,000
 - ▶ 25,000 and above
3. What is the annual turnover of your company in INR?
 - ▶ 0-100 Cr.
 - ▶ 100-500 Cr.
 - ▶ 500-5,000 Cr.
 - ▶ >5,000 Cr.

4. What percentage of employees in your company is engaged in project management roles?
- ▶ <15
 - ▶ 1%-5%
 - ▶ 5%-10%
 - ▶ 10%-20%
 - ▶ >20%
5. What percentage of employees in your company are certified project management professionals?
- ▶ <1%
 - ▶ 1%- 5%
 - ▶ 5%-10%
 - ▶ 10%-20%
 - ▶ >20%

Problem Statement 1: To understand the perceived skill gap across key business functions in the six focus sectors and to identify the role of project management in addressing these skill gaps

6. According to you, which are the most important skills that your employees should possess for being successful in this industry?
7. What are the challenges you foresee in your business and what skills you need to overcome these challenges?
8. What keeps you (CEO/HR) awake at night from a skills gap perspective? What are the skills you are looking to develop in your organization in 3-5 years?
9. Out of the skills mentioned above:
- a. Which skills are the strong points of your organization?
 - b. Which skills you need to build/develop in your organization?
10. What are some of the reasons for the lack of specific skills as enlisted by you?
11. Which are the business function areas where the lack of such skills is most prominent?
12. How do these skill gaps change/manifest across various hierarchical levels in an organization?
13. Do the skills gaps, as mentioned above, get addressed as people grow in the organization, or do training/certification need to be imparted to address such skill gaps?

Problem Statement 2: To understand the role of project management across various functions in the focus sectors

14. What are the various project management skills that are critical for your business?
15. Which of these project management skills do employees in your organization lack?
16. Which project management skill gaps would you like to address urgently at your organization?

17. Which business functions in your organization require project management experience?

- ▶ Supply chain
- ▶ Manufacturing
- ▶ Sales
- ▶ Marketing
- ▶ Finance
- ▶ IT and infrastructure
- ▶ General management
- ▶ Others, please specify

18. Are project management certifications relevant to your company and industry?

19. Which of these business functions require/prefer certified project management professionals?

- ▶ Supply chain
- ▶ Manufacturing
- ▶ Sales
- ▶ Marketing
- ▶ Finance
- ▶ IT & infrastructure
- ▶ General management
- ▶ Others, please specify

20. What percentage of project management employees in the following business functions comprises certified professionals?

Business	0%-10%	10%-15%	15%-25%	25%-75%	>75%
Function					
Supply chain					
Manufacturing					
Sales					
Marketing					
Finance					
IT & infrastructure					
General					
Management					
Others					

21. Which project management certifications are preferred by your company for such roles?

- ▶ PMP
- ▶ IPMA
- ▶ Prince 2
- ▶ Company aided initiative
- ▶ Others, please specify

Problem Statement 3: To identify the key decision factors and stakeholders for PM practice adoption in organizations

22. Please rate the following skills on a scale of 1-5 on their relative importance in performing a managerial role at different levels in your organization (1 – least important and 5 – most important)

Skill rating to be given (1-5)	Entry-level mgr	Mid-level mgr	Top-level mgr
Key skills			
Technical knowledge			
Process knowledge			
PM tools			
Project scoping			
Time, effort and cost estimation			
Revenue management			
Profit management			
Monitoring and review			
Change management			
People management			
Stakeholder management			
Customer expectation management			
Revenue generation			

23. Out of all of the skills mentioned below, can you identify the top three skills/competencies needed to succeed in a project management role at various levels in your organization?

Skill Ranking (top three)	Entry-level mgr	Mid-level mgr	Top-level mgr
Key skills			
Technical knowledge			
Process knowledge			
Communication			
Project Scoping			
Time, effort and cost estimation			
Revenue management			
Profit management			
Monitoring and review			
Change management			
People management			
Stakeholder management			
Customer expectation management			
Business development			
Quality management			
Others (please mention)			

24. What is the average experience of candidates working in project management roles in your organization?

- ▶ 0-5 years
- ▶ 5-10 years
- ▶ 10-15 years
- ▶ 15-25 years
- ▶ >25 years

25. What is the average work experience that a project management trained candidate should possess before being deployed in a project management role?

- ▶ 0-5 years
- ▶ 5-10 years
- ▶ 10-15 years
- ▶ 15-25 years
- ▶ >25 years

26. Types of project management training and courses offered in your organization:

Training	Courses	Hours of training
Mandatory training/certification		
Non mandatory training/certification		
Soft skills		
Project management		
Certifications		
Technical certifications		

27. Who are the decision makers for including particular trainings/certifications in the company's recommended list of certifications?

- ▶ Project team leaders
- ▶ BU heads
- ▶ HR
- ▶ Company directors
- ▶ Driven as per globally defined standards (for multinational)
- ▶ Others

28. Who are the decision makers for nominating/recommending employees for project management trainings/certifications?

- ▶ Project team leaders
- ▶ BU heads
- ▶ HR
- ▶ Company directors
- ▶ Driven as per globally defined standards (for multinational)
- ▶ Others

29. What are the key challenges in driving project management adoption in your organization?

30. Who are the key influencers for driving project management adoption in your organization?

- ▶ Project team leaders
- ▶ BU heads o HR
- ▶ Company directors
- ▶ Driven as per globally defined standards (for multinational)
- ▶ Others

31. What are the various measures taken by your organization to overcome the stated challenges and to drive project management philosophy and adoption in your organization?

Problem Statement 4: To identify the methodologies and resources, including training and certifications, used by organizations to drive project management adoption

32. Is there a company-wide analysis/evaluation for the training needs of project management professionals?

33. What type of training is provided to people in project management roles? Please elaborate

- ▶ In-house training
- ▶ Third-party trainers
- ▶ Self training
- ▶ Certification

34. What mode of training is preferred for project management? Please elaborate

- ▶ Practical sessions
- ▶ Classroom training
- ▶ Outdoor training
- ▶ On-the-job training

35. Are employees across hierarchical levels trained on project management?
36. What kind of project management training is imparted to employees at various levels of hierarchy?
37. How much do you spend per employee on training? What percentage of your overall training spend is for project management-related training?
38. Is project management training mandatory or optional for all applicable employees? Please elaborate on the reasons
39. What percentage of your employees voluntarily opts for project management certifications and not because it is an organizational requirement?
40. How do you ensure that project management adoption is practiced after training employees on project management skills? Is there a follow-up analysis to evaluate the use of project management skills by trained employees?

Problem Statement 5: To enlist critical challenges faced by and success stories of organizations adopting project management practices

41. Please enlist the key benefits (exhibited and expected benefits) accrued to the organization through the adoption of project management practices?
42. Could you share some success stories related to the adoption/promotion of project management principles in your organization/career?
43. What challenges do you expect while implementing project management principles?
44. What feedback, in general, have you received from your employees on the various project management training/certifications conducted by your company?



About PMI



PMI is one of the world's largest not-for-profit membership associations for the project management profession. Our professional resources and research empower more than 700,000 members, credential holders and volunteers in nearly every country in the world to enhance their careers, improve their organizations' success and further mature the profession.

PMI's worldwide advocacy for project management is reinforced by our globally recognized standards and certification program, extensive academic and market research programs, chapters and communities of practice, and professional development opportunities.

Certification

PMI offers six certifications that recognize knowledge and competency, including the Project Management Professional (PMP)® credential held by more than 520,000 practitioners worldwide. Salaries and career opportunities for credential holders show that employers recognize the value delivered by trained practitioners.

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PMI's standards for project, program and portfolio management are the most widely recognized standards in the profession - and increasingly the model for project management in business and government.

They are developed and updated by thousands of PMI volunteers with experience in every type of project, and provide a common language for project management around the world.

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Most of PMI's activity takes place in more than 265 geographic chapters, as well as 39 industry- or interest-based communities of practice. These communities, open to PMI members and led by volunteers, support the knowledge sharing and professional networking that are central to our mission.

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You can also turn to more than 1500 Registered Education Providers (REPs) for project management training and continuing development. For those in college, the PMI Global Accreditation Center for Project Management Education Programs has recognized more than 85 undergraduate and graduate degree programs.

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The PMI Research Program, the most extensive in the field, advances the science, practice and profession of project management. It expands project management's body of knowledge through research projects, symposiums and surveys, and shares it through publications, research conferences and working sessions.

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