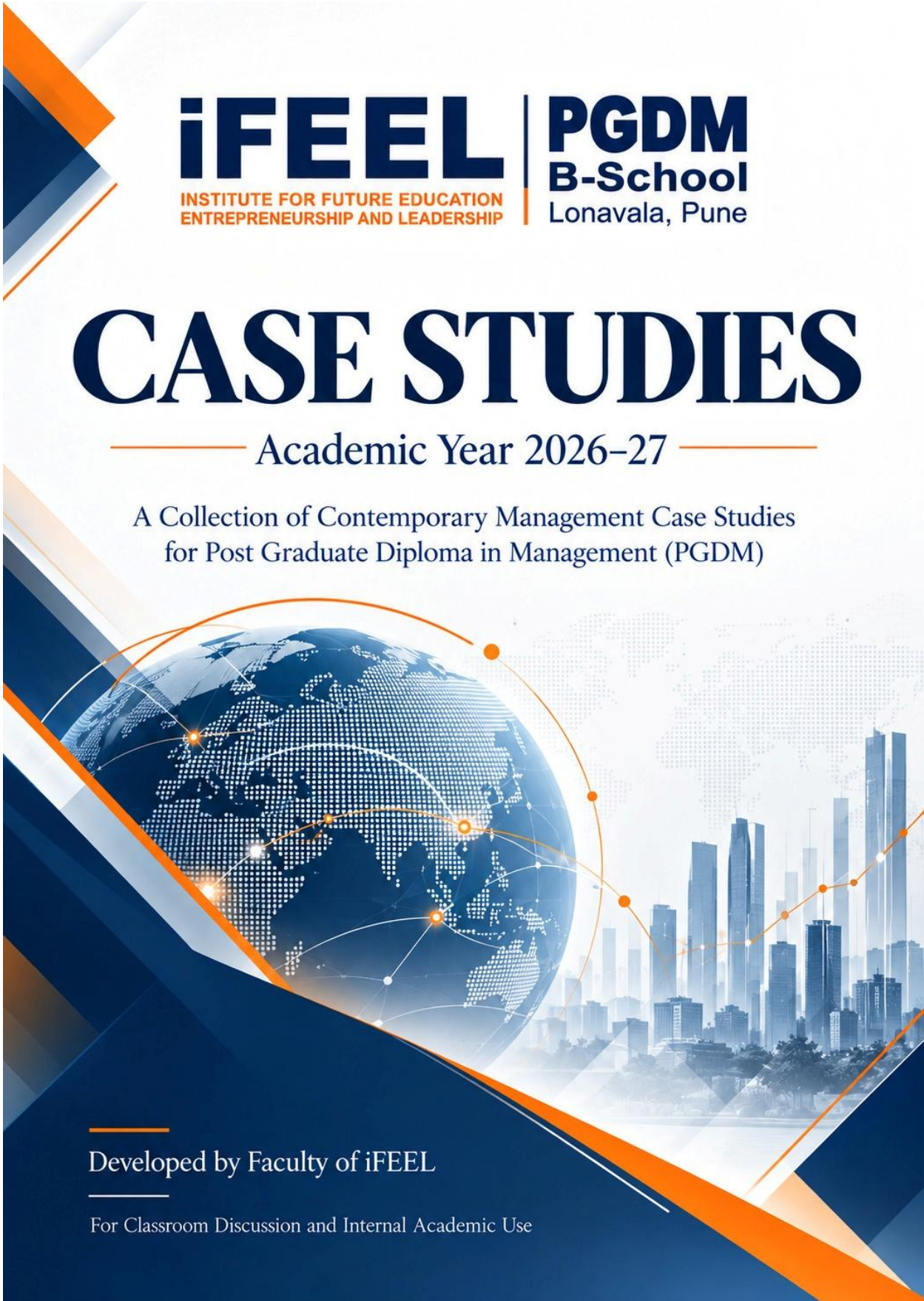




iFEEL

INSTITUTE FOR FUTURE EDUCATION
ENTREPRENEURSHIP AND LEADERSHIP

**PGDM
B-School**

Lonavala, Pune

CASE STUDIES

— Academic Year 2026–27 —

A Collection of Contemporary Management Case Studies
for Post Graduate Diploma in Management (PGDM)

Developed by Faculty of iFEEL

For Classroom Discussion and Internal Academic Use



Institute for Future Education, Entrepreneurship & Leadership

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Publication Details & Disclaimer

Title: Case Studies – Academic Year 2026–27

Institution: iFEEL (Institute for Future Education, Entrepreneurship & Leadership)

Programme: Post Graduate Diploma in Management (PGDM)

Edition: AY 2026–27

Developed by: Faculty of iFEEL

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Preamble

At iFEEL, the teaching–learning philosophy goes beyond conventional classroom instruction by emphasizing the application of conceptual knowledge to real-world business situations. Case studies therefore form an integral component of the teaching pedagogy, enabling students to connect theoretical concepts with contemporary organizational challenges and develop analytical, critical-thinking, decision-making, and problem-solving capabilities.

The cases developed at iFEEL draw upon contemporary organizations, industries, business challenges, and emerging managerial practices, exposing students to situations involving strategic choices, competing priorities, ethical considerations, technological disruption, and organizational change. Through case-based learning, students actively engage in analysing business situations, identifying core issues, evaluating alternatives, applying relevant management concepts and frameworks, and developing evidence-based solutions. Classroom discussions, group analysis, presentations, debates, and faculty-led reflections further strengthen the learning experience. The cases cover diverse contemporary themes including talent management and retention, employer branding, workforce engagement, digital transformation, artificial intelligence, digital learning, knowledge management, innovation, leadership development, and human–AI collaboration. These themes help students understand how management concepts are applied in real organizational contexts and how business decisions are influenced by technological, economic, social, ethical, and competitive considerations.

Each case is designed to stimulate inquiry rather than provide predetermined answers. Core issues and research questions guide students towards structured investigation while encouraging independent perspectives and alternative solutions. This approach develops their ability to interpret business information, question assumptions, collaborate, communicate recommendations, and justify managerial decisions. The case methodology reinforces iFEEL's emphasis on experiential and application-oriented management education by creating a bridge between theory and practice, classroom learning and industry realities, and knowledge acquisition and managerial action. It also contributes to developing the attributes expected of future managers and entrepreneurs, including analytical thinking, ethical judgment, creativity, collaboration, communication, adaptability, digital acumen, and lifelong learning.

Innovation Culture in Indian Manufacturing Firms: A Case Study of Mahindra & Mahindra

Dr. Gaurav Petkar Assistant Professor & Mr. Tarkeshwar Lallan Sharma Associate Professor

Introduction

One of the most critical factors in the organization's success in today's manufacturing environment is innovation. In the globalized world, product, process, business model and organizational innovation have become a constant requirement for manufacturing companies, owing to much that has happened in the way of technological disruption, evolution and changing customer expectations, concerns for sustainability and on-going competitive pressures. In emerging economies like India, innovation becomes even more important since firms are not just competing based on cost but also based on their technological attributes and solutions to customers. Innovation culture is a workplace that fosters creativity, experimentation, learning, collaboration, and growth (Amabile, 1998; Schein, 2017). Innovation cultures in organizations develop systems and practices which inspire employees to innovate and embrace change, and to contribute to the growth of the organization (Cameron & Quinn, 2011). Few companies as Mahindra & Mahindra (M&M) have been as innovative as they have been in the Indian manufacturing industry. Mahindra & Mahindra is one of the most prominent Multinational Manufacturing corporations of India and has built an environment to nurture innovation across all business segments including automotive, farm equipment, aerospace, information technology and renewable energy. This case study provides a look into how Mahindra & Mahindra have developed and maintained an organizational culture that is innovation-focused and investigates the reasons for their innovation success.

Company Background

Mahindra & Mahindra was founded in 1945 and has evolved to become one of the most trusted multinational conglomerates in India. The company's primary business was steel trading, but it became involved in the automobile industry by manufacturing utility vehicles. The company expanded its business over the decades, and became a major player in automotive, tractors, information technology, financial services, hospitality, aerospace and renewable energy. Apart from the strategic diversification, Mahindra's growth is attributed to its innovative approach and ability to deal with market fluctuations. The company currently has over 100 countries of operations and is known for its technological prowess, customer products, and sustainable activities.

India has traditionally been known for its cost-efficient and process optimized manufacturing sector. But, Mahindra stood out by making innovation a key consideration. The company has not just adopted foreign technologies, but also supported in-depth research and development (R&D), engineering talent and creativity of its staff. This vision has helped Mahindra to create innovative products that meet the needs of the local and global market.

Understanding Innovation Culture

Innovation culture is a set of values, beliefs, norms, leadership practices and organizational systems that foster innovative behaviour among employees (Schein, 2017). Organizational scholars state that innovation culture allows for openness to new ideas, risk-taking, experimenting, sharing of knowledge and continuous learning (Amabile, 1998; West & Farr,

1990). These cultures empower staff to question the status quo and to think outside the box when solving issues.

Innovation culture is especially crucial for manufacturing companies as product development cycles are shortening, the pace of technology development has accelerated and the customer is seeking increasingly customised solutions. Innovation in manufacturing goes beyond product innovation and involves process improvements, supply chain optimisation, digital transformation, sustainability and business model innovation. Companies that are able to foster innovative cultures are likely to be more agile when reacting to market shifts and more competitive in the long run (Damanpour, 1991; Tidd & Bessant, 2020).

But, Mahindra & Mahindra understood that technological innovation would not be enough to ensure growth. The company knew that innovation had to be ingrained in the corporate culture and the actions of the people working there. The company therefore decided to take a systematic approach to the innovation process, throughout the organization.

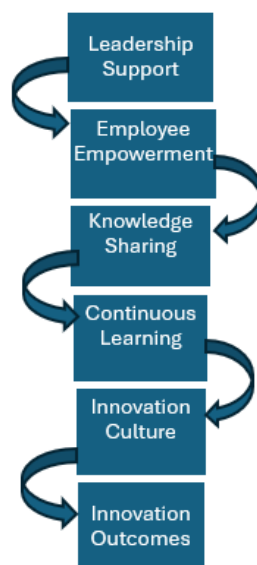


Figure 1 Components of Innovation Culture

Creating an Innovation Culture at the Organization

Leadership commitment is one of the important factors of Mahindra's innovation culture (Schein, 2017). Innovation has always been a key value of the organisation highlighted by senior management (Cameron & Quinn, 2011). It has fostered a culture of innovation and a spirit of entrepreneurship among its management team. The importance of leadership support for establishing an innovative culture lies in the fact that the attitudes of employees are more likely to be promoted when leaders promote innovation, encourage subordinates to engage in innovative activities, and provide subordinates with resources for innovation.

Mahindra set up various mechanisms to encourage innovative thinking within its employees. The company has begun innovation initiatives which encourage workers from all departments to provide suggestions about product, process and experience enhancements. These programs are designed to encourage employee involvement and make them feel invested in the company's innovation process. A culture of inclusiveness and collaboration is nurtured as employees are encouraged to share their ideas, regardless of their rank.

The company also prioritizes psychological safety, making it safe for workers to voice out-of-the-box ideas without fear of criticism or failure (Amabile, 1998). To foster innovation, it is necessary to be uncertain and experiment, and it is important to not punish failure. Mahindra has been working towards building a culture of learning from failure as an integral part of innovation.

Another significant facet of Mahindra's innovation culture is its cross-functional approach. Often, innovation in manufacturing requires a combination of knowledge from disciplines such as engineering, design, marketing, production and customer service. Mahindra promotes collaboration between different departments to promote knowledge sharing and collective problem-solving (Gupta et al., 2006; West & Farr, 1990). This cross-disciplinary approach brings in more holistic and innovative solutions.

Innovation as a result of research and development

Research and development plays a major role in the innovation strategy of Mahindra (Tidd & Bessant, 2020). The company has considerably invested in R&D infrastructure, engineering prowess and technology partnerships (Bessant & Tidd, 2021). It has research focus areas of product innovation, advanced engineering, sustainability technologies and digital solutions.

Among its notable accomplishments was the Scorpio SUV, which showcased Mahindra's capacity to design and produce a vehicle on par with its international competitors with local resources. This was an enormous success as it illustrated the power of collaborative innovation, customer-centric design and engineering skills to deliver an outstanding project. This accomplishment gave the organisation confidence and helped them appreciate the need for innovation-driven growth within the organisation..

Innovation is also been credited to the Farm Equipment Sector of Mahindra. The company constantly innovates in the field of agricultural technology and machinery by incorporating state of the art technology used around the world and making it applicable to Indian farmers. Mahindra has been actively engaged in R&D, leading to the development of fuel-efficient tractors, precision farming technologies, and smart agricultural solutions to enhance productivity and sustainability.

In recent years, the company has also broadened the scope of its innovation efforts to electric mobility, autonomous technologies, connected vehicles and sustainable manufacturing. The projects reflect Mahindra's vision of investing in new technologies, trends and meeting the future demands (Tidd & Bessant, 2020; Bessant & Tidd, 2021).

Employee Empowerment and Knowledge Management

One of the key elements of Mahindra's culture of innovation is the empowerment of its employees. The company understands that innovation can come from people at any level in the

organization. As a result, it has established mechanisms to involve its staff in decision-making and innovation activities (Amabile, 1998; West & Farr, 1990). Staff training and development is on-going to improve technical and creative skills (Gupta et al., 2006). Problem solving, design thinking, project management, digital technologies, and leadership development are the core areas of these programs. Continuous learning helps keep the staff well informed about the latest industry developments and promotes an innovative culture.

Knowledge management practices also help in supporting innovation by enabling the dissemination of experience and best practices throughout the organization (Deshpandé et al., 1993). Mahindra supports staff to capture lessons, participate in joint projects and communities of practice. Such activities enable the organisation to learn and prevent knowledge silos. Furthermore, there are structures of recognition and reward which play an important role in promoting innovative behaviors. Awards, incentives and career progression are some of the ways that employees are recognised who contribute with their ideas to improve the organisation. The mechanisms further reinforce the importance of innovation and help to engage people (Amabile, 1998).

Digital Transformation & Innovation

Digital transformation is one of the key elements of the global manufacturing industries' innovation (Tidd & Bessant, 2020). Mahindra has adopted the digital technologies to create operational efficiencies, delightful customer interactions and to fuel innovation efforts. The company uses state-of-the-art technologies such as Artificial Intelligence, Data Analytics, Internet of Things (IoT), Robotics and Cloud Computing in its operations. With smart manufacturing practices, Mahindra has been able to boost its production efficiency, minimise waste and improve product quality. Data-driven decision making enables managers to identify process for improvement and optimise resources. Digital platforms also enable cooperation between teams spread across regions, further helping to kickstart innovation across the organisation's worldwide operations. Besides, Mahindra has introduced the power of digital in its product development processes. Virtual simulation, digital prototyping, and predictive analytics, shortens innovation cycles and decrease the development costs. These features help the company remain agile and flexible in adapting to evolving customer needs and technological advancements.

The outcomes of Mahindra's Innovation Culture

The fruits of Mahindra's innovation culture abound in the way the company conducts business and in its reputation in the industry. The organization has introduced many new products, entered into new markets and established its global presence. It has spent on R&D, trained its staffs and invested in technology which has put it on a strong footing in local and global markets. It has also provided Mahindra with the flexibility to be innovative, therefore the organization is more flexible. The company's flexibility and responsiveness to market fluctuations, advancements in technology, and trends in consumer preferences have been proven (Gupta et al., 2006). Its ability to continually innovate has helped it to develop and generate value over time. In addition, the company's innovations have contributed to the bigger dreams of the society, such as advancing crop production, conserving the environment and economic development. An approach of innovation towards social responsibility has strengthened Mahindra's image and stakeholder relations. (Deshpandé et al., 1993)

Conclusion

This example of M&M, indicates that a culture of innovations can be a huge competitive edge for a manufacturing business. Leadership's commitment, employee empowerment, investing in R&D, and digital transformation and sustainability-driven initiatives are all summed up in the company's culture of innovation. As Mahindra deals with the challenges of technology transformation and complexity of organizations, it will continue to foster creativity, learning and continuous improvement. The experience shows that innovation culture is a matter of basic competence of the organisation and not a strategy and that is a key factor for success and resilience in the long term. (Schein, 2017; Drucker, 2014; Tidd & Bessant, 2020)

Key issues in the case

Maintaining innovation and retaining efficiency and competitiveness is Mahindra & Mahindra's biggest challenge. Good coordination and knowledge sharing are key to deal with innovations in different business units and markets. It is crucial for the company to maintain and update their workforce's skills and the technological resources for the continuously changing industries. Another key challenge is the need to strike a balance between short-term financial pressures and long-term investments in innovation. In addition, sustainability objectives are an ongoing strategic challenge in business performance.

Discussion Questions

1. What is Mahindra & Mahindra doing to foster an Innovation Culture?
2. How different is the role of employee empowerment and knowledge management in the context of manufacturing companies in creating innovation?
3. How do Mahindra's operational efficiency and experimentation and innovation coexist?
4. How can digital transformation contribute to innovation and competitiveness in manufacturing companies?

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Professional Ethics and Audit Quality Management in Consulting Firms: Evidence from KPMG India

Dr. Sagar Bhadange Professor & Dr. Shraddha Purandare Professor

Introduction

There is a close relationship between auditor credibility and sustainability, and the professional ethics and audit quality management are also the basis for the credibility and sustainability of consulting firms and auditing firms. In an era of stakeholders' expectations and corporate governance that's more than ever regulated, the auditor is expected to be most transparent and independent, objective and professional. Auditors play a key role in enhancing the integrity of financial reporting and protecting the interests of investors, regulators and society. Hence, to establish reputation and trust with the public, it has become all the more essential for organizations to take ethical behavior and quality of audit into consideration (DeAngelo, 1981; Francis, 2004).

In recent years the profession of auditing in India has undergone tremendous changes due to Economic liberalisation, Globalisation and International accounting and auditing standards. As big multi-national consulting firms have grown, audits have become increasingly complex and the competition in the professional services industry is fierce. KPMG India is one of the distinguished companies in the field of audit, tax, risk advisory and consulting services in various industry sectors in India. The firm is part of the global KPMG network, and commits to and adheres to a global culture of professional ethics, quality assurance, risk management and regulatory compliance (Hayes et al., 2014).

But the audit profession has been plagued by problems caused by corporate failures, accounting scandals and worries over auditor independence. The challenges have heightened the need for competitive ethical postures and good quality control systems. The lessons learnt from the experience of KPMG India and its member audit firms are important for consulting firms to improve audit quality and the development of professional ethics and public interest concerns while facing commercial pressure. Ethics in cases, Quality Audit management till 2023, Regulatory issues till 2023 and lessons learnt from the auditing environment till 2023 are covered under the case.

Background of KPMG India

KPMG India is one of the top professional services organizations in India and is a member of KPMG's global network. The firm offers audit and assurance, taxation, risk consulting, forensic investigations, digital transformation, governance advisory and management consulting services. KPMG India has extensive industry experience to assist organisations in a number of sectors including banking, insurance, manufacturing, information technology, healthcare, telecommunications, infrastructure and government services (Whittington & Pany, 2021).

The firm's business model is knowledge intensive services – professional judgment, expertise, and credibility are all essential in the creation of value. Consulting firms are all about ideas and

trust of stakeholders, unlike manufacturing companies where they need physical products. Therefore, auditors' integrity and quality of audit is not only a regulatory requirement but it is also strategic. The failure to perform adequately by a team of professionals and/or underperformance by an auditor can be detrimental to a firm's reputation (Francis, 2004).

KPMG India is a part of the global network which adheres to internationally accepted quality control and auditing methodologies. The firm strives to conduct audit engagements in a uniform and consistent manner and in compliance with the relevant professional standards. Audits are seen to be an important aspect of investor confidence and efficient capital markets. KPMG's global quality philosophy puts integrity, independence, objectivity and accountability at its core as key components of audit excellence.

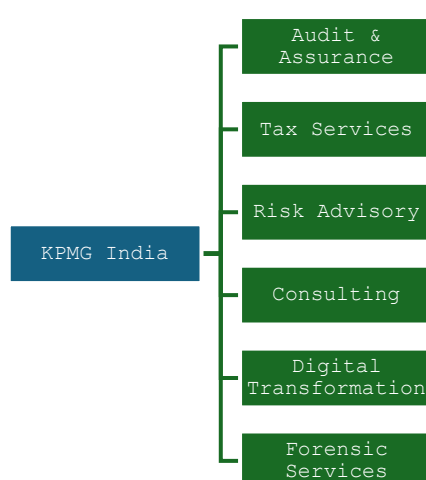


Figure 1: KPMG India Service Portfolio

Professional Ethics in Auditing and Consulting

Professional ethics are the principles and values that influence professional behaviour and decision making. Ethics are especially relevant in the field of auditing, as the auditor is charged with the obligation to independently assess financial information that has been prepared by management. Auditors are expected to give stakeholders their opinions that are not influenced by any concerns to show that financial statements are fair and accurate (IESBA, 2023).

Five Principles of auditors' ethics include integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Integrity involves honesty and being transparent in dealing with one another professionally. Objectivity requires that auditors be unbiased and free from a conflict of interest. The skills and knowledge needed for professional competence demand lifelong learning and technical expertise. Confidentiality involves keeping client information confidential and professional behavior involves rules of law, regulation and professional standards (IESBA, 2023).

Ethical behaviour is part of the policies and governance of KPMG India. Employees have a duty to adhere with professional codes of ethics and independence. Compliance and monitoring, as well as regular ethics training and internal reviews, are effective strategies to ensure ethical behavior throughout the organization. The firm is aware that failures of ethics can have a negative impact on not only the individual engagement but the credibility of the profession in general (Knechel et al., 2013).

The auditor independence issue is one of the biggest ethical problems for the big consulting groups. With the rise of firms providing assurance as well as advisory and consulting services, there is a possibility of potential conflicts of interest. The regulators and stakeholders are hoping that the auditing firms will ensure that there are measures in place to ensure the integrity of the audit processes in front of commercial relationships that could compromise them. Hence, the role of independence management has been one of the most important elements of professional ethics and audit quality management (DeAngelo, 1981).

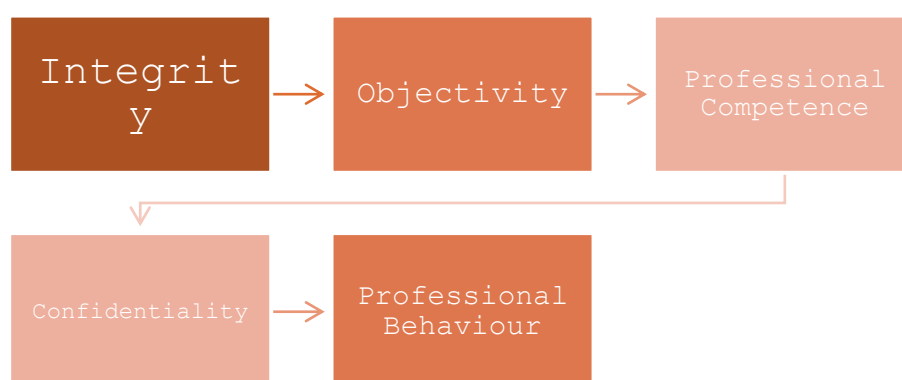


Figure 2: Five Principles of Professional Ethics

AQMF: Audit Quality Management Framework

Audit quality management is the systems, policies and procedures used to guarantee that an audit is conducted with compliance to the professional standards and regulatory requirements. Good audits help to ensure the accuracy of financial reporting, proper corporate governance, and investor confidence (Knechel et al., 2013). KPMG India has a robust framework for Quality Management, which includes leadership responsibility, risk assessment, engagement performance, quality reviews and continuous improvement. The framework aims to give reasonable assurance that opinions given are backed by adequate and appropriate audit evidence (Whittington & Pany, 2021). Commitment of leaders is key to audit quality management. Senior partners have a pivotal role in establishing an environment in which audit quality is given priority over commercial goals. This is accomplished through proper resources, establishment of proper audit controls and the exercise of proper skepticism when dealing with

audit staff (Messier et al., 2020). Client acceptance and continuance procedures also are very significant. The firm investigates the integrity of management, history of regulatory compliance, financial reporting risks and reputation prior to engaging in an engagement. These evaluations can minimise the risk of exposure to activities which may not be appropriate for the client. Engagement is an additional safety net from a quality control review. Important judgments, audit documentation and conclusions are reviewed by an independent reviewer prior to the issuance of an audit report. The reviews can help in achieving uniformity and can be used to pinpoint the deficiencies of the audit process. Moreover, CPE keeps auditors up-to-date on accounting principles, auditing regulations and the development of the industry.

KPMG's strategy for quality audit is to perform high quality audits through the consistent execution of the audit engagements within an effective system of quality control, which will ensure audit firm independence, integrity, professional competence and ethics.

Regulatory Oversight and Ethical Challenges

The regulatory framework for the Indian Auditing profession is well defined and has a wide definition of the regulatory bodies such as Indian Auditing profession, Institute of Chartered Accountants of India (ICAI), Ministry of Corporate Affairs, Securities and Exchange Board of India (SEBI) and the National Financial Reporting Authority (NFRA). Their duty is to ensure that the public interest in these institutions is protected, that they are compliant and the standards maintained. This was an important catalyst towards improving audit governance in India as NFRA was set up. NFRA reviews, inspects and makes recommendations on quality of audits and action to improve professionalism. The regulatory supervision has been dramatically changed because of concerns raised about corporate governance, financial reporting issues. An important milestone in 2023 was the publication of NFRA's inspection reports on the audit firms, including BSR & Co., which is a KPMG-affiliated audit firm. The regulator found that there were deficiencies with independence assessments, audit documentation, and some audit procedures. NFRA stressed the importance of audit firms to enhance their governance frameworks, implement robust quality control and adhere to independence rules. The findings showed a general picture of the problems of the profession. The big four audit firms will need to balance client relationships, commercial objectives, regulations and ethics. If the appropriate safeguards are not maintained, this could lead to risks of independence and audit effectiveness. The developments underlined the need for further improvement in the quality management systems and in the ethics of audits.

Auditor Independence and Professional Skepticism

Independence of the auditor is considered as the key principle of audit quality. Independence allows auditors to be objective in evaluating financial information without pressure or influence from clients. Public confidence in actual independence and in the appearance of independence is both relevant and crucial (DeAngelo, 1981; IESBA, 2023). Large consulting companies may have to deal with independence issues due to a sizeable client base and cross-disciplinary

service provision. As a result, firms make policies and procedures to disclose financial interests, prohibit prohibited services, and monitor relationships which may affect independence. Professional skepticism is the combination of independence that demands auditors to evaluate evidence critically and to be suspicious of possible misstatements or fraud. Questions and doubts are raised on the basis of questioning assumptions, weighing alternate evidence, and challenging management representations when appropriate. Regulators are increasingly focusing on the need for skepticism, as an important factor in audit effectiveness (Trotman et al., 2015). The observations of the 2023 regulatory exams highlighted the need to continue to have effective measures to ensure independence and to improve audit judgement documentation. Regulators said deficiencies in these areas might lead to loss of confidence in auditor reports. Independent and skeptical attitude is an ongoing process that needs to be nurtured, monitored and championed by KPMG India. The following practices assist audit teams to focus on their professional responsibilities rather than commercial interests.

Technology and Audit Quality

Auditing has undergone a tremendous change with technological innovations. With data analytics, artificial intelligence, cloud computing, and automation tools, auditors can analyze more data and find anomalies better. KPMG India has spent on technology-driven audit methodologies that have enhanced risk assessment, evidence collection and audit effectiveness (William et al., 2020). Advanced analytics can be useful in analysing the whole population of transactions rather than just random samples. It can be used to detect unusual patterns and to focus an audit on high-risk areas. Digital platforms also streamline the collaboration between teams on the audit and enhance documentation (William et al., 2020).

But there are new ethical and quality issues with technology. The auditors have to address the challenges of data security, information privacy, algorithm stability, and the responsible development and deployment of new technologies. Despite the technology, ethical principles continue to be vital because "technology can't replace human judgment, professional skepticism and accountability". Therefore, the application of technology in the audit needs to be balanced, taking innovation alongside proper and strong ethical supervision (Whittington & Pany, 2021). All consulting firms have a responsibility to make sure technological tools are designed to meet professional standards and improve audit quality without causing new risks.

Creating a Culture of Ethics in the Organization

Audits uphold ethical standards as they are vital to achieving audit quality and the reputation of the organization, and necessary for a sustainable ethical culture. Ethical culture is the values, beliefs and behaviors that impact decision making across the organization. It is influenced by the actions of leaders, practices of communication, assessment processes and incentives within the organisation. KPMG India has in place codes of conduct, ethics training, leadership engagement and accountability mechanisms to foster an ethical culture. Employees are encouraged to use a whistle blowing system or confidential reporting. Such mechanisms can

be utilized in order to identify the moral dangers in time so that they do not become a big problem.

Leadership is critically involved in setting the "tone at the top. When integrity and quality are reinforced at the highest level of management, employees will be more likely to be mindful of integrity and quality in their work. On the other hand, there is a potential for problem behavior to occur in cultures that put financial gains over professional duties (Knechel et al., 2013). Ethical risks also change over time and continuous monitoring and improvement are also required. New challenges and ongoing adaptation are required due to regulatory, business model and technical changes. Companies that put their emphasis in ethical culture and quality management are more likely to keep the trust of their shareholders and have a sustainable existence in the long run (Francis, 2004).

Conclusion

The case of KPMG India highlights the importance of the role of professional ethics in relation to the quality management system in a consulting firm. Credible audit services are built on ethical principles, including integrity, independence, objectivity and professional competence. Regulatory developments up to 2023 identified the need for better governance, documentation and effective quality control systems. Efficient, long-term practice success is reliant on the consultant's ability to earn, sustain, and restore stakeholder trust by acting ethically, demonstrating professional skepticism, and continually enhancing audit quality management practices (Knechel et al., 2013; Francis, 2004).

Core issues in the Case.

The key problems are to ensure the independence of the auditors and to function in a large consulting network that provides a number of professional services. The second challenge is to maintain audit quality on large, multi-part audits and in different industries. Third, regulatory inspections have identified shortcomings in the quality-control processes, documentation and governance that need to be continually improved. Lastly, there is a need for consulting firms to weigh considerations of the public interest and the ethical boundaries of the business with commercial interests.

Discussion Questions

1. How is auditor independence critical to the quality of the audit and the public's confidence in the audit?
2. What are the ways in which consulting firms can foster ethical culture and professional skepticism among audit professionals?
3. What were the key takeaways for KPMG India and other consulting firms on audit quality in this context from NFRA's observations in 2023?
4. How can technology benefit the audit quality process, without compromising ethical standards and professional judgment?

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Human Capital Development and Digital Capability Building in Consulting Organizations: A Deloitte India Perspective

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Introduction

Today one of the most crucial resources for companies seeking to have a competitive advantage in the knowledge economy is “human capital.” In particular, the consulting business is reliant on the knowledge, skill, creativity and agility of the workforce to contribute value added solutions to the client. The consulting industry has rapidly grown with new digital technologies, artificial intelligence, cloud computing, data analytics and automation, and there is a constant need to invest in human capital development and building digital capability. The landscape in India is extremely competitive, and consulting companies are finding it difficult to keep up with the rapid pace of technological disruption, evolving client needs, and the growing demand for digital transformation services. Deloitte India is one of the top professional services companies and has taken up major efforts to skill its people and build their digital readiness. In this case study, Deloitte India's efforts in the area of human capital development and digital capability building are discussed— strategies, challenges, outcomes and lessons learnt from these initiatives for consulting companies. (Becker et al., 2001; Bontis, 1999; Teece et al., 2016)

Organizational Background

Deloitte India is a member of the Deloitte global network, which is the world's largest professional services network with 245,000 members across 159 countries providing audit, consulting, tax, risk advisory and financial advisory services. Attracting, keeping, and nurturing skilled employees who can solve intricate business problems is a key factor in the firm's success. Today, with the increasing adoption of digital technologies by organisations, Deloitte India has broadened its scope from traditional consulting services and capabilities to digital consulting services and capabilities related to Artificial Intelligence, Cybersecurity, Cloud transformation, Data Analytics, Digital strategy and Emerging technologies. (Teece et al., 2016)

As the consulting industry relies heavily on intellectual capital, employee learning and development is a key strategic investment. In today's rapidly evolving landscape of technological changes, Deloitte India understands the constant need for new skills, and thus, the need for lifelong learning and reskilling the workforce. As a result, talent development is woven into the organization's business strategy and staff members stay relevant in a fast-changing world. (Bontis, 1999; Garavan et al., 2012; Noe, 2020)

Human Capital Development in Deloitte India

Human capital development is the enhancement of workers' knowledge, skills, competencies and capabilities in a systematic manner for the performance of an organization. Deloitte India has a people development strategy that encompasses the recruitment to onboarding processes, ongoing learning, leadership development, performance management and career progression (Becker et al., 2001; Noe, 2020). The firm's talent acquisition is geared towards analytical, problem-solving, flexible and tech-savvy people. Recruitment takes place via excellence educational institutions, professional networks and from sources proven. However, in the evolving consulting world, Deloitte understands that a great education is not the only requirement. This means that newcomers to the workforce need to be inducted into the

organization in a structured manner so that they can better understand its culture, client engagement protocols, work processes and tools. (Garavan et al., 2012)

The concept of Continuous Learning is at the heart of Deloitte India's Human Capital strategy. It encourages a culture of learning, encouraging staff to continually develop their skills and new abilities. Learnings interventions can be in the classroom, virtual learning modules, certification, mentoring, project-based learning, and collaborative knowledge exchange. Individual learning plans, designed to support the organization's goals and individual career plans, are followed to support and inspire employees to invest in their professional development. (Noe, 2020). Leadership Development is another critical element in Deloitte India's human capital. The company understands that future leaders need to be technically adept and strategically oriented. Leadership courses' training areas are communication, decision making, emotional intelligence, innovation management, team leadership, and client relationship management. These can help build a leadership bench to lead the organisation through the changes in technology and market conditions. (Ulrich et al., 2012)

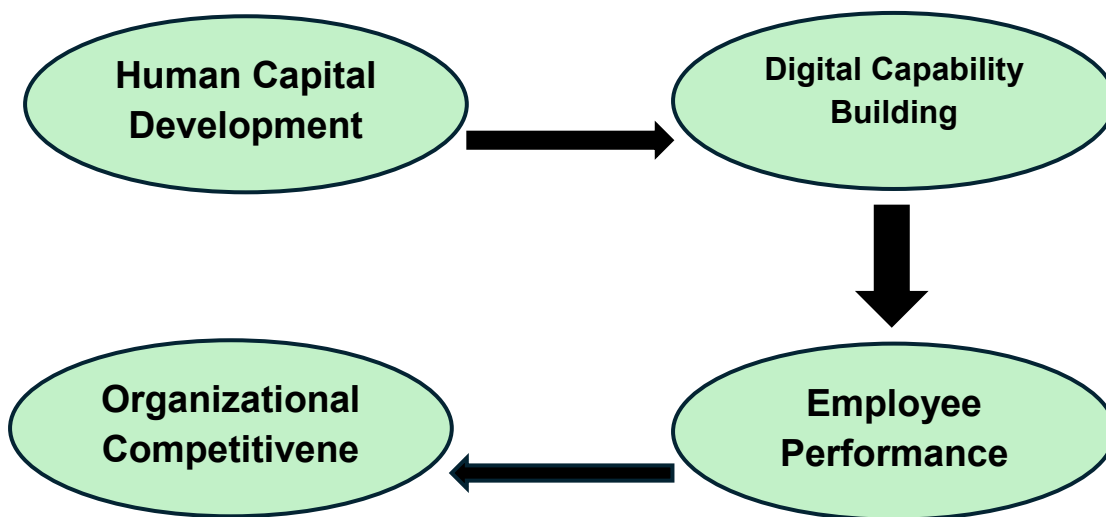


Figure 1. Deloitte India's Human Capital and Digital Capability Framework

Making the switch to digital technology and developing skills.

Digital transformation is a game-changer in the consulting industry. Clients are looking for help with more sophisticated technologies, advanced digital processes and business models based on data. That is in order to meet customer needs and client expectations, digital capacities need to be developed in the workforce (Teece et al., 2016). In response to this, Deloitte India has been investing in digital capability building, and is now poised to take digital transformation to the next level. The organization aims to foster digital literacy, not just among specific teams, but across the entire workforce. Digital capability development refers to training on artificial intelligence, machine learning, cloud computing, RPA, blockchain, cybersecurity, IoT and advanced analytics. (Teece et al., 2016; Noe, 2020)

The company supports its employees in getting industry-accepted certifications from top technology vendors. These certifications boost an employee's competence, and also increase the credibility of the organisation in providing digital transformation services. In addition, Deloitte incorporates technology learning into the work experience, allowing staff to put their learning into practice in real-world engagements (Noe, 2020). Technical skills are not the only

aspects of digital capability building. Employees are educated on the strategic aspects of the use of digital technologies, how to analyse technological opportunities in business and how to create innovative solutions for clients. This wider view gives the consultants the opportunity to bring both business knowledge and technical skill together to provide added value to the organisations going through digital transformation. (Kaplan & Norton, 2004; Teece et al., 2016)

Learning Ecosystem and Knowledge Management

One of the key components of Deloitte India's human capital strategy is to create a strong learning ecosystem. Knowledge-intensive organizations rely on efficient knowledge management systems to capture, share and leverage the knowledge of the organization. Deloitte has created digital learning platforms that give their employees access to a huge library of learning that includes courses, webinars, case studies, industry reports, and best practice repositories. (Bontis, 1999; Noe, 2020)

The learning environment fosters individual and autonomous learning. Staff can determine the areas in which they need to develop and seek relevant learning opportunities in line with career aspirations and project needs. The adaptability of the digital learning platforms increases access and enable ongoing professional learning, anywhere. (Noe, 2020)

Share of knowledge also is important in capability development. Deloitte fosters closer working together through communities of practice, project review, expert networks, and cross functional teams. These processes help to pass on tacit knowledge to other employees, so they can learn from others' experiences and wisdom. This collaborative environment promotes innovation and accelerates organizational learning. (Wang & Noe, 2010)

Employee Engagement and Talent Retention

Employee engagement and retention go hand in hand with human capital development. Consulting has an unusual rate of turnover, especially because of the high demands of their work, the competitive job market, and the numerous outside job opportunities. Deloitte India tackles these challenges with a holistic employee engagement programme.

The company has a culture of continuous feedback and inclusion and diversity. Staff are involved in decision making and are encouraged to make innovative suggestions. Adjustable working conditions, health promotion initiatives, supportive relationships, and career advancement support satisfaction and commitment among workers. (Ulrich et al., 2012; Garavan et al., 2012). The other way round is also true – digital capability building also boosts employees' perceived employability and career prospects, which helps to retain them. Employees are more likely to stay and be committed to their organization if professionals feel that they are investing in their development. A key focus of Deloitte's on continuous learning results in a positive psychological contract, which helps to build loyalty and long-term development for employees. (Noe, 2020; Garavan et al., 2012)

Human Capital and Digital Capability Development Challenges

While investing in learning and development, Deloitte India has been facing various challenges. A key challenge is to be able to keep up with the ever-changing technologies. Digital skills can be rapidly outdated, necessitating perpetual updating of training material and learning programmes. (Teece et al., 2016). Another issue is whether you have enough billable client work to support your employee learning activities. Experts are often pressed for time, and providing adequate time for skills development may be challenging. It is important for organisations to embed learning into their routine work processes, not as an activity in its own right. (Noe, 2020)

Another issue that is still being considered is talent retention. Digital skills are becoming more and more important and experts with advanced technologic skills are actively sought after by competitors. It is imperative that Deloitte continually improve employee value propositions to attract and keep highly-skilled employees. (Garavan et al., 2012). Furthermore, ROI of human capital development programs can be challenging. Learning initiatives are important to improving performance and innovation, but quantifying the direct impacts of learning on organizational outcomes is complicated. Good evaluation systems are needed to help determine the effectiveness of programs and inform future investments. (Marler & Boudreau, 2017; Becker et al., 2001)

The outcomes and the impact on the organization

Deloitte India's investments in Human Capital Development and Digital Capability Building have yielded great benefits to the organization. Increased staff skill levels have resulted in higher levels of service quality, innovation and client satisfaction. Consultants with cutting-edge digital competency can be more effective in tackling complex business challenges and provide transformative solutions. (Becker et al., 2001)

The organisation has enhanced its adaptability and resilience in a context of constant change through the use of its learning culture. Staff are more willing to be open to new technologies and new business models. In addition, leadership development programs have helped in succession planning and organizational sustainability. (Teece et al., 2016; Ulrich et al., 2012) Deloitte India's market competitiveness has also been improved with digital capability building. This allows the firm to further establish itself in the professional services market by providing clients with both integrated consulting and technology solutions. Consulting firms are becoming more attractive to clients because they can offer strategic thinking and technical skills that can help create growth opportunities for the client's business and long-term consulting relationships. (Kaplan & Norton, 2004; Teece et al., 2016)

Conclusion

The Deloitte India case highlighted the need for investment in human capital development and digital capability building as strategic priorities in a consulting firm today. The company has developed an army of experts to meet client requirements through ongoing learning, leadership development, knowledge sharing and technology-based training. Human capital strategy and digital transformation goals have been linked, improving performance, innovation, and competitiveness of organizations. With the ongoing transformation of industries by digital, ongoing investment in employee development will be crucial for future success. (Becker et al., 2001; Noe, 2020; Teece et al., 2016)

Core Issues in the Case

The main problem is that of keeping workers relevant in today's fast-changing technologies and client expectations. The second challenge relates to the balance between intensive client service needs and ongoing learning needs. Thirdly, the ability to keep digitally competent professionals in a highly competitive labor market is an important issue. Last but not least, the impact of human capital development programs and their impacts on the business are a constant challenge for management (Teece et al., 2016; Garavan et al., 2012; Marler & Boudreau, 2017).

Discussion Questions

1. How does development of human capital lead to competitive advantage in consulting organisations?
2. How can consulting companies foster employee digital skills?
3. How to strike a balance between training employees and completing projects for clients?
4. How can effectiveness of human capital development and digital capability building programs be assessed?

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Employee Engagement and Performance Management in Platform-Based Organizations: Insights from Swiggy

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Introduction

Platform organizations have contributed to the evolution of industry. Digital platforms can be facilitated with technology to enable real-time communication between service providers and customers, and develop flexible, scalable business models. The food delivery industry has seen tremendous growth in India with the rise of smart phones, urbanization and new food trends. One of the largest companies in this segment that have been a game-changer in the food delivery segment with their tech-driven platform is Swiggy. Platform organizations have a number of advantages, such as flexibility and efficiency, but they also come with a variety of challenges, including employee engagement and performance management. Because of the unstructured nature of work, which is often performed at the worker's home or in remote areas, away from other workers, it is difficult for platform workers to maintain motivation, commitment and consistency in their work. Swiggy's journey offers a few good pointers for digital companies that want to boost their performance and maintain a geographically dispersed workforce in a fiercely competitive sector (De Stefano, 2016; Wood et al., 2019).

Platform-Based Organizations and Workforce Dynamics

Platform-based organisations are based on linking together various stakeholders via digital infrastructure. Swiggy's Core Platform consists of restaurants, delivery partners, foodies, and even service providers. The company heavily depends on its delivery executives as they are the first line of contact with the customers. These delivery workers' roles are somewhat flexible and are compensated through deliveries, incentives, and performance-based rewards.

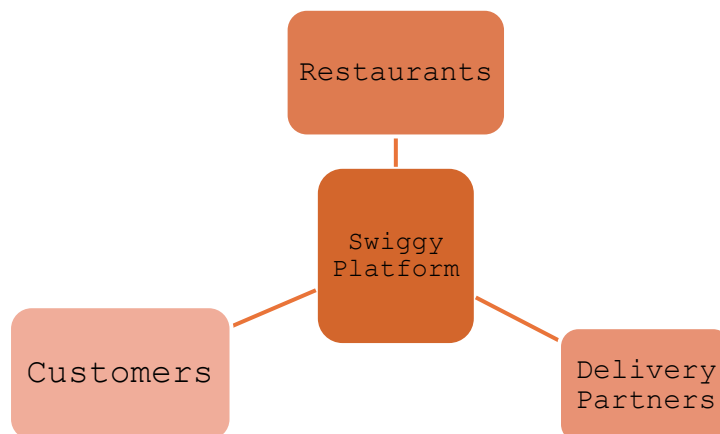


Figure 1. Swiggy Platform Ecosystem

The platform economy is very different from a typical employment system. While workers can organise their working hours and their workplaces, they may also feel insecure about their job and may not know how to progress their career. In this regard the subject of organization becomes the most important subject of the employees' commitment - employee engagement. Definition of employee engagement: Psychological, intellectual and physical commitment of the employees to their work and the goals of the organization. Employees who are engaged will be more productive, service oriented, be more ready to leave the company and inclined to

be oriented towards the products. In platform-based organisations, with less direct supervision, engagement is even more significant to maintaining an organisation's performance (Bakker & Albrecht, 2018; Saks, 2019).

The company has four job roles – Corporate, Tech, Customer Support, Warehouse and thousands of delivery partners are deployed to different cities to do the business. Educational practices must be creative, with emphasis on technology, communication, rewards and organizational practices, to be able to compete for the interest of a diverse workforce.

Swiggy's Employee Engagement Practices are quite evident in the above points. Swiggy has adopted many strategies to help its delivery partners and employees engage. Flexibility is a key factor of engagement. The delivery executives will be given the option to work their hours based on their availability and choice. This flexibility is what attracts students, part-timers and those who are seeking additional income. Flextime is a positive attribute of perceived autonomy, and a strong influence on engagement (Saks, 2019).

Another employee engagement mechanism is technology-based communication. Swiggy provides delivery partners with real-time updates, performance feedback, and incentive information through its mobile application. Geographically spread workers can stay on the platform through notifications in the app and support. This digital communication infrastructure creates a sense of community and ongoing communication among employees and the organisation (Saks, 2019). Reward and recognition are another key aspect of engagement. Swiggy also provides performance-based bonuses, referral and milestone rewards. Such incentives help to ensure the quality of service and productivity from delivery agents. Recognition theories in the form of behavioural theories are advanced to help explain how recognition can create the conditions for desired behaviours and thus improve employee satisfaction and engagement (Cropanzano et al., 2017).

It has also pledged itself to welfare and working towards improving worker welfare. Some schemes like accident insurance, health support, emergency assistance and financial protection schemes can alleviate some of the issues associated with gig work. This is the organization's concern for the well-being of the workers; this can help to strengthen the psychological bond with the platform (Cropanzano et al., 2017). Engagement is also achieved through programs of training and skill development. People providing the product undergo training on the interaction with the customer, security, navigation and operation of the product. Confidence and competence are linked with engagement and job satisfaction - this is why continuous learning is key (Mone & London, 2018).

Organizations based on platforms: Performance Management

Performance Management is a systematic process of evaluating, monitoring and improving employee performance to realize the organizational objectives. Typical organizations will conduct performance management via supervisor assessment, annual review and individual encounters. When the work is distributed to different places and interactions are primarily technology mediated, there are different ways to go about platform-based organizations (Cappelli & Tavis, 2016; Pulakos et al., 2015).

Swiggy has a lot of data-driven performance management systems. The data gathered from all deliveries is measurable in terms of customer ratings, acceptance rates, order completion rates, attendance, service quality indicators and delivery time. By using these metrics, the company can track its performance over time, and they are all quantifiable in terms that are easily

understood (Cappelli & Tavis, 2016). Real-time performance tracking gives feedback to delivery partners in real-time. You can see the earning, delivery, rating and eligibility of incentives on the mobile app. This openness enables people to see what is expected of them and take corrective action, if required. Performance information that is on display encourages self-management and accountability (Cappelli & Tavis, 2016).

The ratings received by customers is an important component of Swiggy's performance management system. It is imperative to know the amount of service quality, timeliness, professionalism and communication skills by customers. High ratings will generally lead to higher incentives and rewards and low ratings will often lead to corrective interventions and/or training requirements (Pulakos et al., 2015). Gamification is a new and fresh performance management solution for platform organizations. Swiggy employs leader boards, achievement badges, performance rankings and incentive challenges to motivate the employees. Gamification encourages greater productivity, and makes work more interesting and rewarding, in a competitive environment (Mone & London, 2018).

Solving Employee Engagement & Performance Management Issues

With all the efforts, there are a number of engagement and performance management issues that need to be addressed on-platform organizations. There's one thing that's problematic about gig work; the transactional part. In fact, for some delivery partners, it is a means of earning a living, rather than a career path. This orientation can decrease the organizational commitment and make it harder to engage. Another obstacle to overcome is income variability. Earnings are subject to the variation of demand, weather, geographic location and incentives. The unpredictability of income can cause stresses and dissatisfaction amongst employees. Organizations need to, therefore, find the right balance between working efficiency and just compensation mechanisms. Worker isolation is another aspect of interest. Unlike traditional workers who have to work with fellow workers and bosses on a daily basis, delivery partners work a lot on their own. Low social interaction may result in low organizational identification and low sense of belonging. Swiggy tackles this issue by creating community-building activities, support groups and events that occur every now and then.

There are other difficulties with algorithmic management. Platform companies are increasingly using algorithms to assign tasks and to measure performance, and to calculate incentives. The advantage of working with an algorithm is that it will work efficiently and consistently, but workers may feel like they are working with an impersonal or inexplicable algorithm. Algorithms can determine decisions that can be non-transparent, can affect trust and engagement (Wood et al., 2019).

If there is too much an emphasis on quantitative measures, the measurement of performance can be problematic. The metrics measured – such as delivery time – can create the situation where workers seek efficiency rather than safety or service quality. For this reason, it's crucial that organisations design their systems of balanced performance to include productivity and employee health.

The significance of Leadership and Organizational culture

In the digital workplace, there are still steps of leadership that need to be taken. Swiggy's management has realized that the importance of having a positive culture in an organization is that their workers also feel good about their work and value themselves as a strong contributor

to the achievement of the organization. Effective communication of the company's objectives and values can help get the employees on board.

Culturing a culture around respect, customer, innovation and continuous improvement is positive influence on engagement. Discretionary effort and commitment from the workers will be fostered by the Fairness, Recognition and Support in the organization. Customer centric approach makes customer delivery people feel like they are an integral part of the brand. The significance of inclusive leadership practices is greater in the setting of platforms due to the diversity of socioeconomic and educational backgrounds among the workforce. Trust between employees and organization is fostered by providing equality of opportunity; with clear policies and easy-to-use grievance processes (Kuhn & Maleki, 2017).

Use of technology in HRM

Swiggy uses technology to be an operation tool, and also as a human resource management tool. In Workforce Planning, Route Optimisation, Demand Forecasting and performance monitoring, AI, machine learning and analytics are applied. The technologies increase efficiency and provide for personalized engagement interventions.

Predictive analytics can help identify those who are likely to be disengaged or even leave the company. These trends in behavior can be used to inform decisions that organizations make for retaining employees, like providing additional benefits or some training. Specific incentives and support measures can then be put in place to further improve the effects of the engagement. Ongoing performance discussions can be facilitated with digital feedback systems as well. No annual reviews – workers receive feedback via platform interface. This reflects modern-day approach to performance management based upon agility, responsiveness and learning.

Sustainability and Future Directions

The platform economy is growing and sustainable workforce management will be even more crucial. Organizations need to shift their focus from productivity to long-term worker health and success, career trajectory and personal commitment. Swiggy's success story highlights the importance of having employee engagement initiatives that are linked to performance-based compensation. Future changes may include additional enhancements to learning platforms and pathways, mental health supports, and participation of workers in decision making. These initiatives can help to increase employee engagement, provide excellent service and improve performance. Practices in the areas of engagement and performance management may be impacted by regulatory considerations. The labour rights, social security and employment of the gig economy is of growing global interest. The more proactive organisations will be better at achieving engagement outcomes and competitive advantage over the long-term (Kaine & Josserand, 2019).

Conclusion

This is reflected in Swiggy's journey of how employee engagement and performance management are key to success of a platform-based organization. One of the innovative methods of working with a dispersed workforce, implemented by the company, is flexible working hours, technological communication, incentives, welfare measures, and data-based performance management. However, income insecurity, worker isolation and algorithmic management are ongoing challenges that need to be overcome. The secret to getting sustainable success for a platform organisation is finding a balance between the efficiency of operations, employee well-being, engagement and long-term workforce development (Wood et al., 2019; Saks, 2019).

Key Issues in this Case:

- Maintaining geographically dispersed delivery partners and mostly independent teams of employees.
- Finding the right balance between performance expectations and workers' welfare and job satisfaction.
- Providing technology and algorithm based systems as a method to motivate the workforce.
- Addressing uncertainties in gig work situations such as income, turnover and organizational commitment.
- Designing sustainable performance management systems for increased productivity and employee health.

Case Questions

1. In platform-based businesses such as Swiggy, how is the link between Employee engagement and Service quality/organizational success?
2. What are the pros and cons of performance management systems based on data in the gig economy?
3. What are the problems in maintaining the balance of efficiency and the care and retention of employees at platform organizations?
4. How can Swiggy improve commitment of delivery partners?

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Leadership Development and Change Management during Digital Transformation: Axis Bank Experience

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Introduction

Businesses now must transform into a digital world, in an era of cut-throat competition and tech-savvy industries. The fintech industry, changing customer expectations, artificial intelligence, cloud technology and data analytics and mobile banking are just the latest to give the banking sector a shake up and that's just likely to keep up. Banks have been constantly hit by fintech companies, shifting customer needs, artificial intelligence, cloud, data analytics and the proliferation of mobile banking but it is set to continue. To be relevant in the digital age, conventional banks have had to re-engineer their business, organization, leadership and staff competencies. The Axis Bank is one of the best-case studies on successful Digital transformation in India. Over the past decade, Axis Bank has undertaken a complete transformation journey for customer satisfaction, operational efficiency, digital skills and fostering an innovative culture. This is a period in which effective change management and development of leaders have played a pivotal role. Digital transformation was not only about the technology, it was about the way the bank operates, and in the programme Axis Bank knew that the leaders of this technology programme would need to operate in an environment of uncertainty, inspire teams and encourage innovation. Just as in the case of many other sectors, new capabilities were needed on all levels of leadership to deal with the transformation of bank operations into digital, the customer in the centre, and the necessity to manage agile. In the meantime, the employees had to deal with customer expectation changes, technology and role changes. This required a leadership development and change management to be intrinsic to the bank's transformation programme (Vial, 2019; Westerman et al., 2014).

Organizational Background

Axis Bank was established in 1993, and developed into a leading private sector bank in India, providing financial services and products to retail and corporate and institutional clients. A number of products and branches have built up the bank over the years, gaining a great number of customers. However, the pace at which the technological innovations are developing in digital and the increasing competition from the fintech companies were a great challenge. With no hesitation, customers are requesting seamless digital experiences, immediate access to transactions, customization and access to digital channels at all times. The traditional banking systems were no longer performing effectively with the branch-based services and manual processes they were using. To maintain the competitive edge, Axis Bank knew that significant investments in digital infrastructure, innovation, employee skills, and leadership abilities were necessary. To remain competitive, the bank embarked on a transformation journey that included modernization of technology systems, enhancement of digital products, adoption of analytics-driven decision making, and development of a digitally capable workforce.

Digital Transformation Initiatives

A number of steps have been taken by Axis Bank to build its digital ecosystem. The bank has enhanced its mobile banking apps, Internet banking, artificial intelligence-based customer service, robotics process automation, and data analytics. In order to create an easy and

comfortable customer experience and satisfaction, digital products such as mobile apps, digital payments, online lending platforms, and contactless banking were introduced.

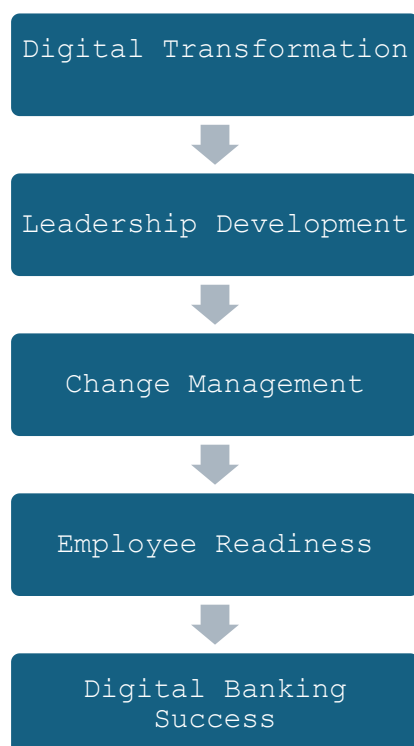


Figure 1: Leadership Development and Change Management Framework during Digital Transformation at Axis Bank

A great deal of organizational change was necessary for the effective implementation of digital technologies. Business processes were redesigned, decision making processes became more agile and team working between departments has improved. The change also involved a shift in organisational culture from a hierarchical to more innovative and “customer” and “technology” focussed approach. The leadership team knew that technological investments in themselves were not going to lead to success. Employees were required to learn new working habits, to gain new skills and be willing to develop new solutions. Leadership development thus began to play a crucial role in the transformation process at this stage.

Developing a Digital Leadership Culture

One of the greatest challenges in digital transformation is to create an innovation and adaptability culture. Axis Bank emphasized a leadership culture characterized by openness, collaboration, innovation, and customer-centricity. Leaders would be expected to model this for others with regard to the use of technology, sharing of knowledge and innovation within teams. The management of the Bank became more agile and focused on collaboration and agility in decision making. The leaders were encouraged to work beyond departments and to foster inter-functional working. This strategy allowed for integration between various departments in implementing digital initiatives, fostering innovation and enhancing the agility of the organization. The need was to emphasize more on data-driven decision making for digital leadership. Leaders were trained on how to use analytics and performance indicators to identify opportunities, and how to use a framework of assessing risk and making decisions based on this in a strategy. Analytical thinking in leadership practice enabled the company to be

responsive in the changing market requirements and customer needs. Moreover, leaders were encouraged to give employees freedom, and consider experimenting. In this context, staff were able to have a safe space to share their thoughts and ideas, and to be receptive to new ideas (Avolio et al., 2001; Northouse, 2022).

Change Management Challenges

Resistance to employees of what they may perceive as losing the ritual and/or that their skills are being taken away or technology changes is one of the hurdles of digital transformation. Just like staff, Axis Bank had its own set of challenges on transitioning to new systems, processes and expectations. This resistance to change may be due to uncertainty, fear of failure, lack of understanding or lack of communication. New technologies and platforms, new skills and work practices were needed because of the digitisation and automation of the world. Some people were not ready for these changes, more especially those that were used to the traditional banking systems.

The other challenge was to balance the transformation initiatives with the current operations of the business. Service quality, customer satisfaction, and efficiency were critical for the bank to consider when implementing digital solutions. This was a double challenge as it required careful planning and management around it. There's also rapid advancement of technology which led to capability gaps. The need was to upskill the employees with Digital tools, Analytics, Cyber Security and Customer Engagement technologies. Tackling these skill gaps became a key element in the bank's change management plan (Cameron & Green, 2019; Burnes, 2020).

Change Management Strategies

To overcome these challenges, Axis Bank embarked on a comprehensive change management programme, which involved enabling the employees to adapt to the changes and to work in sync with the changes. Communication was one of the key elements to the transformation process. There was regular communication of a vision, purpose and benefits of digital transformation at all levels. Clear communication minimised uncertainty and fostered trust. Staff have been informed about the impact of the changes in technology and how these will be supported by the organisation as they move with it. Key messages on transformation were repeated by means of regular internal communication campaigns, workshops and town hall sessions. Roster training and development has been well leveraged to develop employee confidence and competence. The bank started investing in digital learning platforms, skill enhancement programs and digital banking practice and specialisation on emerging technologies. Staff were encouraged to participate in continual learning opportunities to ensure they were up to date with the world in which they live.

One of the other major approaches was to involve workers. The bank has engaged employees in transformation work, solicited their input and invited them to participate in the decision-making process, which has increased their willingness to be engaged in the different transformation projects. Those staff who felt involved with the change had more positive perceptions of how well the organization was supportive and more positive attitudes toward the new behaviors. Change management was supported by leadership. Management acted as change agents, addressing concerns from employees, providing reinforcement and direction for desired behaviors. Evidently worked to develop momentum and alignment of the organization (Kotter, 2012).

Effectiveness of Leadership Development and Change Management

Change management and leadership development are integral parts of the digital transformation journey and have helped Axis Bank achieve successful steps. The bank experienced tremendous progress in digital delivery to its customers, and in efficiency and agility of the organization. The digital channels grew in importance both as channels of customer interaction and the bank was able to meet the expectations of its customers. Leadership programmes assisted managers to become more effective and to make the organization more agile. Leaders acquired more techniques in addressing uncertainties, managing innovation and collaboration. In the face of market changes and technological evolution these skills have been a great asset.

A series of communication, training and involvement programmes were also developed and rolled out to achieve improvements in employee engagement, as targeted. Staff's confidence in the use of digital tools and new working methods grew. There was a gradual shift in the culture to continuous learning and innovation and even to a customer centric culture. The change put Axis Bank in the league of top players in the Indian digital banking landscape. The investment in technology, leadership development and a change management programme on a structured basis created a basis for future growth and competitiveness.

Conclusion

The Axis Bank experience shows that there is more to digital transformation than technology – it takes a significant focus on people and leadership to achieve this. Through leadership development, managers were given the autonomy to lead in a complex situation and to inspire their employees to effectively take the company through the transformation process. At the same time, structured change management practices improve employee willingness to engage in change and minimise resistance to change as the employees adjust. The case highlights the importance of leading, changing culture, building employees, and using technology to succeed in the process of digital transformation. Organisations that wish to initiate similar leadership development and change management programmes might find a lot in Axis Bank's holistic approach to leadership development and change management. (Schein & Schein, 2021; Yukl & Gardner, 2020).

Core Issues in the Case

Leaders need to be capable in a fast-changing digital landscape – this is the main issue in the case. One of the other big issues is what to do about the resistance and uncertainty of employees when there are drastic changes in the technology being put in place. The case also brings to the fore that while pursuing operational efficiency the management should also be innovative and stick to the continuous change in the organization. In addition, addressing digital skills gaps, and facilitating a culture of learning and adaptability were identified as being critical in the success of the transformation.

Discussion Questions

1. Why do banks need to invest in leadership development for their digital transformation?
2. What were the factors that were challenging Axis Bank in the process of digital transformation and how did they overcome the challenge?
3. What are the methods to help reduce the resistance from the employees towards introducing technological changes?
4. What can be learned from Axis Bank's leadership development and digitalisation initiatives by other organisations?

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Workforce Upskilling and Technology Adaptation in Industrial Automation

Firms: Siemens India Study

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Introduction

Industrial automation is surfacing as the most significant advancement in the manufacturing and engineering industry throughout the universe. With the advent of Industry 4.0 has revolutionized industrial operations via technologies like Artificial Intelligence (AI), Internet of Things (IoT), robotics, cloud computing, data analytics, and digital manufacturing systems. In India, industries are gradually accepting automated technologies to improvise efficiency, operational proficiency, quality assistance and ecological balance. As companies move towards smart manufacturing systems, employee retraining has become uniformly necessary as employees require progressed technical skills to manage contemporary digital tools successfully.

Siemens Limited is the most foremost industrial automation and engineering firms in India which aims at digital transformation, smart infrastructure, electrification, and industrial software solutions. Siemens India has taken part notably for the advancement of intelligent manufacturing models and Industry 4.0 adoption throughout several industries like automotive, pharmaceuticals, energy, electronics, and infrastructure. The organization has also aimed towards corporate training, employee upskilling and technology implementation to assist industrial transformation.

The swift implementation of automation technologies has initiated both opportunities and challenges for industrialized companies. Even though automation accelerates productivity and efficacy, it also develops talent mismatch as conventional employee skills are not enough anymore within the digital manufacturing industry. Henceforth, organizations like Siemens India should constantly provide workforce upskilling, technical skill-building and creative approaches to stay in the market competition.

This case study investigates employee upskilling and technology modification approaches implemented by Siemens India till 2023. It also points out the key impacts, opportunities and upcoming predictions related to Industry 4.0 revolution within the industrial automation firms.

Industrial Automation and Industry 4.0 in India

Industry 4.0 means the incorporation of digitalized tools with industrial manufacturing models to make intelligent, linked and computerized fabrication landscape. The ideas includes the utilization of smart tools, corporate software, updated on-the-go data analysis, cloud tools and cyber-physical tools to improvise operation-based results and manufacturing productivity.

India has undergone swift advancement within industrial automation because of rising competition, high labour charges, universalization and government proposals influencing manufacturing advancement. Industries progressively implemented automated models to minimize flawed manufacturing, improvise quality, expand elasticity and reinforce supply chain management.

Key tools implemented in industrial automation incorporates:

- Artificial Intelligence (AI)
- Internet of Things (IoT)
- Robotics and machine automation
- Cloud computing
- Big data analytics
- Digital twin technology
- Predictive maintenance systems
- Smart sensors and industrial networking

Government programs like “Digital India,” “Make in India,” and Production Linked Incentive (PLI) proposals motivated businesses to infuse into digital manufacturing and automated technologies. Consequently, India’s industrial automated market grew remarkably until 2023. Nevertheless, the rise of Industry 4.0 also made employee-oriented issues as workforce required updated digital expertise and technical upskilling. This maximized the value of employee upskilling and employee adaptableness within industrial firms.

Workforce Upskilling at Siemens India

The implementation of Industry 4.0 systems transformed employee responsibilities within industrial automation organizations. Labours functioning withing conventional manufacturing units require more updated skills in industries like industrial software, AI systems, robotics, IoT platforms, cybersecurity, and data analytics.

Siemens India identified that a thriving digitalization is based on both technological implementation and employee upskilling advancement. Henceforth, the firm began employee upskilling programmes to train professionals for a digital manufacturing unit.

The organization facilitated with technological training initiatives, virtual learning systems, workshops and certified courses related to automation technologies and industrial software tools. Professionals were trained on analytical maintenance, robotics incorporation, data analytics and cybersecurity, Siemens India also motivated constant education via virtual upskilling courses and technical workshops.

Executive level training was another imperative segment of the organization’s employee policy. Managers and team leaders were provided training to manage organizational transformations related to automation and virtual revelation. Additionally, Siemens India teamed up with training institutes and technical training organizations to minimize the lack of skills within industrial automation and train upcoming employees to Industry 4.0 professions.

Technology Adaptation Strategies of Siemens India

Siemens India implemented various updated technological tools to improvise industrial output, operational efficacy and ecological balance. The key target domain was the adoption of smart manufacturing models where machines, gadgets and digital platforms are interrelated via industrial networks and clouds systems.

The business incorporated Artificial Intelligence (AI) and IoT systems within manufacturing operations to improvise on probable maintenance and operational tracking. IoT powered tools gather on-the-go information from machines, while AI-powered tools scrutinize the information to find out execution challenges and minimize the chances of collapse of tools.

Digital twin technology is another imperative creation implemented by Siemens India. Digital twin designs digital models of industrial tools and manufacturing units, enabling businesses to replicate methods, track operations and assess developments prior adopting the transformation in actual manufacturing units.

Cloud computing models and industrial software tools improvised off-site surveillance, process-oriented alignment and data handling. Siemens India also empowered cyber defence tools to guard industrial data and related manufacturing units from cyberattacks and operational barriers.

Moreover, the firm also stressed upon ecologically balanced manufacturing by adopting eco-friendly automation tools and smart energy management systems. Investing on studies and advancement assist in innovation and improvised Siemens India’s competitive market within the industrial automation industry.

Challenges in Workforce Upskilling and Technology Adaptation

Inspite of the several benefits automation and digitalization has, Siemens India underwent through various issues with respect to employee upskilling and technological changes. One of the key issues was retaining workforce because of technological upgrades. Several labours

panicked about unemployment because they thought convention manufacturing roles would be taken over by automation and robotics. These apprehensions created conflict for upgradation towards digitalization.

The other issue included the excessive expense of applying high-end automation tools and labour upskilling courses. Industrial automation needs ample funds in software, hardware, digital infrastructure, cybersecurity tools and labour upgradation. In India the lack of digitally skilled labours impacted the development of industrial automation. Businesses need specialists in robotics, AI, industrial software, and cybersecurity but the presence of skilled employees is very restricted. Figure 1 presents the

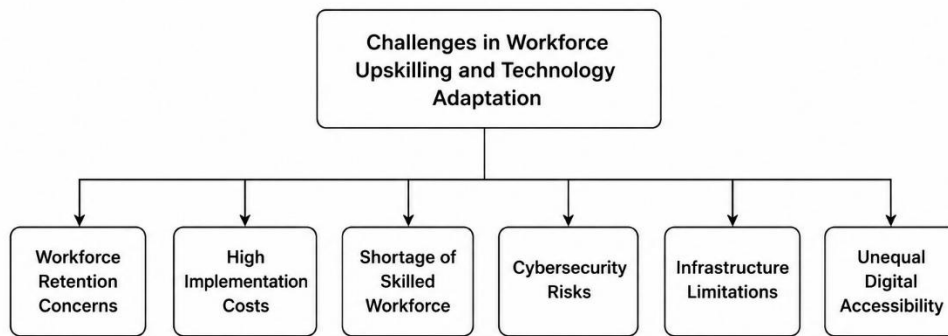


Figure 1 Challenges in Workforce Upskilling and Technology Adaptation

Cybersecurity consequences surfaced as another acute issue as interrelated industrial tools are susceptible to cyberattacks and privacy breach. Companies henceforth require powerful cybersecurity blueprints and staff consciousness related to information security. Insufficient infrastructure and unequal digital accessibility in a few industrial places of India creates obstacles to a productive Industrial 4.0 execution.

Current Industry Trends and Market Outlook

In India the Industrial automation industry stretched swiftly until 2023 because of rising need for digitalized manufacturing units and relatable production tools. Industries like automotive, electronics, pharmaceuticals, chemicals and energy extremely spend on automated tools to improvise efficacy and efficiency.

The need for smart skilled workers also grew notably as companies need labour force with proficiency in robotics, AI models, cloud computing, cybersecurity and industrial software.

Key industrialized automated business that are functioning in India incorporate ABB, Schneider Electric, Honeywell, and Siemens India. These firms aim towards innovative ideas, digitalized manufacturing tools, ecological balance and employee upskilling to handle competitive edge. The upcoming stance towards industrial automation in India stayed extremely optimistic due to rise in industrial upgrade, government initiatives for manufacturing development and rise in implementation of Industry 4.0 tools.

Conclusion and Future Perspective

The case study presents that in the age of Industry of 4.0, employee upskilling and technical implementation are extremely imperative for industrial automated companies. Siemens India serves as an imperative body for developing modern manufacturing and digital revolution within India via investments within automated tools, industrial software, AI models, IoT platforms and labour upskilling programmes.

The business aimed at training staffs, leadership advancement, digitalized upskilling initiatives and industry of academics with corporate to train employees for transforming industrial landscape. Simultaneously, Siemens India went through issues associated with labour struggle, cybersecurity issues, lack of skilled employees and rise in expenses for adoption.

The potential of industrial automation in India is presumed to observe upcoming advancement in AI-oriented manufacturing, robotics, predictive analytics and interrelated industrial models.

Constant employee upskilling and technological innovation will henceforth be imperative for industrial businesses who are looking for long-term competitive advantage and ecological balance.

Summary of Core Issues

The key challenge within industrial automated companies is equalizing technological development with upskilled employee. Siemens India implemented Industry 4.0 tools to improve efficiency and operational efficacy; however, staffs need constant training to adjust to digital manufacturing tools. The rest of the key factors incorporate high automated expenses, cybersecurity challenges, incapability towards technological transformation, lack of employees who are digitally skilled and infrastructure restrictions.

Key Questions

1. How does workforce upskill support successful Industry 4.0 implementation in industrial automation firms?
2. What technologies did Siemens India adopt to support digital transformation and smart manufacturing?
3. What challenges do organizations face during automation-driven workforce transformation?
4. How can Siemens India address the shortage of digitally skilled professionals in India?
5. What strategies should industrial automation firms adopt to remain competitive in digital manufacturing environments?

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Strategic HR Practices and Organizational Learning in Multinational Technology Firms: Microsoft India Case

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Introduction

The technology sector has gone through swift revolution because of innovations in artificial intelligence (AI), cloud computing, cybersecurity, machine learning, and data analytics. These transformations have maximized the need for competent employees who can adjust to growing technological setups. Thus, multinational tech-based companies are highly seeing human resources as a deliberate resource which leads to invention, efficiency, and competitive benefit. Strategic Human Resource Management (SHRM) aims at corresponding human resource approaches with organizational goals via hiring, professional development, performance evaluation and employee participation. Likewise, organizational learning examines the procedure via which companies obtain, design, share and implement knowledge to improvise performance and adjust to changes. Within knowledge-oriented sectors like information technology, both SHRM and organizational knowledge serve important roles in enduring business upliftment.

Microsoft India, a part of Microsoft Corporation, has surfaced as one of India's foremost technology companies. With the help of its development centers, research facilities, cloud operations and consulting services the organization delivers remarkably towards Microsoft's universal innovation network. Microsoft India has constantly stressed upon workforce knowledge, leadership skills, diversity and inclusion and employee welfare as crucial factors of HR approaches.

This case study scrutinizes the planned HR approaches and organizational knowledge sharing activities implemented by Microsoft India until 2023 and examines it affects organizational performance.

Strategic HR Practices at Microsoft India

Talent Acquisition and Employee Development

Microsoft India concentrates on inviting extremely skilled experts via campus recruitment, internship programs, and direct hiring. The organization hires experts from top tier colleges like IITs, NITs, and other top universities whilst also hiring skilled experts in fields that includes cloud computing, artificial intelligence, software engineering, and cybersecurity.

Employee advancement continues to be a key factor of Microsoft's HR policy. With the help of Microsoft Learn and several certification programs, workforce gather chances to raise their technological and managerial skills. Upskilling initiatives aim at modern tools, managerial capabilities, project management, and digital revolution. These plans safeguard that staffs stay competent in reacting towards swiftly modifying industrial needs.

Performance Evaluation and Managerial Growth

Microsoft changed its conventional performance evaluation technique by switching yearly ratings with constant review and training. The business pushes for repeated conversations between administrators and workforce to reinforce upskilling and career upliftment. This method pushes cooperation and knowledge instead of domestic rivalry.

Managerial growth is likewise vital within Microsoft's HR structure. The organization finances in training, educating, team-building sessions, and upskilling programs. Staffs labelled as potential leaders are given chances to improve calculated mentality, decision-making, and team organisation abilities.

Heterogeneity, Integration, and Worker Welfare

Microsoft India stimulates a comprehensive corporate space ethos value by backing gender heterogeneity, approachability to programs, and egalitarianism for skill development. Staff

networking groups and upskilling initiatives assist in creating a setting where workers from distinct heritage are able to accomplish.

After the Covid-19 virus, worker welfare became an even bigger importance. Microsoft employed hybrid work paradigms, counselling support, flexible work provision, and wellbeing schemes to improvise worker contentment and efficiency. These methods aid to bring worker involvement whilst encouraging business productivity.

Organizational Learning at Microsoft India

Advanced and Upskilling Mentality

A substantial viewpoint of Microsoft's structural principles is the acceptance of a advanced mentality. This methodology motivates workers to consider upskilling as a constant development and to accept issues as a step towards development. Workers are stimulated to ask for review, do experimentation with novel ideologies, and understand from disappointments.

The progressive mentality keeps improving by initiating a setting where creativeness and constant enhancement are given importance. Hence, learning becomes rooted as a part of a daily structural policy.

Exchange of Knowledge and Engagement

At Microsoft India knowledge sharing is an essential factor of business upskilling. The enterprise motivates to collaborate via digital tools, cross-functional teams, and internal team members of system. Workforces systematically work with co-staff from several divisions and off-sites thereby allowing the sharing of knowledges and best methods.

Collaborative models like Microsoft Teams enable communication and knowledge sharing throughout the corporation. These approaches aid workers to resolve complicated challenges together and donate towards administrative invention.

Constantly Upskilling and Virtual Knowledge

The rise of technological tools like AI, cloud computing, and cybersecurity has enhanced the value of continuous upskilling. Microsoft India spends profoundly on virtual knowledge platforms which offers learning and upliftment to employees.

The Microsoft Learn helps workers to access technical courses, certifications, and customized learning. The business also assists workforce to acquire professional certifications in dedicated fields. Constant learning improves workforce to stay significant in a swiftly progressing technological sector whilst supporting Microsoft's managerial expertise.

Impact on Organizational Performance

The incorporation of tactical HR methods and business knowledge has optimistically impacted Microsoft's business results.

Upskilling of Workforce: Continuous upskilling programs have improved staff capabilities with evolving tools like artificial intelligence, cloud computing, data analytics, and cybersecurity. This has enhanced both personal and professional performance.

Novel Ideas and Creativity: The broad mindset philosophy and collective work ecosystem foster employees to research, share mindset, and stem novel results. These methods add to Microsoft's capability to continue as a forerunner within the technical invention.

Engaging and Retaining Staff: Chances of upskilling, leadership growth plans, and workforce well-being programs boost job contentment and career progress. Employees who find prospects for progression have the chances to stay devoted to the corporation.

Business Resilience: Constant knowledge allows workforce to adjust swiftly to technical transformations and developing business needs. This flexibility improves Microsoft's capability to act successfully to market issues and prospects.

Challenges Faced by Microsoft India

Inspite of the achievement, Microsoft India undergoes various issues in handling human resources and business knowledge.

Swift Technical Shift: With the growth in technologies, it is constantly reforming the sector thereby making it mandatory for workforce to consistently renew their expertise and intelligence.

Shortage of Skill and Need of Upskilling: The rise in need for proficiency in AI, cybersecurity, cloud computing, and data science establishes issues in sustaining an employee with informed technological competences.

Retaining workers: The technical industry is extremely cut-throat, and talented experts mostly get chances through rival companies. In order to retain skilled professionals, it needs constant financing through professional upliftment and staff commitment.

Handling Hybrid Task: Whilst hybrid work paradigms provide elasticity, it can build issues with respect to engagement, collaboration, sharing of experience, and business principles. Supporting workforce commitment and knowledge in digital setup stays a constant issue.

Future Outlook

In the upcoming days HR management and business knowledge at Microsoft India will be impacted by artificial intelligence, automation, and digital revolution. The rise in need for advanced technological skills will need businesses to devote more towards labour training and constant learning programs.

Microsoft is presumed to reinforce customized learning systems, skill-oriented employee hiring and AI-oriented learning modules. Hybrid work planning and digital collaboration models will keep on shaping corporate training strategies. By strengthening its target on employee development and innovation, Microsoft India is properly placed to stay ahead of the competition within the growing technological ecosystem.

Conclusion

Microsoft India presents the way strategic HR practices and organizational learning may assist in success in multinational technology firms. Even though talent acquisition, continuous learning, leadership development, diversity initiatives and employee workplace wellbeing initiatives, the firms will attain extremely talented and compliant employees.

The implementation of a development-oriented culture, knowledge-sharing method and digital learning platform has fortified innovation, staff contribution and organizational responsiveness. Even though problems like swift technical change, talent match and hybrid work management is considered important, Microsoft's assurance to constant learning stages the company for long-term development and competitiveness.

The case study stresses that in knowledge-oriented sectors, sustained success relied not just on technical abilities but also on the productive development and handling of human capital.

Summary of Core Issues

Microsoft India provides employee upskilling via tactical HR approaches and organizational educational methods. Major issues involve technical interruption, skill gaps, retaining talent and hybrid work supervision. The case presents that constant knowledge, employee development and knowledge sharing are important for handling innovation and cut-throat competition in the technology industry.

Questions

1. How do strategic HR practices support organizational learning at Microsoft India?
2. What is the role growth-oriented mindset towards worker expertise?
3. How does constant upskilling contribute towards novel ideas and bring a competitive edge?
4. What issues does Microsoft India undergo during employee upskilling and staff attrition?
5. How can big organizations uplift business knowledge in the upcoming days?

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Managing Multigenerational Workforce Challenges in Large Conglomerates: Evidence from ITC Limited

Dr. Sanjay Salunkhe Professor & Dr. Shraddha Purandare Professor

INTRODUCTION

The modern workroom is observing a substantial demographic revolution as workforce from several age group work together within the same company. Developments in healthcare, varying retirement patterns, and growing career hopes have led to offices where skilled managerial employees cooperate along with young experts. This policy has initiated both openings and issues for companies looking to support efficiency, invention, and employee engagement.

A multigenerational employee implies to the existence of workers from distinctive age groups who acquire discrete values, communication styles, technical capabilities, and work prospects. Whilst employees variety can boost managerial knowledge and innovation, it might also establish differences occurring from contrasting perceptions involving management, career evolution, office flexibility, and technology implementation.

In India, big corporations are gradually facing the issue of handling several age groups throughout several business roles. Organizations should stem comprehensive human resource methods that enable collaboration, knowledge sharing, and worker commitment among diverse age group. Efficient organization of a multigenerational labor force has become an key factor of administrative sustainability and long-term competitiveness.

ITC Limited signifies one of India's most varied corporations with businesses traversing Fast-Moving Consumer Goods (FMCG), hotels, paperboards and packaging, agri-business, and information technology services. The enterprise's varied professional portfolio needs workforce with wide-ranging abilities, experiences, and specialised backgrounds. Consequently, ITC utilizes people from diverse age group who influence towards organizational progression via their exceptional expertise and perceptions.

This case study investigates the issues correlated with surviving a multigenerational labor force at ITC Limited until 2023. It further investigates the human resource approaches accepted by the organization to encourage collaboration, employee engagement, leadership development, and knowledge sharing among all age groups. The study also emphasizes central results and potential prospects related to efficient multigenerational workforce organization.

OVERVIEW OF ITC LIMITED

ITC Limited is one of India's chief differentiated multinationals with controls in FMCG, Hotels, Paperboards and Packaging, Agri-Business, and Information Technology. Established in 1910, the enterprise has advanced into a multi-business firm identified for invention, sustainability, and talent improvement.

By 2023, ITC had grown into an effective administrative culture centred around leadership enhancement, employee engagement, and constant knowledge sharing. The firm has a unique labour force which consists of distinct age group, making efficient staff management which is imperative for preserving efficiency, cooperation, and sustained development.

MULTIGENERATIONAL WORKFORCE CHALLENGES AT ITC LIMITED

The existence of several age groups inside ITC labour force brings variety and novel ideas. Nevertheless, a variety of communication approaches, work style, and career outlooks lead to numerous management disputes.

Communication Gaps: Top management staffs mostly favour proper message and personal exchanges than through virtual and casual communication networks which are favoured by young workforce. These dissimilarities occasionally result in disagreements and low cooperation.

Knowledge Transfer and Succession Challenges: The administrative expertise acquired by the skilled labours might be exhausted by the time of retirement. On the other hand, young workforce mostly looks out for swift career upliftment, requiring valuable skill transfer and progression decision imperative.

Technology Adoption Differences: Although young staffs are mostly able to catch up novel tools faster, but some upper management staff might need supplementary guidance and assistance. Administering the shifting stages of technical skill is essential for productive digital revolution.

Differences in Career Expectations: Aged groups repeatedly value job security and longstanding career development, while Millennials and Generation Z prefer elasticity, professional development, and significant job. These distinctions will lead to management of labours more complicated.

Workplace Inclusion and Collaboration: It is an imperative issue to cultivate a comprehensive atmosphere where labours from all generations are given importance. ITC aims at stimulating collaboration, shared value, and knowledge contribution to improve cross-generational team building and structural efficacy.

HR STRATEGIES ADOPTED BY ITC LIMITED

In order to identify the issues lingering within a multigenerational labour force, ITC Limited has implemented several HR policies to bring in inclusiveness, employee development and engagement.

Leadership Upsliftment Programs: ITC aims at progressing potential leaders via coordinated training programs, cross-functional tasks, and leadership programs. Talent management facilitates continuousness in significant organizational roles and safeguard organizational expertise.

Learning and Upskilling Facilities: The organization facilitates continuous learning through training programs, workshops, certifications, and digital learning platforms. Such facilities support workers to upskill themselves and mould themselves with the transforming business needs.

Training and Upward Mentoring Programs: ITC encourages training to enable sharing knowledge from qualified workers to younger specialists. Upward mentoring permits young workforce to share virtual and technical skill with senior leaders.

Employee Inclusion and Welfare Projects: Employee inclusion is backed by appreciation programs, career development chances, and incentives based on performance. Health, wellness, and work-life balance programs support the enhancement of worker happiness and inclusion.

Virtual HR Revolution: The organization exploits digital HR platforms for knowledge, performance supervision, worker interaction, and talent training. These approaches improvise productivity and encourage employee upgradation.

Building an Inclusive Organizational Culture: ITC nurtures cooperation among workers from several age group via cooperation and cross-functional tasks. It motivates diversity, respect, and parallel openings to construct a comprehensive office space.

OUTCOMES AND ORGANIZATIONAL IMPACT

Enhanced Knowledge Transfer: Training and teamwork ideas have reinforced knowledge sharing among experts and young staffs which provide stability over proficiency within the organization.

Increased Employee Involvement: Appreciation programs, knowledge sharing, and welfare programs have motivated workers and provided fulfilment, and dedication towards organization.

Innovative and Creative: Partnership with diverse age group helps in mixing different experiences with novel perceptions resulting in innovative ideas and problem-solving.

Greater Talent Mobility: Leadership development and talent management initiatives assisted ITC train to potential managers and make certain for equal organizational changes.

Refined Adaptability to Transform: Constant learning programs have allowed staffs to adjust to technical developments and shifting professional setups.

Facilitate Sustainable Development: A comprehensive and collective work ethos has fortified employee preservation, enterprise productivity, and sustainable business development.

FUTURE CHALLENGES AND OPPORTUNITIES

Inspite of key developments in handling a multigenerational labour force, ITC will probably undergo various issues and prospects in the upcoming days. The rising existence of Gen Z workers will affect office structure, as this age group creates a huge focus on flexibility, real-time feedback, technological incorporation, and impactful work. Simultaneously, swift developments in artificial intelligence, automation, and digital tools will need workers from all age groups to constantly renew their skills via reskilling and upskilling themselves.

Workplace standards are also progressing, with expanding significance being set on office flexibility, employee welfare, multiplicity, comprehensive, and work-life harmony. Consequently, companies will require to adjust their HR plans to meet these shifting needs. Additionally, as skilled staffs retire, retaining effectual data, training, and talent management will become extremely significant to confirm leadership and organizational steadiness. ITC should also keep on improving its comprehensive office culture through collaboration, equal regard, and knowledge sharing among staffs from diverse age groups. Thus, effectively addressing these issues will allow the company to increase worker engagement, advance innovation, and preserve enduring competitiveness.

CONCLUSION

Since overseeing staffs from different age groups has become a compulsion for big companies like ITC Limited, variations in communication modes, technical skills, and career outlook create prospects and issues. ITC has focused on these issues via leadership development, constant upskilling, training programs, staff engagement practices, and digital HR approaches. These attempts have enhanced knowledge transfer, novel ideas, employee inclusion, and adjustment to business structure.

The understanding towards the way ITC establishes it through efficient management of different age groups can reinforce business results, assistance in sustainable progress, and build a more comprehensive company.

SUMMARY OF CORE ISSUES

The fundamental issue in handling a multigenerational labor force is harmonising the various expectancies, skills, and operational ways of staff belonging to distinct generations. Whilst skilled staffs provide executive expertise and strength, young staffs carry novel ideas, technical proficiency, and versatility. The major concerns recognized in this case study incorporates communication differences, knowledge sharing, differing stages of technological implementation, changes in career potential, and the requirement for comprehensive office procedures. ITC has adopted these issues via leadership development, training programs, constant learning programs, worker interaction approaches, and digital HR revolution.

QUESTIONS

1. Why is essential to handle a multigenerational labour force in big organizations like ITC Limited?
2. What issues occur when staffs from several age groups are part of the same organization?
3. Does training and upward mentoring help in sharing knowledge and employee upskilling?
4. What role does constant upskilling serve in handling generational gap?
5. How should a company plan for the rising impact of Gen Z in an office space?

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HR Analytics Adoption and Decision-Making Effectiveness: A Case Study of Indian IT Industries

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INTRODUCTION

The swift digital transformation of companies has augmented the significance of data-driven decision-making through all organizational roles which includes human resource management. Nowadays companies collect huge amount of employee information while hiring, talent management, and employee participation processes. Efficiently examining this information has become imperative for improvising business results and attaining planned goals.

Conventionally, HR outcomes trusted on administrative proficiency, gut feeling, and past working style. Nevertheless, the increasing intricacy of talent management has generated a requirement for proof-based decision-making. This resulted in the advent of HR Analytics, that includes a planned accumulation and evaluation of workers information to improvise talent management and business performance.

The Indian IT sector offers context for the adoption of HR Analytics. Being a key provider towards India's economy and an international junction for technological skills, the industry hires a huge and varied labor force. Nevertheless, issues like staff attrition, skill gaps, and the rising technical needs keep impacting HR departments.

In order to face these issues, Indian IT organizations are gradually implementing HR analytics to amend employment, talent management, staff output, and retention. This case study scans the implementation of HR analytics in the Indian IT industry and how it influences businesses decision-making results.

CONCEPT OF HR ANALYTICS

HR Analytics, also known as People Analytics or Workforce Analytics, means the usage of data driven methods to improvise on workforce planning and business performance. It allows companies to determine employee results, recognize trends, and forecast upcoming HR-oriented tendencies.

HR Analytics is segregated into four types. They are:

- **Descriptive Analytics:** Descriptive analytics aims at analysing previous and present employee status via performance data and visual tools. The common KPIs are staff attrition rate, absence, and hiring trend.
- **Diagnostic Analytics:** Diagnostic analytics looks to recognize the causes that leads to employee patterns and challenges. For instance, companies might examine workforce trends and issues. For example, organizations should analyse staff offboarding information to find out the reason behind employee turnover.
- **Predictive Analytics:** Predictive analytics utilizes past information and predictive models to predict upcoming results. IT organizations mostly implement predictive models to recognize workers who are at the danger of resigning from the company.
- **Prescriptive Analytics:** Prescriptive analytics suggests plans which companies implement to attain the results. It encourages to take calculated decision by recommending approaches on the basis of analytical outcomes.

Common HR data-driven methods implemented within the companies are staff attrition, time of hiring, cost to company for each hiring, upskilling productivity, KPIs, employee inclusion.

HR ANALYTICS ADOPTION IN INDIAN IT COMPANIES

The implementation of HR Analytics has risen remarkably among Indian IT organizations in the last ten years. As companies produce huge amount of worker information, analytics tools assist in converting these data into valuable data which encourage planned decision-making.

The rise in growth of digital revolution, worker expertise and organizational results has speeded up the usage of HR Analytics throughout the sector.

Drivers of Adoption

Numerous elements have motivated Indian IT companies to implement HR Analytics.

- **Digital Revolution:** The extensive usage of cloud computing, artificial intelligence, and digital HR tools have made employee information easier to access and comprehend.
- **Difficulty in Retaining Employees:** Retaining workers is still a significant concern within the IT industry. HR Analytics supports companies to find out the retention dynamics and build better approaches to retain.
- **Strategic Staffing:** IT organization should constantly correspond employee skills with transforming technical needs. Analytics supports in predicting the upcoming employee needs.
- **Managerial Support:** Senior professional highly identifies the importance of data-oriented decision-making, supporting HR departments to incorporate analytics into their systems.

Applications of HR Analytics

HR Analytics is utilized throughout several HR roles in an Indian IT company (Figure 1).

- **Hiring and Selection:** Analytics supports in finding out successful hiring platforms, assess talent standards, and minimize acquisition expenses. Data-oriented hiring decisions increase the chances of picking filling talents.
- **Staff Performance Management:** Businesses use analytics to track staff efficiency, assess performance patterns, and identify highly skilled employees.



Figure 1 Applications of HR Analytics

- **Forecasting Resignation:** Predictive models assist in recognizing staff who might be looking forward to resigning. By identifying these patterns enables companies to apply strategies for retention.
- **Training and Upskilling:** HR Analytics estimates mentoring productivity by evaluating upskilling, employee performance and ROI.
- **Staff Engagement:** Research data and employee KPIs assist businesses to comprehend employee fulfilment levels and apply strategies to enhance corporate environment.

The incorporation of analytics into these HR roles allows businesses to take strategic decisions and boost complete employee productivity.

CASE ANALYSIS: HR ANALYTICS AND DECISION-MAKING EFFECTIVENESS

Decision-Making Before Analytics Adoption

Prior implementing HR Analytics, several HR decisions in Indian IT organizations mostly depends on administrative judgement, expertise and conventional monitoring tools. Even though these strategies gave certain amount of assistance, they were mostly short of precision and could not predict.

The decision to hire is also mainly impacted by resumes and interviews, making it challenging to find people who would bring results in the long run. Consequently, staff attrition was mostly looked into after people started resigning increasingly. Employee management was more reactive than proactive lead to lack of skilled employees and project running behind schedule.

Minimum approach to employee information minimized the capability of HR experts to recognize the surfacing trends and make calculated decisions.

Decision-Making After Analytics Adoption

The induction of HR Analytics remarkably improvised the standard and success of HR decision-making in IT companies.

- **Better Hiring Decisions:** Analytics assists to recognize the features within skilled workers resulting in qualitative hire and minimizes hiring expenses.
- **Minimized Employee Attrition:** Predictive analytics allows companies to identify dangers of attrition and apply planned retention approaches prior resigning a staff.
- **Better Talent Management:** Data-oriented prediction assists with better distribution of talent resources and guides businesses to plan for upskilling during advancement.
- **Improved Performance Appraisal:** Analytics need key performance indicators, minimizing prejudice and improvising the justice towards appraisal reviews.
- **Planned Decision-Making:** HR experts are able to match employee approaches with business goals by trusting empirical findings instead of
- can align workforce strategies with organizational goals by relying on evidence-based insights rather than assuming it.

CHALLENGES IN HR ANALYTICS ADOPTION

Inspite of the advantages, the implementation of HR Analytics in Indian IT organization comes with various issues.

Challenges with Data Standards: The success of HR Analytics is based on the precision and stability of employee information. Inadequate, obsolete, or incorrect information result in inaccurate perceptions and insignificant decision-making.

Privacy and Moral Concerns: Companies gather huge amounts of worker data which arises a doubt on privacy and secrecy. Businesses should make sure look into the agreement on protecting the information and keep workers' faith.

Absence of Skill in HR Sectors: Several HR experts are highly skilled in talent management, but they might not be good at analysing information or understanding them. This absence of skill will restrict from properly utilizing the HR Analytics tools.

Complication with Technology Incorporation: The incorporation of analytics tool with the available HR information systems is multifaceted and expensive. Companies mostly undergo such complication while handling information from several sources.

Unwillingness to Transform: Workers and Leaders might be uncertain towards implementing information-oriented strategies, particularly when conventional decision-making approached have been considered from a long time. Following an approach with analysis needs dedication towards an organization and constant upskilling.

FINDINGS AND DISCUSSION

The outcomes recognize which HR Analytics has considerably improvised the impact of decision-making in Indian IT companies. By switching perception-driven methods with empirical evidence, businesses should make more learned decisions with respect to hiring, employee management, staff growth, and retention.

HR Analytics has surfaced as a calculated model which assists businesses faces talent management issues and increase total organizational results. Predictive analytics, specifically serves an essential role in recognizing turnover dangers and assisting proactive retention policies.

Furthermore, HR Analytics improvises business productivity by improvising recruiting standards, boosting training funds, and supporting performance management practices. Nevertheless, its effective application is based on elements like information standards, technical environment, guidance assistance, and the systematic abilities of HR specialists.

CONCLUSION

HR Analytics is an essential model for enhancing the impact of taking the right decision within an Indian IT sector. By implementing employee information, businesses will be able to improve hiring, talent management, staff inclusion, and retention. The implementation of analytics has allowed HR to serve in a tactical way for a business to perform outstandingly.

Even though issues with respect to data standards, privacy, and strategic thinking is considered, the advantages of HR Analytics overpower the drawbacks. With the onset of digital revolution HR Analytics should serve an essential role in structuring the employee policies and reinforcing business competitiveness.

QUESTIONS

1. How does implementation of HR Analytics transform decision-making practices in Indian IT businesses in comparison to conventional HR practices?
2. What elements have led to rise in the implementation of HR Analytics in the Indian IT sector?
3. What are the ways can predictive analytics support IT companies to face employee attrition and talent management issues?
4. What are the chief blockages in successful application of HR Analytics, and how businesses can defeat them?
5. How can HR Analytics contribute to business performance and long-term competitive advantage in the Indian IT technology?

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Knowledge Management Systems and Organizational Learning in Global IT Services: A Case of TCS

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Strong framework of Knowledge Management (KM) system is leveraged by TCS (Tata Consultancy Services) for scaling organizational learning across their massive global workforce. With the combination of specialized digital platform, constant training programs of employees and collaborative culture, intellectual capital was transformed by TCS into a core competitive advantage. In 1995, TCS introduced the concept of knowledge management and a dedicated team was formed in 1998 called as “Corporate GroupWare”. The KMpilot was launched by this group in mid-1999 that was subsequently implemented by a team comprised of steering committee, corporate GroupWare implanters, application owners, branch champions and infrastructure group. A well-organized and integrated Knowledge management system needs to be maintained by IT companies in order to meet all their demands in this digital era. This is the reason it is said that the role played by HRD in present scenarios has uplifted the shop-to-floor people management to the Board, where it is involved actively towards the development of the company into digital knowledge economies and able to make better decisions regarding future. Knowledge management system is proved to be a robust equipment for empowering HRD functions, thereby empowering the company as a whole for competing and striving for the excellence of the business.

Strategies of Knowledge Management

Two main knowledge-management strategies are balanced by TCS:

- i. **Strategy of Codification** – focusing on capturing, categorization and storing of explicit knowledge for it to access and reuse it by any team globally.
- ii. **Strategy of Personalization** – concentrating on transferring of tacit knowledge, and expertise locked in the mind of people. It can be achieved with employee rotation, mentorship sessions and communities of practice.

Organizational Learning Framework

It is SECI model (Socialization, Externalization, Combination, Internalization) on which TCS operates, there are three different levels into which organizational learning is divided:

- 1) **Individual Level** – through specialised learning portals, foundational skill development is facilitated, portals are “*Aspire* and *Ignite*” that equip new recruits with online courses and project simulations of real-world.
- 2) **Group Level** – cross functional collaboration and sharing of assets are encouraged by “Communities of Practice (CoPs)” among distinct project teams.
- 3) **Organizational Level** – through management frameworks like “Tata Business Excellence Model (TBEM)” and continuous internal training programs like “*PROPEL*” strategic knowledge is disseminated.

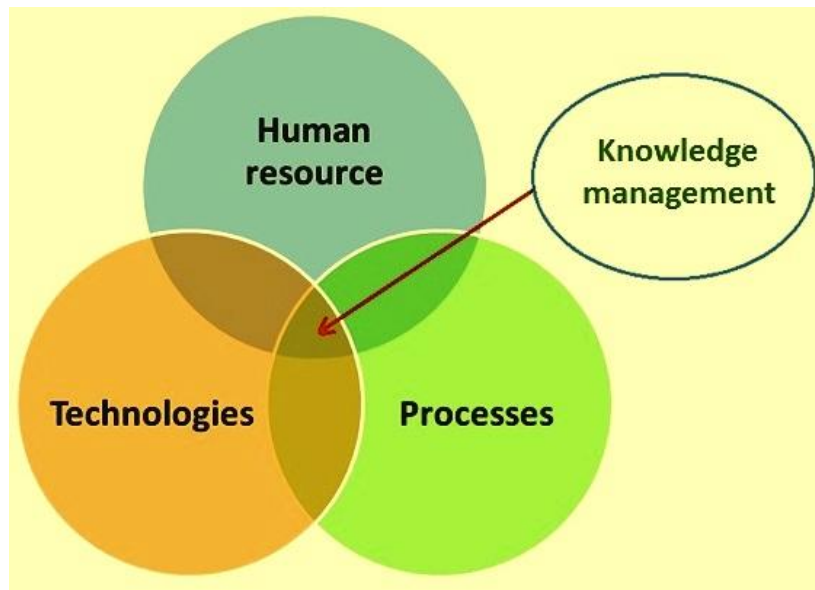


Figure 1 Knowledge management

Knowledge Management is known as an organizational discipline promoting an integrated approach to create, capture, organize, access and use of organizational knowledge asset. Such assets include textual information, structured database along with policies, and procedure document and highly important, the implied knowledge and expertise resident in the head of individual employees (Satyendra, 2020). One of India's leading IT service firm Tata Consultancy Services (TCS), has been at the forefront to embrace HR solutions driven by Artificial Intelligence. Focusing on innovation, AI has been integrated by TCS in various HRD functions for improving experience of employees as well as operational efficacy. The effectiveness of customer support process is improved with the integration of knowledge management system with six sigma methodology as it provides shorter resolution time of problems, reusing previous solutions and reduced engineer time. Proper organizational structuring, effective blend between the system and acceptance of the system by users play important role in the success of new systems (Yildirim, 2017). Adaptive Knowledge Bank of TCS assists businesses in consolidation of enterprise knowledge for making it available for stakeholders and permitting enterprise to search and retrieve relevant information by using Machine Learning (ML) and Natural Language Processing (NLP) that aids in effective management of content. Collaboration feature is provided by this solution for improving productivity of employees and for delivering enhanced customer experience. In organizations, poor knowledge management system can lead to inconsistent processes for creation and management of knowledge articles and in-efficient methods to reach and retrieve relevant information. The failure to access correct information at right time makes the process of handling queries of customers time-consuming that eventually lead to dissatisfied employees and negative customer experience, the increases the operational cost for business and also add non-productive hours of employees in significant manner.

In the world of Information Technology there are tools, platforms and solutions for management of multitude of information within an enterprise. There are systems to create, store, management and disseminate information. In Information Technology, management of information is managing facts. It is the data residing in ERPs, CRMs, log files and IoT data and usually that data is tabular in nature or structured. The authenticity of present-day Information Technology is that huge amount of data is produced and captured which is structured and unstructured both. It is unfortunate that much of it is not in the form that is favorable to human use. It is because total amount of data, its fragmentation and storage in agnostic format make it hard to find signals in the noise (Tyson, 2022). They motivate

employees to make formal communication and brainstorming solutions for many problems. Many training problems are launched by TCS like initial learning programs for new employees as well as old employees along with “Leadership Development Programs” for employees who have more than 5 years of experience. Employees are rotated regularly by TCS to various functions and within other groups of Tata company. Employees are motivated to join outside certification courses. Such tools of collaboration assist employees in improving their skills and experience and also ward them with certificates (Nikaravu, 2016).

Often shortened as KMS, the knowledge management system, it is a blend of technology, structure, process and governance helping companies in management of knowledge throughout their lifecycle. It is where the knowledge of business is captured, reviewed, organized, published, searched, measured, re-used and improved.

That knowledge might include:

- ✓ Documentation of products
- ✓ Answers to customer support
- ✓ Internal policies
- ✓ Standard procedures of operations
- ✓ Troubleshooting guidelines
- ✓ Resources of onboarding HR
- ✓ Information Technology service instructions
- ✓ Material of Sales enablement
- ✓ Documentation of Compliance
- ✓ Learned lessons from projects
- ✓ Employees expert insights

A KMS is not just a folder, wiki, shared drive, intranet or static document library. Such tools have the ability to store information, but a knowledge management system is designed to make knowledge usable, searchable, governed and improved constantly. The main impact of knowledge creation is sharing tacit knowledge through the process of socialization. Leadership behavior is important for improving creation of knowledge in organizations. Leadership with vision provides clear direction to organizations in terms of guidelines and what type of knowledge needs to be created (Tseng, 2014).

Several benefits are offered by Knowledge management offers several to organizations. Some are given below (LMS, 2023).:

- I. Enhanced Decision-Making** – knowledge management make sure that relevant information and expertise are available for supporting decision-making. It also assists companies to make informed decisions, lessen the chances of errors and avoidance of duplication of efforts.
- II. Improved Efficacy and Productivity** – organizations are assisted by knowledge management for streamlining the operations and lessen the waste by making knowledge accessible and actionable that leads to better efficacy, cost saving and productivity.
- III. Improved Innovation** – sharing of ideas and expertise is facilitated by knowledge management that leads to innovation and solutions to problems. It creates a culture of constant learning that makes organizations to stay ahead of the curve, adapting to changes in their environment.
- IV. Enhanced Employee Engagement** – employee engagement is improved by knowledge management along with the satisfaction as it provides employees with the tool and resources that they need to do their job in efficient manner. It leads to better rate of employee retention and positive organizational culture.
- V. Improved Customer Service** – organizations are assisted by knowledge management in providing improved customer service as it ensures employees to have information

and expertise that they need to meet the demand of customers leading to enhanced customer loyalty and satisfaction.

Recently, the role of IT in knowledge management has become essential. Information Technology assist companies in creating, storing, sharing and distributing knowledge in efficient and effective way. It assists in improving decision-making, collaboration and communication within the company. There are different types of knowledge management system, but they all share some common features. It includes database or repository of knowledge, tools for the management and accessing the knowledge, and process to create, update and share knowledge **(Pandey, 2023)**. Organizations became aware about the significance of lifelong learning, that is learning the concept of the organization, so that it can turn such concept of business. Investing in knowledge, innovation and development are investment with high returns through business sustainability and better perspective. Accelerating development and requirement of implementing new technologies that motivate organizations to change and learn. It is the cause to learn organization to become a way companies operate, not just an alternate behavior and concept of business **(Rudancic, Misevic & Tomasevic, 2021)**.

Core Issues in the Case:

As a leading IT services company, Tata Consultancy Services leverages Knowledge Management Systems (KMS) to facilitate continuous learning, innovation, and efficient project execution. However, challenges such as knowledge silos, employee engagement in knowledge sharing, rapid technological changes, and maintaining the quality and relevance of knowledge repositories can hinder organizational learning. Understanding how KMS supports collaboration, enhances employee competencies, and strengthens organizational learning is critical for sustaining competitiveness and delivering high-quality global IT services.

Questions

1. How do Knowledge Management Systems (KMS) influence organizational learning and knowledge sharing among employees at TCS?
2. What are the key factors affecting the effectiveness of Knowledge Management Systems in improving employee performance and innovation at TCS?
3. How does organizational learning contribute to knowledge retention, continuous improvement, and competitive advantage in TCS's global IT service operations?
4. What challenges does TCS face in implementing and sustaining Knowledge Management Systems to support organizational learning across geographically distributed teams?

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Financial Risk Assessment and Credit Growth Strategies in Retail Banking: A Case of ICICI Bank

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Introduction

The framework of financial risk assessment of ICICI Bank is retail banking includes advanced analytics along with digital solutions for evaluation of credit worthiness of borrower and for maintaining quality of asset. With enforcement of strict capital adequacy and monitoring the gross Non-Performance Assets closely, the bank manages risks of retail portfolio actively. A regulated retail credit strategy is pursued by ICICI Bank, they prioritise secured, underwriting based on cash flow as well as strict liquidity management over unsecured growth of volume. Attractive yields are balanced with strict credit risk mitigation, an industry-lead Net NPA of 0.39% is maintained by the bank while they navigate strong competition in deposits. Financial risk management make sure that not just bank stay solvent but they also develop value for their equity shareholders (Hiremath, 2018). The bank is shifting towards the digital system that have transformed tradition practices of audit, it has updated compliance, risk management and efficacy. This case study examines the influence on audits from digital changes of the bank, they concentrate on specifically on ICICI Group and how the insights of Artificial Intelligence, Blockchain, Robot accounting checks, and cloud solution have reshaped the complete audit methods. It is suggested by the findings that digital technique of audit have improved fraud identification, openness of deals and making calls, providing guidance towards leadership noticeably. Though, difficulties in governance and incorporation of technology have remained as common hurdles. A smart adoption of digital tools in auditing have not just strengthen the structure of compliance but have also developed a culture of proactive administration and assessment of risk across the whole banking industry. In order to decrease the customer acquisition cost and for better management of risk, the banks need to adopt and implement CRM and data warehousing in the prime manner. It has become mandatory foe banks to recognize and integrate new digital tools and technologies such as cloud computing and invest in analytics based on big data (Joshi, Gupta & Gupta, 2021).

Risk management is a method of identification of measures, monitoring and management of uncertainties. It does not mean to remove risk but empowering bank to bring the risks to uncontrollable rates and not substantially making any impact on their earnings. The risk management is defined by “The International Financial Risk Institute” as "The use of financial analytics and various financial instruments to control and generally minimize the type of selected risks.". While the assets that idle are a legacy of the past, the disaster plan of risk management is an influential action for the future.

Risk management is managing changes before the risk takes over the control. An effective credit risk management strategy is highly important for ICICI Bank as well as whole banking industry. Credit risk management practices of ICICI Bank plays a vital role that ensures financial stability, maintains high-quality portfolio of loans, optimizes risk-adjusted returns, comply with regulatory requirements, and instil confidence of stakeholders. Various tools to measure risk liquidity are used by ICICI Bank that includes statement of structural liquidity, statements of dynamic liquidity gaps, liquidity ratios and testing of stress. Diversified source of liquidity is maintained by ICICI Bank for facilitating flexibility to meet the requirement of funding.

They address main challenges like economic and conditions of market, quality of data, modelling of risk, and regulatory compliance. The framework of Credit risk management is enhanced by ICICI Bank (Anshika, Ganguly & Ahmad, 2023). In the pre-reform era of the banking sector, they have used risk control system for adjusting with the legal environment but after they have entered into a deregulated market economy, the Indian banks are exposed to the different types of like operational, liquidity, solvency, credit, market, interest rate and foreign exchange rate risks. Therefore, it is important to develop an effective approach of risk management that would include risk determination, risk assessment and risk minimization. Failure to develop such system would make negative impact on financial security of business leading to high chances of bankruptcy (Kaur & Sharma, 2017).

Retail banks are creating suitable organizational structure for the purpose of risk management; it includes the process that reports directly to the top management of the bank. Following the best practices, banks are directed by the Reserve Bank of India (RBI) to adopt procedures that include provisioning, adequacy, and other steps that are important to maintain and protect the banks during crisis. Risk management structure and the process of ICICI Bank have the aim to deliver superior value to their shareholders by attainment of proper trade-off between risk and return. A Board Level Committee has been constituted by ICICI Bank which is empowered to review risk management policies of the bank that pertains to market, credit, operational, liquidity, outsourcing, reputation risks, continuity of business and disaster recovery plan.

Framework of Risk Assessment

Retail credit risk is evaluated by ICICI Bank by using dual approach with the combination of qualitative assessment and quantitative models:

- I. Models of Credit Scoring** – model of machine learning evaluates external credit bureau data such as CIBIL score, alongside it also evaluates internal behavioral scores for the prediction of the probability of default.
- II. Stress Testing** – to ensure capital adequacy ratio, regular macro-stress testing is conducted to stay resilient during economic downturn or fluctuations in interest rate
- III. Valuation of Collateral** - ICICI employs independent property valuations and conservative Loan-to-Value for secured loans like home loan or Loan Against Property to minimise loss given default

Important Strategies for Credit Growth

1. Platform Thinking and Ecosystem

- ❖ **Salary Relationships** – salaried employees of private and public sector are targeted by ICICI by using salary account as a "beachhead" for cross-selling credit and retail products.
- ❖ **Digital Journey** – financial services are integrated by the bank into FinTech, merchants, and e-commerce partner ecosystem that enables seamless, pre-approved offers and immediate disbursement of credit without any documentation.

2. Technology Enabled Penetration of Micro-market

- ❖ **Hyper-Personalization** – customer behavioral data is analysed by the banks by using Artificial Intelligence and Machine Learning for generation of 360-degree customer personas. It permits them to pitch the right loan exactly when customers require it.
- ❖ **Rural Focus** – with integration of retail and rural business groups, ICICI Bank has expanded into rural India by using localized approach like “Tab Banking” for instant processing and strategic ties with MFIs “Micro-Finance Institutions”.

3. MSME and Scaling up of Business Banking

- ❖ **InstaBIZ** – digital platforms are leveraged by banks like InstaBIZ app for offering instant, paperless working capital and credit solutions for small and medium enterprises (MSMEs).
- ❖ **Financing of Supply Chain** – expanding corporate relations allow ICICI Bank to tap into ecosystem of dealer-distributor and vendor of big corporate clients, generate secured, granular growth of SME credit.

4. Secured Lending & DSAs (Direct Selling Associates)

- ❖ **Intermediary Networks** – banks are highly dependent on massive network of DSAs and channel partners for originating secured portfolio, mainly for auto and home loans
- ❖ **Preferred Financing** – by directly partnering with leading manufacturers of auto and two-wheeler, it is ensured by ICICI to stay preferred financier during sale.

5. CASA - Liability-Led Growth

- ❖ **Deposits First** – recognition of credit growth need strong liquidity, the bank links their lending push to aggressive acquisition of deposit.
- ❖ **Expansion of Branches: by adding the branches actively in unbanked and underbanked** Tier 2, 3, and 4 locations, ICICI Bank has successfully converted local credit demand into strong, low-cost current and saving account (CASA) deposit.

In the last two years, the credit growth in India has slowed down. Deposit growth has outpaced growth consistently in credit since June 2019. Because of the slow and inactive demand, disruptions that are caused by the pandemic, and deleveraging of balance sheet by big corporates, the credit growth has been declined. The offtake of credit has recently improved because business activities are picking up and corporates are showing high interest in re-leveraging. Credit growth has been boosted constantly by retail, personal and MSME segments. As per the reports of RBI, as of December 2021, the bank credit growth stood at INR 116.8 lakh crores. Credit to non-food sector stood at INR 114.10 trillion as of February, 22. In this context, ICICI Bank has 7% of market share (Munshi, 2022). It is risk management dynamics on which the future of banking would certainly rest. Only those banks can survive in the market in the long-run who have efficient risk management system as it is a vital element for long-term success of banking institute. A tool of risk management is utilised firstly for identification, then for analysing and lastly to respond to some particular risk. In banking, risk management includes common practices that must be normal part of everyday operations of the banks, and some special practices that are implemented at senior level management. Appropriately structured identification of risk, its analysis and process implementation would reduce the associated risk with ICICI Bank and it must develop educational programs as well as workshops. Analysis and management of risk is a vital measure for bank's success. Majority of risks in banking sector are mostly inter-related. As liquidity risk, investment risk and fund cost risks are inter-related in management of investment portfolio, spreads, gaps and maturities. An important analysis of risk is between solvency and credit risk. It is the losses of loan (Rani & Shastry, 2016). System level offtake of credit grew by 15.1% y-o-y in the fortnight ending July, 22, which indicates growth of loan sustaining that gives the sign of improving economy and investment revival and demand of loan. On the other hand, deposit rises by 9.1% reflecting a healthy economic scene but are trailing advances growth. The bottom-up story of the bank is intact and would see accelerated growth of loans, while margins are expanding continuously in higher interest rate cycle. Quality of asset is not a big issue from corporate loans ends as just deleveraging is observed. From retail side, there might be some pressure but nothing is substantial. Quality of asset is possibly remained stable except the segment of MFI (Sharekhan, 2022). Risk management is considered as an important element of corporate planning. The method of risk management tries to reduce or remove the chances of risk of some particular type of business incidences. The main purpose of adoption of risk management techniques for

safeguarding companies against vulnerabilities. Most of the approaches of corporate risk management strategies might focus on sustainability and reduction of financial risk. However, risk management also intend to safeguard workers, their customers as well as broader public from unwanted incidents like terrorist attacks and fire. The techniques of risk management might include protecting physical equipment, records, data as well as physical assets that are being owned or used by a business. Practices of risk management usually involve transfer to other parties of risk, risk avoidance, negative impact or probability of risk reduction and acceptance of some of the potential or actual influence of particular risk. Different elements of risk management standards have been criticised for not just significantly increasing the secrecy of judgments and estimations (Lakshmi, Krishna & Kumar, 2022).

Core Issues in the Case

ICICI Bank faces the challenge of maintaining strong retail credit growth while ensuring effective financial risk management in an increasingly competitive and digitally driven banking environment. The bank must balance business expansion with prudent credit assessment, asset quality, regulatory compliance, and liquidity management. Additionally, the integration of advanced technologies such as Artificial Intelligence, Machine Learning, and digital banking platforms creates opportunities for better risk assessment but also introduces governance, data quality, and implementation challenges. The long-term sustainability of the bank depends on its ability to achieve an optimal trade-off between growth, profitability, and risk mitigation.

Case Questions

1. How does ICICI Bank balance retail credit growth with effective financial risk management to maintain asset quality and profitability?
2. What role do Artificial Intelligence, Machine Learning, and digital technologies play in strengthening ICICI Bank's credit risk assessment framework?
3. Evaluate the effectiveness of ICICI Bank's credit growth strategies, such as ecosystem partnerships, MSME financing, and rural market expansion, in achieving sustainable growth.
4. What challenges can ICICI Bank face in maintaining liquidity, regulatory compliance, and credit quality while expanding its retail lending portfolio?

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Infrastructure Investment Decisions and Project Risk Management in India: Lessons from Larsen & Toubro

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Introduction

The infrastructure investment decision of India revolves around a huge capital outlay, which is steered strategically by the government policies and private & public partnership to hit an ambitious investment target of \$2.2 trillion by 2030. The decision of investment is dependent on long-term financial sustainability, systematic planning, and targeted social and economic impact. A blueprint is offered by Larsen & Toubro (L&T) for infrastructure investment in India by shifting from asset-heavy ownership to an asset-light, engineering-led model, expanding into green energy as well as digital AI factory and using strong management of working capital for mitigation of execution of risks. Rapid urbanization is seen in India and the financial requirements of cities are proportionately expanding. A sustainable rise in urban infrastructure investment is requirement for enabling economic growth, enhanced living quality and liveability, and developing resilience to the expected influence of climate change. However, cities are facing considerable challenges. Despite a significant rise in fiscal transfer to cities in the past decade, there is a big shortfall of resources relative to requirements (Athar, White & Goyal, 2023). A critical role is played by infrastructure development in the economic growth of India as it improves supply of energy, transportation, urban development and industrial productivity. Large projects of infrastructure need significant capital investment, long duration of project and coordination among multiple stakeholders. Such projects are highly exposed to many risks like delays, overrun of cost, uncertainty of policy, financial instability and environmental concerns. Larsen & Toubro (L&T) is one of the leading engineering, procurement and construction company of India. A significant contribution is made by the company towards metro rail systems, highways, smart cities, airports, power plants and defence infrastructure, etc. Valuable lessons are provided by L&T with regards to India's infrastructure investment decisions and project risk management.

Core Strategic Focus

- **Sovereign AI Infrastructure** – in a major rise for digital future of India, Larsen & Toubro (L&T) partnered with NVIDIA for building largest gigawatt-scale AI infrastructure of India. The aim of such initiative is democratisation of Artificial Intelligence and establishment of India as a global hub for digital data capabilities.
- **Transition of Green Energy** – rapidly moving from fossil fuels, Larsen & Toubro (L&T) has designed and developing largest green hydrogen plant of India and have expanded their presence in renewable and solar energy engineering.
- **Asset-Light Divestment – for maximization Return on Equity (RoE)** and navigation of capital-heavy markets, Larsen & Toubro (L&T) is exiting strategically non-core, asset-heavy developmental projects like divestment of stake in L&T IDPL to Edelweiss Alternatives.

Figure 1 displays the Core Strategi Focus:

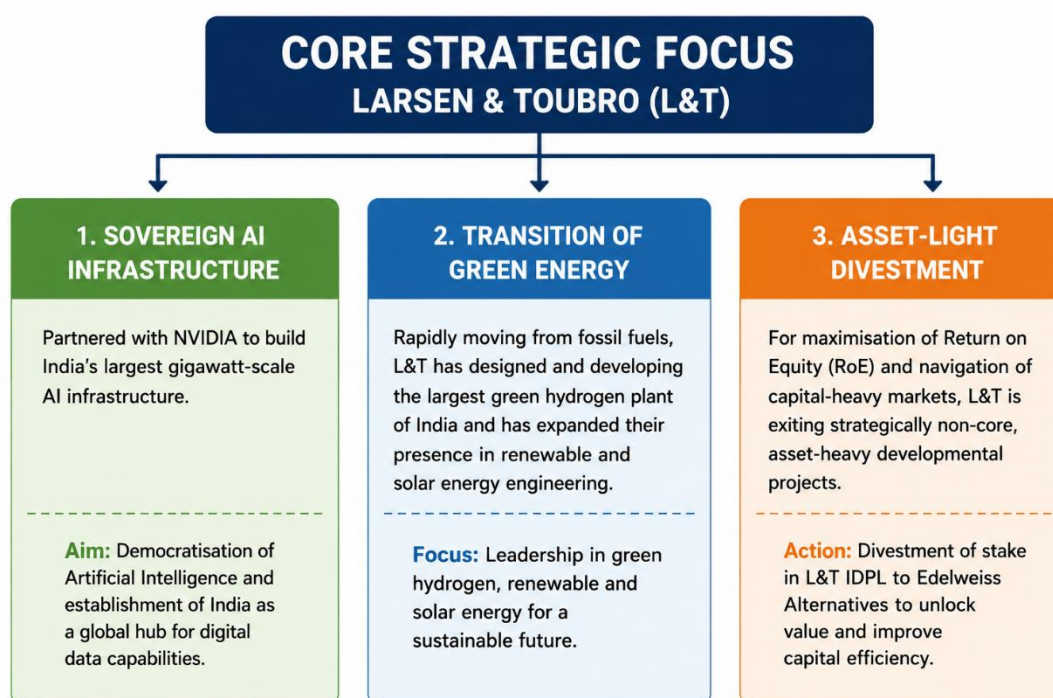


Figure 1 Core Strategi Focus

India is constantly investing in development of infrastructure heavily as the main driver of growth. This is not just in terms of adoption of a long-term integrated focus on large infrastructure projects but it also provides quick application by providing needed regulatory as well as timely financial assistance. The Union Government, over the years, is providing constant policy support for development of Infrastructure in India. A national master plans is announced by the Prime Minister for multi-modal connectivity in Oct, 2021, with the aim to develop infrastructure for lowering down the cost of logistic and improving the efficacy (Integrated Annual Report 2021-22). For L&T, LTIDPL is the holding company for various infrastructure project investment. L&T, the parent company have a track record of about seven decades is a well-established and dominant engineering and construction major with presence across wide ranging of sectors like refineries, oil & gas, chemical complexes, power & infrastructure and industrial projects. L&T holds strong capabilities across segments as well as sound track record of executing the projects. IDPL L&T is in the process to bid for new projects and investment in such infrastructure projects subjected to risk execution. The investment in such 11 projects as on March, 2018 through equity and mezzanine debt was INR 2,540 cr. which was 55% of net worth. Entire spectrum of credit rating is provided by CARE Rating assisting the corporates for raising capital for various needs and helping investors to develop an informed decisions of investment on the basis of credit risk and risk & return expectations. Our grading and rating service offers leverage the domain and analytical expertise backed by methodologies consistent with international practices (Press release, 2019).

Infrastructure Investment decisions in India need careful evaluation of economic, technical, financial, environmental and regulatory elements. Effective project risk management is important to ensure timely completion, cost efficacy and long-term sustainability. The experience of L&T highlights the significance of strategic investment planning, diversified financing, technical innovation, coordination of stakeholders and sustainable practices in management of large infrastructure projects successfully. Valuable guidance is provided by these lessons to policymakers, researchers and infrastructure firms who are operating economies like India. Larsen & Toubro (L&T) is a leading engineering and construction

conglomerate of India; it expresses strong optimism with regards to the growth prospects in domestic as well as international markets. Strong order books are cited by the company from overseas and rising expenses within India as the main driver to secure new business. Chairman & Managing Director - S. N. Subrahmanyam while speaking at the annual general meeting spoke and acknowledged the prevailing global economic uncertainties that stems from the policy shifts. However, he also put emphasis on positive outlook of L&T, mainly with concern to Middle East, where significant infrastructure investment and a steady flow of new orders are forecasted to continue. L&T, the industrial conglomerate is exploring a listing of their infrastructure asset that includes toll roads in local market through newly developed investment trust, their chief financial officer told Reuters. The way is cleared by India for the nation's first infrastructure trusts and so-called real estate investment trust by announcing tax benefits, it permits developers to monetize assets through stock exchange listing. Investors are tapped by L&T earlier in the year for listing of their infrastructure assets in Singapore, in a deal source familiar with the matter could raise up to \$800 million, but it did not move ahead as per the plan (Money Control, 2014). In India, Project Risk Management (PRM) include identification, assessing, and mitigation of risks like delays of supply chain, scope creep, and fluctuation of currency ensuring timely and cost-effective delivery. Looking at complicated infrastructure of India and regulatory landscape, structured Project Risk Management prevents blowout of budget and enhance confidence of stakeholders.

Main Risk Factors in the Indian Market

- ✓ **Regulatory & Compliance** – frequent changes of policy, environmental clearance, and different state level laws of labor.
- ✓ **Logistics & Supply Chain** - inefficacies of transport and global disruption in trade make impact on availability of material
- ✓ **Economic & Financial Fluctuations** – fluctuation in interest rates, inflation and foreign exchange risks
- ✓ **Site & Geological Challenges** – unexpected site conditions, mainly in complex urban tunnelling and metro rail projects

Risk Management Framework of Larsen & Toubro (L&T)

Project risks are managed by Larsen & Toubro (L&T) through a strong 3-pronged approach “Operational, Tactical, and Strategic” spanning pre-bid to a close-out phase. Such framework helps in mitigation of severe infrastructure and financial exposure through cross-functional risk team, Artificial Intelligence driven credit system, and strict contractual guardrails. A highly structured system is used by L&T covering engineering, procurement, fabrication, logistics and geopolitical variables. The Company has a 3-pronged approach to Risk Management “Operational, Tactical, and Strategic.” Risks at individual as well as at the portfolio level are managed through a strong process that include statutorily mandate and other internal processes.

❖ The 3-Tiered Strategy:

- i. **Operational** – everyday mitigation at individual project level, which is managed by heads of the business along with the local risk team
 - ii. **Tactical** – reviewing portfolio for allocation of resources and resilience of supply chain
 - iii. **Strategic – compliance and high-level of monitoring by Risk Management Committee, Apex Risk Management Committee, and the Board's Audit Committee.**
- ❖ **Risk Assessment of Pre-bid phase** – before making any commitments to mega-projects such as “Mumbai Trans Harbour Link or bullet train corridors”, risk evaluation is conducted by L&T limiting total contractual liability to reasonable levels.

Identification, measurement and mitigation of risks are included under Risk Management. It also includes the judgement on the probability and severity of risk events. The framework of risk management includes Risk teams and Business heads at various businesses that are working in close synchronization with company-level teams. In addition to risks at project level, risks that arise corporate functions like cyber security, IT and HR are also mapped and mitigation properly. The main purpose of Risk Management function is improving results of the projects and thereby aid financial performance.

Use of @RISK for development of a Methodology to Determine Risks of project

L&T is a construction, engineering, technicity and manufacturing company. It is one of the biggest and highly respected business organization in private sector of India. Setting up a centre of excellence in project management, a high quality of education and research is provided by “the L&T Institute of Project Management in the field collaborating with leading institutes of reputed all over the globe. “@RISK” is used by the institute for the development of a methodology that service providers in in engineering outsourcing sector can use for identification of risk impacting accurate determination of project scope, scheduling and delivery. @RISK is chosen by the institute as a solution of choice for quantitative statistical modelling. All the analysis is importer into Excel by “@RISK meaning that everyone can use all the formulae in software along with the features of “@RISK which is a strong combination for statistical analysis (Lumivero, 2021). Being India’s leading engineering and construction company, L&T is involved in large-scale infrastructure projects like metro rail system, airports, highways, power plants, smart cities, water treatment plants and defence infrastructure. A major role is played by L&T in infrastructure development of India and execute projects domestically as well as internationally.

Project Risk Management is highly important in infrastructure projects as these projects involve:

- Long project durations
- Environmental and regulatory uncertainties
- Multiple stakeholders
- Large investments
- Technological complexity

Core Issues in the Case

The case highlights the complexities of infrastructure investment decisions in India, where large-scale projects require significant capital, long implementation periods, and coordination among multiple stakeholders. Larsen & Toubro (L&T) must balance growth opportunities with effective project risk management by addressing regulatory uncertainties, cost overruns, supply chain disruptions, and financial risks. The company also faces the challenge of adopting sustainable and technology-driven strategies while ensuring timely project execution and long-term profitability.

Case Questions

1. What are the major factors influencing infrastructure investment decisions in India, and how does Larsen & Toubro address them?
2. How does L&T's three-tier project risk management framework help in mitigating operational, tactical, and strategic risks?
3. Evaluate the role of digital technologies, Artificial Intelligence, and quantitative risk assessment tools in improving project execution and risk management at L&T.
4. What are the key challenges faced by infrastructure companies in India, and what strategies should L&T adopt to ensure sustainable growth and successful project delivery?

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Innovation Management and Cloud Investment Strategy in Enterprise Markets: Microsoft India Experience

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Introduction:

A massive shift is driven by Microsoft India from adoption of artificial intelligence to AI-native enterprise operations, it is backed by monumental investment of \$17.5 billion in Indian cloud and AI infrastructure. The strategy concentrating on transitioning Indian organizations into "Frontier Firms" that are led by humans, and enterprises that are agent-operated scaling computer and intelligence without redeveloping core operations. Innovation management of Microsoft in enterprise market centres on co-innovation and transformation driven by Artificial Intelligence. Microsoft, in India, drives this by connecting with local IT majors, IndiaAI Mission of the government, and many startups they deploy artificial intelligence tools like Copilot for scaling up solutions at global level. When a new laboratory was opened in Bangalore by Microsoft Research in 2005, it was 6th research lab of the organization, and outside U.S. it is was 3rd. It is announced by Microsoft that it will invest around \$17.5 billion in India between 2026 to 2029. Innovation Management and strategy of cloud investment are important drivers of competitive advantage in this digital economy. With the rising adoption of cloud computing by organizations has improved operational efficacy, scalability and capabilities of innovation, a vital role is played by technology firms that facilitates digital transformation. The practices of innovation management are examined in this study along with the strategies of cloud investment is adopted by Microsoft in the market of Indian enterprises. How Microsoft leverages technological innovation, strategic partnership, customer-0centric solutions and cloud infrastructure investment is explored by the study. With the expansion of cloud services, integrating AI and industry specific digital solutions. Enterprises are enabled by Microsoft India to accelerate digital transformation while making improvement in business resilience and productivity.

It is suggested by the findings that effective innovation management with the combination of strategic cloud investments improves performance of the organization, nurtures technical competitiveness and makes contribution towards the development of digital economy of India. The update posted on X following \$3 billion, as announced by the company earlier. The funds would go towards cloud infrastructure; requirements related to artificial intelligence and operational expansion across its presence in India. One of the main parts of investment is development of India South Central cloud region in Hyderabad. This region is forecasted to start their operations in mid of 2026 and would house 3 availability zones. It is stated by the Microsoft that the site would cover roughly an area equal to double of Eden Garden stadium. Such facility is built for supporting domestic requirements of data and increasing use of artificial intelligence systems. The commitment of \$17.5 billion adds to the flow of large investment in technology to strengthen cloud and AI infrastructure of India that makes another phase of expansion in digital framework of India. Mission was stated by Microsoft Research India at that time was conducting long-term basics and applied research and collaboration with Indian Research Institutes and Universities for accelerating scientific progress and innovation in software engineering and computer science.

In the past few decades, Microsoft Research India has attained high records of innovation in the area ranging from health and education to agriculture and accessibility. Innovation is constantly considered as a means for business to remain successful and to survive in

competitive market driven economies. Innovation as a term, innovation management and creativity are used throughout in politics and business. Companies having the capability of building and managing their potential of innovation are likely to succeed and profit in fast moving future economy. In order to do so, they need to build a solid innovation, creating a culture of innovation and develop, implementing best ideas being captured through process of idea management (Shakeela, Ranjita & Priyadarshini, 2016).

The rising power of brand affords Microsoft the credibility of expanding into a wider market range extending beyond their legacy in PC operating system like cyber security and cloud computing. Presently, more than 100 million developers all over the world are using Microsoft owned open platform for building, shipping and maintaining software. Such capability of expanding and extending the brand into new product area is important given the breadth, size and range of growth markets the company has before. In the past decades, a union of secular trends has expanded dramatically the market for evolving portfolio of productivity of Microsoft its intelligent cloud and personal computing products (Diorio, 2023). Microsoft sets to improve data literacy and harnessing institutional expertise with consolidation thousands of detailed historical financial documents in a single knowledge library that can be asked in natural language. Moreover, Microsoft wanted to explore potential of artificial intelligence for automating the recovery of historical information of product launch, thus enhance efficiency of time, and productivity in financial activities associated with development of new product. For unlocking the potential within the vast range of financial data, Microsoft collaborated with professionals. Vital insights are provided by such collaboration, it enabled Microsoft to apply best practices and improve expertise in digital engineering, data analytics and artificial intelligence. Microsoft is a known name and need no introduction. It is a universal force in India as majority of companies along with government agencies are using its products, remarkably the Office 365 suite. Recently, the business organizations have played main role to help shape Digital India, and such extends to “Information Technology (IT) and IT-enabled services (ITeS) sectors” of the nation. India’s ITeS sector has witnessed a substantial trend of heightened adoption of artificial Intelligence and innovation. Artificial Intelligence is recognized as Microsoft as a game-changing technology empowering companies to achieve business advantage (Anand, 2023). In the effort of supporting the startup ecosystem in nation, program has been Microsoft to nurture and scale up startups to leverage AI. “Microsoft AI Innovate” is a ten-week initiative for supporting Indian startups to leverage AI technologies, it helps them to scale operations, driving innovation and building industry expertise. B2B and B2C startups from different industries include healthcare, financial services, agriculture, education, manufacturing, retail are invited to engage in quarterly associates of immersive program ([CXOtoday News Desk](#), 2021).

Digital transformation initiative in India across different industries like healthcare, banking, retail, manufacturing and government services have risen the demand for cloud-based solutions. Microsoft has been established as a leading provider of cloud services through cloud platform, Microsoft Azure that offers business enterprises a complete suite of infrastructure, software services and platform. The cloud strategy of Microsoft India concentrates on growth driven by innovation through investment in data centres, capabilities of AI, cyber security solutions and strategic collaboration with businesses and public institutes. Such initiative support customers to achieve operational excellence and sustainable growth. Cloud strategy of Microsoft enterprise in India on data power, hyper-scale infrastructure, and population-scale artificial intelligence. A massive commitment of \$17.5 billion is expanding local data centre of Azure for addressing strict compliance regulations, it enables highly secured, low-latency transformation for manufacturing, banking and public sector across the nation. As per the

reports of “Fortune Business Insights”, the global cloud computing market is expected to reach “\$1,712.44 billion by 2029” from “\$480.04 billion in 2022”. Among the leading cloud providers, Microsoft Corporations might know such prediction in a better way (Saha, 2023). The technological and economic power dynamics has been reshaped by Artificial Intelligence, projecting some nations to the rank of new nerve centres of innovation. Certainly, India, boosted by quickly expanding market and considerable pool of talent, attracts tech giants in a race to dominate the sector. A decisive milestone has been crossed by Microsoft by announcing a \$3 billion investment for development of its cloud and artificial intelligence capabilities. Such ambitious initiative includes building of new data centres, deploying cloud infrastructure and most importantly vast training programs envisioned for 10 million Indians by the year 2030. Far from being just economic gamble, such investment is a part of a long-term strategy with the goal to anchor Microsoft at the heart of digital transformation of India. Microsoft experience in India shows that successful innovation management and strategies of cloud investment make substantial influence on enterprise competitiveness and results of digital transformation. Through constant innovation, significant investment in cloud infrastructure, solutions driven by Artificial Intelligence and strong ecosystem partnership, its position has been strengthened by Microsoft in Indian enterprise market. It is concluded that companies that have adopted cloud technologies supported with effective practices of innovation management are more possibly to achieve enhanced operational efficacy, sustainable growth and business agility. Approach of Microsoft provides a valuable insight for technology organizations who seek to leverage computing as a strategic resource in this digital age.

Microsoft is well-known for their capability of analysing and innovating technologies strategically, and is committed to drive innovation constantly in technology industry for meeting the requirements of the changing market as well as providing secured and reliable solutions. On one hand, technological innovation has enabled Microsoft in maintaining their competitive advantage and expanding the market. With the constant introduction of new products and technologies, Microsoft can meet the needs of users for innovative and efficient solutions, therefore maintain leading position in competitive environment and technological innovation helping Microsoft to explore new opportunities of business and expanding market share (Shuying, 2023). In the journey of Artificial Intelligence, India stands at a vital moment, one is defined by influence at scale, determined to lead. Technology has become a substance for complete growth and economic transformation; the nation is appearing as a frontier AI economy. Against such framework of bold motivation and accelerate growth and innovation, the company announced largest investment in Asia of \$17.5 billion by 2026 to 2029 for advancement of cloud and AI infrastructure of the nation and skilling up the ongoing operations. This investment made on \$3 billion, which was announced earlier this year that were on the track of spending by the end of 2026. India with Microsoft is setting new benchmark driving the leap of the nation from digital public infrastructure to artificial intelligence in future. The company is shaping the future which is more unique and equitable in its impact and scale. Cloud computing is a standard shift in IT sector that basically transformed the way software and services get delivered to the desktop of end users. Shared resourced of software, hardware and information are enabled by cloud computing, which is provided to customers on demand, and charging based on the usage. In this space, Microsoft is offering Azure, it provides infrastructure and software as a service along with the platform for developing new application on the model of “pay-per-use” (Gupta et al. 2011). “Cloud Accelerator Program” was launched by Microsoft India for helping Indian business enterprises and government organizations for taking full benefit of cloud. Such launch was announced by the company at largest cloud conference of India, which was “the 2015 Microsoft Azure Conference.”

Figure 1 shows Microsoft India's Innovation Management and Cloud Investment Strategy

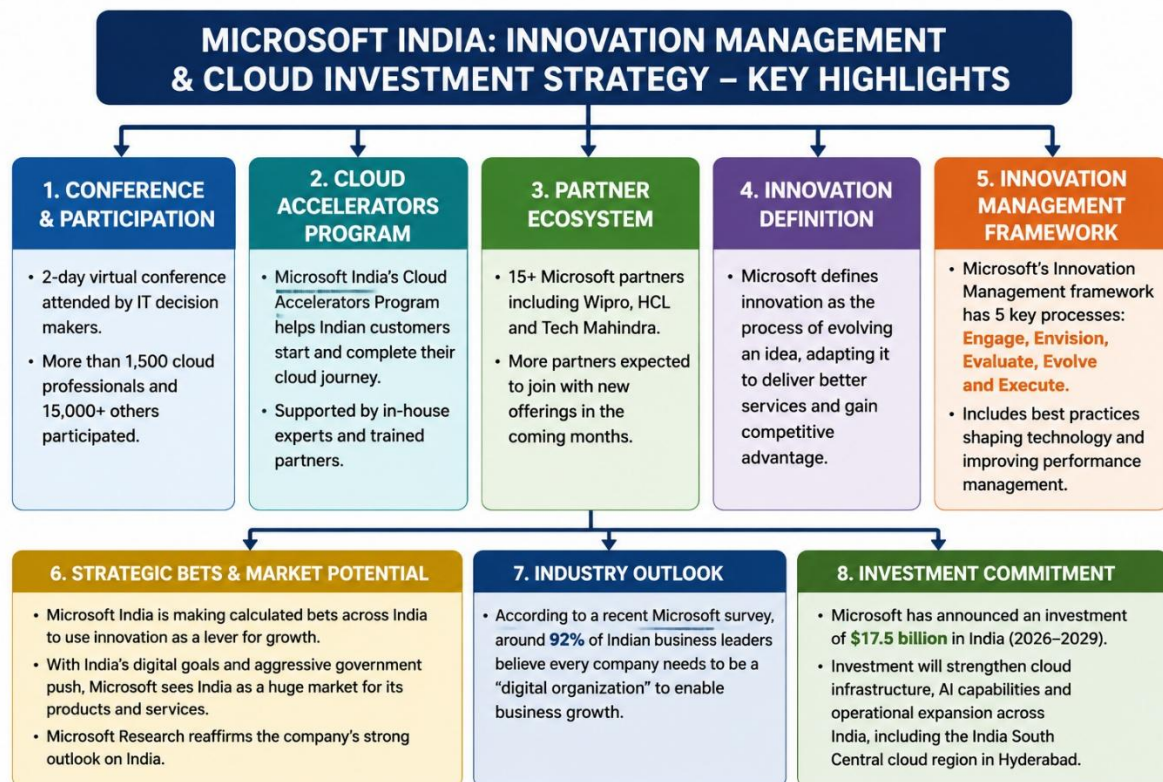


Figure 1 Microsoft India's Innovation Management and Cloud Investment Strategy

The decision makers of IT sector and more than 1500 cloud professionals along with 15 thousand others attended that 2-day virtual conference. With the assistance of in-house experts and trained partners, Cloud Accelerators Program of Microsoft India is designed specially for helping Indian customers for starting and completing their cloud journey. More than 15 partners of Microsoft that include Wipro, HCL and Tech Mahindra. It is expected that more partners would come on board with new offering in the coming months. Innovation is defined by Microsoft as the process evolving version of an idea, which is being adapted to get best services to gain competitive benefits. Microsoft Innovation Management framework has 5 main processes leading to innovation involving engage, envision, evaluate, evolve and execute. This framework includes best practices shaping technology and improving performance management. A series of calculated bets are taken by Microsoft India across India as it attempts to use innovation as a lever driving growth. Looking at digital goals of India coupled with aggressive government; it is believed by Microsoft that India is a big market for their product and services. Microsoft research verifies the bullishness of the firm in India. As per the reports of recent survey, which was conducted by Microsoft, around 92% of Indian business leaders believe that every company needs to be a "digital organization" enabling growth for their business (Srikanth, 2017).

Core Issues in the Case

The case examines how Microsoft India manages innovation while making large-scale investments in cloud computing and Artificial Intelligence to strengthen its leadership in the enterprise market. The company faces the challenge of balancing rapid technological innovation with infrastructure expansion, strategic partnerships, regulatory compliance, and customer-centric digital transformation. At the same time, Microsoft must ensure that its cloud

investment strategy enhances operational efficiency, business agility, and long-term competitive advantage in India's fast-evolving digital economy.

Case Questions

1. How does Microsoft India's innovation management strategy contribute to its competitive advantage in the enterprise cloud market?
2. Evaluate the significance of Microsoft's cloud investment strategy in accelerating digital transformation among Indian enterprises.
3. What role do Artificial Intelligence, strategic partnerships, and cloud infrastructure play in Microsoft's enterprise growth strategy in India?
4. What are the major challenges Microsoft India may face in implementing its cloud and AI investment strategy, and how can these challenges be effectively addressed?

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Subscription-Based Revenue Models and Market Expansion in Creative Software Firms: Adobe Case Study

Prof. Balkrishna Namdeo Salunkhe Assistant Professor & Prof. RupenPilankar Assistant Professor

Introduction:

From a perpetual licensing, Adobe shifted to subscription-based Software-as-a-Service (SaaS) model, which is a successful business transformation in tech history. It was launched as Creative Cloud (CC) that have revolutionised the creative software market, it has transformed Adobe into a scalable, predictable and constant ecosystem of growth. Transformation of Adobe from traditional software selling company into a global SaaS leader of subscription-based system, which is one of the important business model shifts. Previously, Adobe was dependent on one-time software sale, where users buy tools such as Illustrator and Photoshop in just one transaction. Revenue spiked through this model but it lacked long-term consistency. With the transforming digital trends and rising cloud computing, Adobe through Creative Cloud shifted towards subscription-based system. The shift permitted users to access software on the basis of recurring payment. It has improved user's affordability creating steady financial growth for Adobe. Parallely to this subscription transformation, a new category of business was created and lead by Adobe, which is known today as digital experience. The company forecasted that creation of content has become first step in lifecycle of content, the capability of analysing, managing, deploying and optimising that content would become important for future success of users. Such factor make contribution towards decision of transformation of Adobe's Creative Suite business to monthly cloud-based subscription model from boxed-licensed software model that closed during the launch of Adobe Creative Cloud (Moorman, 2018).

Adobe is known as a prominent example successful model transformation of business. The transition of company from selling the packaged products of software like Photoshop, Illustrator, and InDesign to offer cloud-based subscription through Creative Cloud basically altered their strategy of generating revenue. Such shift enables Adobe in the expansion of customer base all over the globe with the creation of a predictable and recurring revenue stream. (Lauchlan, 2016).

The Core Shift - Perpetual to Subscription

Adobe use to sell boxed software prior to 2013 with individual suites that costed more than \$700 to \$1000, they use to release new versions after every 18 to 24 months. This model caused unpredictable stagnation of revenue and stock prices. This model was replaced by The Creative Cloud model with recurring monthly or annual payments.

Strategic Benefits:

- **Stability of Revenue** – A predictable, recurring revenue stream created by subscription billing. More than 90% of revenue of Adobe is driven by ongoing subscription, it reduces to influence of product release cycles.
- **Constant Updates & Value** – Instead of waiting for the release of new boxed, Adobe moved to constant delivery of software, improving customer relations and engagement.
- **Reduction of Software Piracy** – Moving application to authenticated subscription or cloud-hosted make significant reduction in piracy rates

- **Lower Barrier to Entry** – Addressable market of Adobe gets broadened with seemingly cheaper monthly plan by attracting students, hobbyists and small businesses who might not afford large upfront payments.

Transition of Adobe from traditional software licensing company to a service provider based on subscription shows a turning point in digital business landscape. Such shift is not only regarding changes in pricing, but it has redefined how value is delivered, monetized and consumed in software industry. With recurring subscription, one-time purchases get replaced and Adobe created a highly predictable and scalable business model. The business model which is subscription based did not started with the revolution of interest but it did go viral with it. Freelancers were not the only reason that Adobe moved to subscription business model. By shifting towards subscription model Adobe removed the fee of big-ticket from new users, they increase the new bunch of users and at the same time expanded the lifetime value of customers of all the users. When an individual subscribes to a product you will get service as a valued customer. Therefore, business based on subscription always have top customer service, support as well as automatic update of the system (Schwartz, 2019).

High costs of switching and steep learning curves have protected market position of Adobe. Company's subscription-based model is providing stable, recurring revenue and also maintains flexibility of customers. Proprietary Artificial Intelligence model is leveraged by Adobe, which is trained on high quality data, supported by large creative community as well as strong financial capacity for long-term investment. TAM of Adobe is forecasted to reach to \$293 billion by the year 2027 as it grows at 13% CAGR from 2024 to 2027. Revenue of Adobe accounted by just 7% in FY2023 that left ample of room for expansion. Transition of Adobe to subscription-based model shows how innovative model of business driving sustainable growth and expansion of market in creative software sector. The company is enabled to generate forecasted recurring revenues with subscription model, it also helps in improving customer retention, supports constant innovation, and expansion into global markets. Adobe has strengthened its competitive advantage by offering flexible pricing, cloud-based accessibility as well as regular updates on products, while it also improved organizational performance. It can be concluded that revenue model based on subscription represents a powerful strategy for software company who seeks long-term profitability, loyalty of customers, and market leadership in this digital era.

The “digital media software (DMS)” sector is a pivotal still relatively under-explored sector in terms of dynamics, potential of market, evolution and opportunities of growth. Using Adobe as an example, the evolution of DMS evolution has been highlighted focusing on key business segment of Adobe, business strategy and business model, diversification of product and in-organic expansion mainly capturing response of Adobe to change the needs of the market (Bansal et al. 2022).

Strategies of Market Expansion

The recurring revenue from Creative Cloud is providing predictable flow of cash needed for aggressive expansion and integration of technology:

1. **Expansion of Product Ecosystem** – from core tools such as Photoshop and Illustrator, Adobe expanded to a comprehensive suite including video editing (Premiere Pro), UX design (Adobe XD), and 3D modelling (Substance).

2. **Enterprise Integration** – Adobe has been allowed by subscription model for packaging bundles that are designed for enterprise teams, it drives deep integration across branding, marketing, and designing of departments.
3. **Aggressive Acquisitions** – fueled with forecasted revenue streams, tech platforms are acquired by Adobe for expanding its Total Addressable Market (TAM), it includes major buying like Magento, Marketo, and Workfront, it has transformed itself into an end-to-end provider of digital experience.
4. **Generative AI Integration** – Adobe has leveraged subscriber base to integrate generative AI tools seamlessly like Adobe Firefly into Creative Cloud ecosystem, it adds immediate value to existing subscriptions and attract new users without the launch of whole new standalone products.

By shifting from selling boxed software to offering Creative Cloud, Adobe transformed its business as a subscription-based SaaS platform. Predictable revenue was delivered by this move, constant updates and global reach. Strong IP involved software and content copyrights, unique feature's patent, trademarks for brand trust and DRM for access control have made this model possible, profitable and sustainable. With the protection of complete ecosystem, Adobe has secured its position as creative industry standard. From selling perpetual software licenses, Adobe moved towards delivering of Creative Cloud as a subscription marked one of the substantial moves in the software sector. Revenue model of Adobe got redefined by this transformation, along with its product delivery, and customer relations that have turned the standalone tools into a constantly evolving creative platform. Adobe attempted to make sales growth more predictable by moving towards subscription system that helped in avoiding shortfalls of revenue and declining stocks occurring in-between updates to Creative Suite. (Bloomberg, 2012). The digital world is craving for innovative digital experience to be made for all those who are living in it and Adobe is known to be a software giant. It was formally known as Adobe System Incorporated, present called as Adobe Inc. is a software company offering a line of products and services that are used by marketers, professionals, knowledge workers, application developers, consumers to create, manage, deliver, measure, optimize and engage to compel content and experience across multiple operating system, devices and media. The needs of creative professionals are addressed by the Creative Cloud of the company. For creating printed and online information its creative products are used for people to see, read and communicate every day, it includes animation, video, mobile and advertising content (Anand, 2022).

Adobe switched to a SaaS model in 2013, it offers cloud-based solutions for a monthly charge. It enables users who can afford to pay money upfront for products for using them at a lower price for whatever time they require. For business organizations to seek to replicate this success, are partnering with SaaS lead generation agencies, which can be a game-changer. In just 2.5 years, Adobe got 4 million new subscribers, it delivered tools and services empowering individual for creating, collaborating and expressing their vision, and transforming businesses with compelled, personalized experience in streamlining to workflow and connect communities with new level of collaboration. The goal of Adobe is becoming a leading provider of Cloud-based solutions to deliver digital experiences and enable digital transformation. The Adobe experience Cloud applications and services that are designed for management of customer journey enabling personalized experience at scale and deliver intelligence for businesses of any size in any sector (Goel, 2023). The focus of Adobe business model concentrates on subscription-based services. This new model needs customers to pay annually or monthly some fees to access services of Adobe. The subscription model of Adobe has been successful and helped company to maintain dominance in software market.

Core Issues in the Case

The case explores Adobe's strategic shift from a one-time software licensing model to a subscription-based Software-as-a-Service (SaaS) model through Creative Cloud, enabling predictable revenue, stronger customer relationships, and global market expansion. While the transformation has strengthened Adobe's competitive position, the company must continuously innovate, integrate Artificial Intelligence, expand its product ecosystem, and maintain customer retention in an increasingly dynamic digital software market. Sustaining long-term growth depends on balancing innovation, subscription value, and technological leadership.

Case Questions

1. How has Adobe's transition to a subscription-based SaaS model improved its revenue stability and long-term business performance?
2. What role do Creative Cloud, Adobe Experience Cloud, and AI-driven innovations play in Adobe's market expansion strategy?
3. How does Adobe's subscription ecosystem enhance customer retention, product innovation, and competitive advantage in the creative software industry?
4. What strategic challenges does Adobe face in sustaining growth, expanding globally, and maintaining customer loyalty under its subscription-based business model?

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Market Penetration Strategies for Digital Payment Platforms in India: Insights from Paytm

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Introduction:

Market penetration of Paytm in India was dependent on strategies led by ecosystem and also aggressiveness resolving the two-sided marketplace. A massive network of acceptance by merchant was also built simultaneously along with active user base of customers by using ground-level distribution network, broad financial services and freemium hardware. With the evolving landscape of Indian Fintech, Paytm being a strong digital payment player were shifting their focus from just customer acquisition to strict regulatory compliance as well as profitable subscription model. Being a prominent player in Indian fintech industry, Paytm highlighted their evolution, challenges and regulatory landscape. Paytm was founded in 2010 and have influenced the digital payment ecosystem of India, it offered a wide range of services and reaped widespread adoption. Major milestones include the launch in 2017 of Paytm Payments Bank that additionally strengthened their position in financial services. However, regulatory inspection, which was represented by actions from the RBI, presented substantial complication making impact on its market share and confidence of investors (Kaur, Chopra & Chopra, 2024). Paytm is a swiftly-growing business organization making string presence in the banking and service sector of India. It has evolved from a small business start-up becoming a big business corporation in short time period that highlights the strength of capitalist system of India and the adept use of innovation. Exceptional success has been achieved by Paytm, it has received awards from all over the world for their work in the field of digital payment and for being the developer of e-commerce (Puneeth & Nethravathi, 2021). The initial success of the company was driven by their QR code-payment system enabling users to make transactions without the need of physical cash and card. With the growth of the company, they expanded their services to include online payments permitting their users to make transactions on e-commerce platform and online market. A significant boost was received by the company in 2016 with the acquisition of Free charge, a leading platform for mobile recharge that further expanded their reach and user base. Paytm also diversified their revenue stream with the introduction of new services like Paytm Mall, an e-commerce platform and Paytm Payments Bank, which was a digital banking service. Payment ecosystem of Paytm has evolved including features like UPI-based transactions that enabled users to make payments directly from their bank accounts (Sharma, Behera & Dua, 2024).

Key Market Penetration Insights from Paytm

1. The Power of Habit-Building Marketing – instead of just selling a service, a shift in the lifestyle was engineered by Paytm. The executed the campaign of "Aadat Se Azadi" (Freedom from Habit), addressing the friction and insecurity to carry the cash. Such message, along with the catchy tagline of "Paytm Karo" made the brand identical with digital transaction in India.

2. Ecosystem Lock-In – mobile wallet and integrating UPI as a gateway to a broader financial service. Once the platform is adopted by users for simple mobile recharge and transfer money online, they cross-sold into services like:

- **Paytm Payments Bank** - convenient savings accounts and digital banking.
- **Paytm Money** - accessing mutual funds, stocks, and wealth management.
- **Loans and Credit** – availability of small-ticket loans through the app directly.

3. Hyper-Aggressive Acquisition of Merchants – the keystone of B2B penetration of Paytm was deploying inter-operable QR codes to more than 20 million merchants all over India. By waiving off transaction fees initially, they penetrated Tier-1 and Tier-2 markets rapidly.

4. Cashback Incentives and Subsidies – Paytm spent money significantly in their early growth phase in acquisition of users with direct cashback. Such monetary incentives have lowered the barrier to entry drastically, tempting customers to opt digital wallet over cash payments. Paytm transitioned by offering high cashback incentives and concentrating on user retention and monetization.

5. High-Visibility Partnerships – to make their name strong as a household name, prime sponsorship was secured by Paytm, it acted as the official partner for the Indian Cricket Team. Aligned deeply in cultural passion provided brand with huge visibility across various demographics.

Presently, Paytm is identical with India's digital payment, it offered everything from just a mobile phone recharge to personal loans just at a click of a button. More than 8 million of monthly transacting users and more than 4 lakhs of merchant partners, Paytm has mastered user acquisition and user retention having a wide scope of diverse services for up-selling and cross-selling. Paytm has gathered more than 280 million users by 2017, and their acceptance spanned even in villages. Such huge adoption has solidified reputation of Paytm as a reliable and trusted platform (GrowthX, 2024). The goal of Paytm is to implant in many financial transactions and can charge a rate where it can. However, it yields low margin revenues. True potential of Paytm would come from finding other methods of monetising their ecosystem through advertising, lending, insurance wealth management, etc. Paytm is set apart by their strength on P2M transactions. Their merchant strategies have found to be really good. Other digital payment vendors like "PhonePay" and "GPay" limited themselves to onboarding of merchants on their platform and pasting of QR codes. Additional device is provided by Paytm for solving problems of customers like Voice Box and POS device making Paytm the default choice for merchants with this device (Mann, 2022).

Marketing Strategy of Paytm

Marketing strategy of Paytm takes a broader approach as it targets urban as well as rural market. Paytm was originally a mobile recharge platform, it evolved into a super app, offered a range of services from payment to financial services, e-commerce and others. Strategy of Paytm is building aggressive cashback offers, discount campaigns and partnership with local merchants. Digital marketing strategies are employed by the platform, it includes visual advertisements and social-media promotions for strengthening brand awareness. UPI LITE is offered by Paytm for fast, and real time transactions along with All-in One payment solutions catering to variety of payment requirements, it includes payment of utility bills as well as mobile recharge. UPI (Unified Payments Interface) is a system integrating multiple bank accounts into a single mobile application. Seamless routing of funds is enabled by UPI, also enables merchant payments, and peer-to-peer transactions that operates 24/7, it has features like scanning of QR codes and single click and for secured transactions with two-factor authentication. With the growth of mobile phone users in the world, the potential market for online market and cashless transactions has risen. Paytm targeted customers using smart phones for cashless transactions schemes. The company has induced Indians successfully to depend on the use of cash regularly in everyday business. Rather, people are preferring to make digital payment system. An initiative was launched called "Aadat Se Azadi or Habit Free", which was achieved by focusing

on problems that are faced by people when they deal with cash. Stress was given on how people feel insured while using cash or while going out with lot of cash (Shahid, 2021).

Paytm has moved from high cash-burning acquisition to a sustainable and profitable growth. Following regulatory changes with regards to payment bank, the company doubled down on their core UPI distribution to merchants as well as B2B tech services. With integration of Artificial Intelligence and streamlining of operations into detection of fraud and onboarding, Paytm maintains huge market share while generating records of net profits. Many marketing techniques were applied by Paytm over the past few years that sometime criticised by critics and regulatory agencies. Still, they left good impressions in the minds of users. The success story of Paytm in Indian market proves as a testament to the power of strategic digital advertising. With the combination of user-centric approach with inventive campaigns, strategic partnership, focusing on security, and localized content, Paytm do not just navigate the challenges but appears as a trailblazer in the sector of digital financial services. Paytm is a leading alternate solution of payment in India. Paytm owned by One97 Communication, earlier started their operations as a prepaid mobile and platform for DTH recharge in India in 2010. Paytm Wallet was launched by the company in 2014, which was used for online and in-store payment. With online banking, credit and debit card, cash can be loaded to the Paytm wallet. In the initial stage, Paytm was used only at online marketplace for bill payments and e-commerce sites, the wallet now is accepted widely at many online apps and merchant sites.

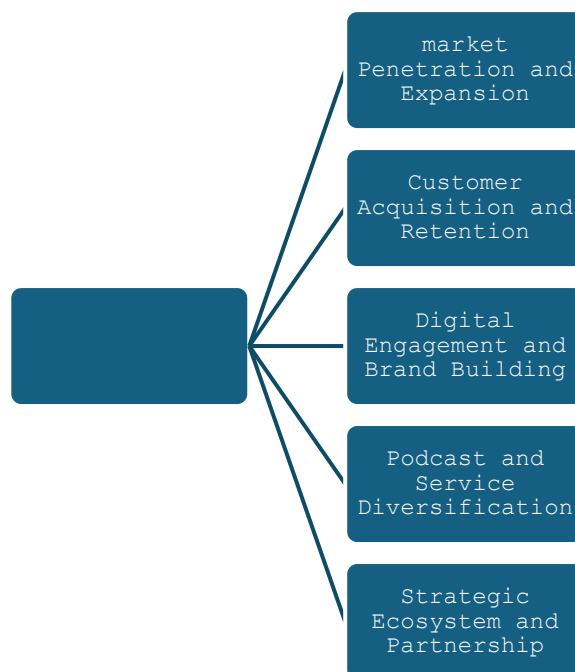


Figure 1 Important Marketing Strategies of Paytm

Paytm is among the leading business organizations in the space of Indian mobile wallet that accounts for 10.5% share of the total e-commerce transaction of the nation as per the Global Data 2022. Paytm is used for everyday transactions along with online payments and it is accepted across all merchant types that ranges from grocery stores and street vendors to big retail brands (Global Data, 2023). While shopping, the two words that comes in the mind of every India post monetization was “Paytm Karo”. A paradigm shift was brought by Paytm in the retail sector by transforming the methodology of payment. In the early stage, online wallet cum e-commerce website was used for making payments for limited things like shopping bills

and mobile and DTH recharge. This portal has expanded their scope over the years, and has brought about anything and everything under the domain of their operations. Paytm was used by users for recharging their metro card, paying bills like water and electricity and for transferring the funds to other bank accounts. Users also use it to book train and flight tickets, for hotel reservation, etc. The latest success story of Paytm is ever expanding by adding e-retail and m-commerce stores, giving options to small vendors to list their products on the website permitting them to expand the base of its customers (Komirisetty & Simha, 2018). Complete online market of India was covered by Paytm. The number of transactions conducted through Paytm gateway is second highest in India. In 2010, Paytm was started as a mobile recharge company and it is now everywhere used by uncountable number of users. They have their own payment bank which was approved by RBI (Dixit, Prakash & Tiwari, 2017).

Core Issues

Key issues include increasing user adoption across urban and rural markets, building customer trust through secure and reliable transactions, and enhancing customer engagement through value-added services and reward programs. The expansion of merchant acceptance, regulatory compliance, and continuous technological innovation are also essential for sustaining market leadership. Furthermore, understanding changing consumer preferences and responding to competition from banks and fintech firms are crucial for achieving long-term market penetration and business growth.

Key Questions

1. How do market penetration strategies adopted by Paytm influence customer adoption and usage of digital payment services in India?
2. What factors affect customer trust and satisfaction in Paytm's digital payment platform?
3. How do promotional offers, merchant partnerships, and value-added services contribute to Paytm's market penetration and customer retention?
4. What challenges and opportunities do Paytm face in expanding its digital payment services in the highly competitive Indian fintech market?

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Angel for Investors: A Case Study on Success Story of Angel One Investing

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Introduction:

Formerly known as Angel Broking, today known as Angel One, its success stems from the rapid, and technology-driven transformation. As it pivots from a traditional, branch-based brokerage to a digital-first discounting model capturing a huge segment of Tier 2 and Tier 3 millennial investors. Angel One was found by Dinesh Thakkar in 1996, it disrupted the Stockbroking industry in India by a highly strategic and phased evolution. Angel investing is known as the most trusted platform for deploying private capital into leading venture-packed company in India. Focusing on identification of emerging opportunities and challenges, analyses of investment trends, regional disparities, and the Angel Investor's profile. An important role is played by Angel investors in the ecosystem of startups as it provides early-stage business firms with not only capital, but also industry expertise, mentorship, and valuable network. It is offering the potential for higher returns and satisfaction to support innovation, but also carry substantial risk because of high level of failure rate among new startups. In order to be successful, angel investing need careful due diligence, patience, diversification and long-term perspective. When approached strategically, angel investing can become a strong tool to drive entrepreneurship as well as economic growth and offers investors a meaningful financial as well as personal rewards (Singh, Gupta & Singh, 2025). As online trading is reshaping the landscape of financial market continuously. The role of technical innovation has become dominant that make influence investors satisfaction and develop sustainability. A comprehensive case study is presented examining the complicated relationship between technical innovation, sustainable practices, and satisfaction of investors in context of Angel One who is a prominent player in online broking sector. Angel One has the long-lasting potential of making investors happy. While making risky online investment transaction, investors place a premium to receive friendly services. A small financing cost needs to be paid by the corporation for transactions. The dealers need to automate for reduction of number of possibilities to buy and sell stocks responding to the fluctuations of market (Kumari et al. 2024).

Customers across India with Angel One can navigate capital markets, make investment and trade in equities as well as mutual funds as it uses convenient and cutting-edge tools. Angel One, being a retail broking company has transformed successfully from a traditional way to run the business completely through digital platform and grow the customer base to around 2 crores. Dinesh Thakkar, the founder of Angel One started small office in Mumbai in 1996 was available to just few and was conducted through terminals located in different parts of the nation. This process for retail investors was tedious as it meant to got to stock broking office and signing the papers for transactions. This happens today just at a click of a button because the internet has a democratised stock trading market that pulls in a large number of retail investors. At present, after Groww and Zerodha, Angel One stands at 3rd position, both Groww and Zerodha are digitally native platforms in terms of active clients of NSE (Poojary, 2024). Angel One is the biggest retail broking firm of India in terms of active client on NSE. Angel One being the digital-first company provides a digital platform to investors to make investment in stock market. In order to support investors further in their investment journey, the goal of the company is to improve their strategy of communication by leveraging digital channels for real-time, and customised engagement (Infobip). The success story of Angel One represents a huge fintech transformation, evolved from traditional sub-brokers of Dalal

Street of India's largest and technology driven and listed retail stock-broking platform. Digitalization driven, zero-brokerage and flat-free model, it is scaled from a small offline company to more than 36 trillion in total average daily turnover.

Angel One, being a digital-first firm seeks to upgrade their present system of communication for resolving some main challenges:

- ✓ **Lacking real-time interaction** – customers dropping-off during the process of onboarding might not be followed up in real-time.
- ✓ **Low reachability** – emails and SMS being the traditional channels were not sufficient to reach the high customer based that was growing speedily.
- ✓ **Missing two-way communication** – immediate query resolution was difficult that results in poor experience of customers.



Figure 1 Challenges Faced by Angel One

Angel One being India's dynamic landscape of financial market, has appeared as a challenging player that leverages technology for democratisation of investment for huge number of investors. Outpouring retail participants in equities, the digital-first approach positions Angel One it at the forefront of the financial revolution. Angel One is well-positioned for capitalization retail trading market in India. Angel One growth trajectory was ensured by Customer-first strategy along with the technology driven approach, and strong brand recognition. For millions of Indian retail investors who seek low-cost trading, Angel One becomes a one-stop trading platform, it provides platform for strong research and seamless investment management. Growing retail investors future of Indian capital market has been reshaped by companies like Angel One. However, retail investors must stay cautious of potential regulatory risks and high competition in the market (Kapoor, 2025).

Crucial business segments

Below are the main business segments on which Angel One operates:

- **Broking and Trading of Equities** – low-cost equity, commodities and derivative trading is offered by Angel One focusing on zero brokerage for delivery trades.
- **Distribution of Mutual Fund** – mutual funds and earning commissions from top AMCs are distributed by the company.
- **Wealth Management & Advisory** – company provide tailored services of wealth management along with financial planning for HNI clients.

- **Loans Against Securities** – company offer loans against securities to its customers by pledging equity holdings as collateral.

Several milestones have been added by Angel One in its journey over the decades. Until 2015, Angel One has the network of 180 branches, by 2019 it transformed into a digital-first platform completely as it started offering digital investment solutions. A phenomenal performance has been shown by Angel One as it has expanded their client base to million, double than shown in 2021.

Technology usage for growth by Angel One

Digital offerings across this sector have become highly sophisticated and customers are looking for seamless, customised and involving communication with the brand. By using an integrated technology of marketing enabling customised involvement with customers and building meaningful association leading to the growth of the company, just like leveraging social media platform for reaching to the audience. Looking at the language related challenge for customers, vernacular language system is also promoted. Artificial Intelligence and Machine learning is being used for providing the clients to have better experience. One of the main challenges is attracting young investors while making sure existing customers of the company are not isolated. Stellar performance of the company over the years is the result of leveraging advanced technologies. It has continuously defined their journey of innovation. Better dormancy prediction models have been used by the company. The seamless communication of Artificial Intelligence and Machine Learning has enabled a customised experience of investment. Like deploying AI through data with temporal signals give out tailored suggestions and journey. Forecasting model based on machine learning has been deployed for improving quality. New propensity model needs to be built for improving activation of clients (Karna, 2022).

Angel One as a company shares the concept of demand and supply. Its price always suffers from a rise as well as fall. It is the law of nature that in case a company forecast to post good results, it would get reflected in a corresponding rise in their share price, owing to the purchasing by the informed investors. All the companies, technically have their own psychology of work, theories, and circumstances that help in prediction of improved share price movement. Many enjoyable advantages are being provided by the company to their sub-brokers, which is a complete process. Company's business model shares derivatives, currency trading, life insurance and mutual funds. The word 'investment' has got trust related issues in present world. Investors are being provided support by the company in exchange of brokerage so that they do not suffer from any trust related issues that might appear worldwide. Higher brokerage is equal to higher commission (Dutta, 2021). The financial space of India is highly vibrant and thriving, this industry having grown manifold in the past and have promised rapid transformation. Angel One has an interesting story where an entity rises to a fame by its virtue in innovative solutions as well as services in the domain of financial advisory and stock broking. From an ambiguous starting, it became one of the leading brokerage firms of India, its strategic planning of incorporating customer-centric approach became its success story that have leaped into a cutting-edge technology. Various aspects have been discussed related to Angel One's journey, challenges, success, achievements and vision also what made the business grow was their customer-centric approach. The company believes that customers are the biggest asset for the company, they give high importance to the development of long-term association on the basis of trust as well as transparency. Various education resources and tools are also provided by the company that might help clients in making informed decisions. Webinars, market reports, tutorials and expert insights are also included. The success story of Angel One is an example of how any business grows and can reach to the highpoint by staying to their core competencies, embracing innovations and by keeping their customers satisfied.

Important Business Metrics

The strategy to democratise investments and financial savings are fueled with exponential growth for Angel One:

- **Client Base** – scaling from around 0.5 million of active customers in 2020 to a total client of more than 31 million
- **Market Share** – NSE shares of the company of active client base flowed from 4.9% to more than 20% in few quarters only after digital transformation
- **Efficiency** – shifting towards digital-first model increased the revenue per employee significantly, stabilising the operating profit margin around 30% to 50% mark.

Business of Angel One

Angel One was full broker with many branches up till 2018-2019 that was placing physical orders and such like things. Later they realised that this model is not scaling and have high cost of operations, therefore they decided to transition and become fully digital broker without any physical presence. Figure 2 presents the business era wise.

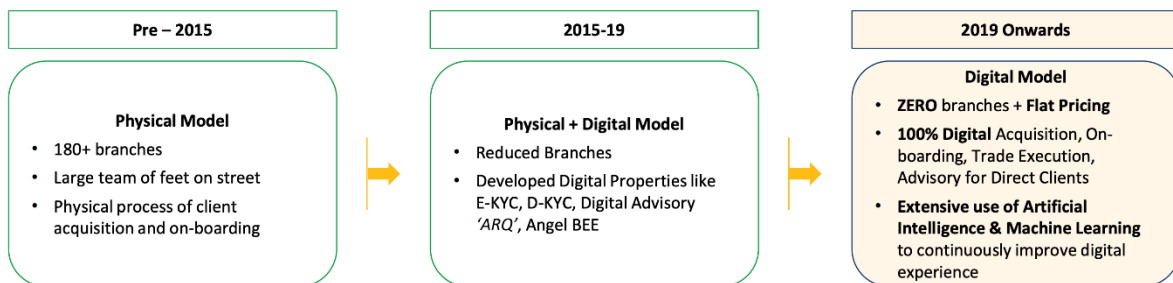


Figure 2 Majority of its revenue is earned from broking by Angel One being a broker.

Core Issues

Angel One successfully transformed itself from a traditional branch-based brokerage into a technology-driven digital investment platform by leveraging AI, machine learning, and customer-centric innovation. Despite achieving rapid growth in its client base and market share, the company faces challenges related to real-time customer engagement, intense competition from fintech rivals, evolving investor expectations, and regulatory uncertainties. Sustaining long-term growth while continuously enhancing digital capabilities and investor satisfaction remains the key strategic issue.

Key Questions

1. How has Angel One's digital transformation contributed to its rapid growth and competitive advantage in the Indian online broking industry?
2. What role do artificial intelligence, machine learning, and customer-centric strategies play in improving investor satisfaction and business performance at Angel One?
3. What are the major challenges faced by Angel One in sustaining customer engagement and competing with digital-first brokerage platforms?
4. What strategic initiatives should Angel One adopt to maintain its market leadership and achieve sustainable growth in the rapidly evolving fintech ecosystem?

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Digital-First Banking Models and Financial Inclusion in Emerging Economies: IDFC First Bank Case

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Introduction:

Financial Inclusions is all about the process that ensures people and business mainly marginalized and low-income groups to have proper access to secured, affordable and appropriate financial services and products like credit, saving, banking and insurance. It helps in bridging the gap between the formal economy and unbanked section of the society it reduces the poverty actively along with income inequality. Digitalization of financial services have gained popularity after India's demonetization after which major pandemic occurred causing most of the sectors a recession. The model of digital-first banking prioritises mobile and web platforms over physical branches that offer different features such as AI-driven personalization, cloud-native infrastructure and digital onboarding. Instead of just digitising the old methods and process of banking, Digital-first banking models has completely re-engineered the financial value chain for providing seamless and real-time user experience. Digital-first banking models has been leveraged by IDFC FIRST bank that include analytics-led lending, digital infrastructure (UPI/Aadhaar) of India for providing financial services to the unbanked Indian population and bypasses traditional expansion of branches. Integrated with local networks and using 11 steps of digital under-writing, IDFC FIRST bank is offering efficient, and low-cost banking for micro-enterprises as well as low-income groups. A remarkable transformation has been witnessed by the banking industry with the arrival of digital technology where internet banking provides important services in this digital era. As financial institutes are getting adapted to the rising requirements of customers, internet banking has become vital part of modern banking. Efficacy of digital initiatives of IDFC First Bank's has been evaluated, which shows that internet banking has improved accessibility to services, convenience, and increased customer satisfaction with the development of financial inclusion, mainly under banked regions. The main focus of IDFC First Bank is to expand their retail banking segment as that would be the key driver for their growth. The aim of the bank is to increase their customer base as it offers innovative products like saving accounts with high interest rates, personal and home loans and credit cards. Expansion of their presence in under-penetrated market, the main focus would be mainly on semi-urban as well as rural areas. Main element of economic progress and reduction of poverty mainly in developing nation, is financial inclusion meaning that all society members must access to and use financial services. Digital banking has arrived as a potential method of improving financial inclusion as it has removed conventional hindrances like distance, cost and administration and all thanks to the rising digital technology. As an outcome, emerging economies are serving as a test bed towards the digital banking technology with the aim to expand their access towards formal financial services. For benefitting low-income and unbanked population, banks, government, telecom and FinTech companies are working for the development and launching digital banking programs. Microcredit, insurance, digital saving accounts and mobile money transfers are some of the services that are important part of these programs helping people to save money for their future, investing for themselves and managing risk (Baghel & Gupta, 2021). Rapid expansion of digital technology is offering opportunities for providing financial services at a lower cost that eventually boost financial inclusion and profitability and enable large productivity gains across the economy. Digital finance has the potential of providing access to financial services to 1.6 billion of people in emerging nations where more than half of the total are women participants. Digital finance has been defined as a financial service that are delivered through digital infrastructure that include internet and mobile with lower use of cash and traditional

banking branches. Computers, mobile phones and cards that are used over “point-of-sale (POS)” devices are connecting individuals as well as businesses for digitized national payment infrastructure and enables seamless transactions across all parties. Figure 1 shows the Digital First Model of IDFC Bank.

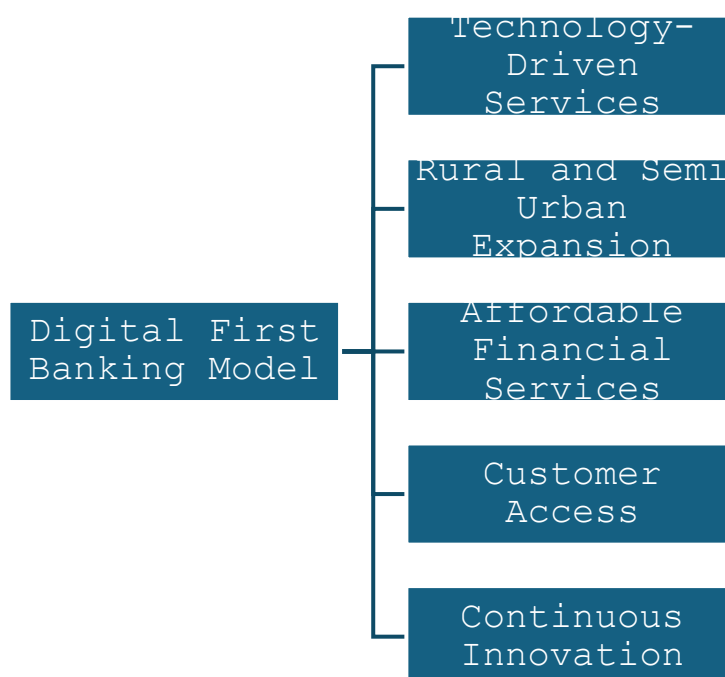


Figure 1 Digital-First Banking Model

Broad-Based Financial Inclusion Enabled by Digital Technologies

Digital technologies and mobile that are spreading all over the globe at a high-speed having a disruptive power have the potential to change the situation completely. In emerging nations, finance is the next frontier. Rather than cash, using a mobile phone is saving significant time and cost of travelling, helps in the reduction of risk and theft, boosting the convenience. Digital technology and digital banking give access to a broader range of financial services that are being delivered digitally like saving account and loans. Mobile phones have become omnipresent as networks increases the coverage as well as quality. Mobile phones with networks have reached to more than 90% of people in emerging nations. As businesses and individuals are making digital payments, they are creating a data trail of their receipts and expenses enabling financial service providers to assess their credit risk. Such information would allow the service providers to underwrite insurance policies and loans for a larger number of borrowers with greater confidence (**Manyika et al, 2016**). Bank’s strategy of IDFC FIRST bank is financial inclusions as it’s central that targets the unbanked and underserved people of India. The combination of digital innovations and physical touchpoints, their focus is on retail deposits, micro-enterprise loans and financial literacy to people for integrating marginalized communities into formal economy.

Main Pillars and Strategies

- **Livelihood Loans and Microfinance** – provides personalized credit to women entrepreneurs, small business enterprise and dairy farmers for driving grassroots economic empowerment.
- **Digital "Mitra" Network** – leveraging local business correspondents and interoperable micro-ATMs for extending banking services in rural areas.
- **Zero Banking Fee** – removing standard fees that include ATM withdrawals and NEFT/RTGS transfers on saving accounts for making banking affordable and transparent for low-income people.
- **ESG & Social Impact** – financing initiatives like rural housing, sustainable agriculture and “Water, Sanitation, and Hygiene” (WASH) loans

Instantaneously, IDFC FIRST Bank make investment in digital platforms. A strong brand, level of service quality, transparency and customer friendly products enabling IDFC FIRST Bank maintaining strong deposit impetus. For strengthening its presence as a retail franchise, investments are made by the banks in expansion of their branches and digital capabilities and widening offering of products and increasing the count of employees. It leads to substantial rise in opex and therefore costs metrics were evaluated and not comparable with peers. Retail deposits have been scaled at a strong 73% CAGR in financial year 2019-2022 with a solid CASA mix of 50%. Bank has invested in digitalization of the system, branches and expansion of products and to be present across all retail products. Ratio of costs are elevated but would moderate as scale benefits would come into effect, and retirement of high-cost borrowing would support NII growth (**Aggarwal, Agarwal & Agarwal 2022**). Seamless customer interface must be provided by “Core Financial Services Solution” (CFSS) in digital offerings and transactions associated to products and services anytime and anywhere enabling integration of functions of NBFCs, providing centralised database and accounting records and have the ability of generating suitable MIS for internal purposes and regulatory reporting. The system of offline digital payment is where transactions does not need internet or telecom connection. Under such framework, such type of payment system can be carried by using channel or instrument like mobile device, cards and wallets. Indian government attempted to ensure digital infrastructure as a main utility for people as it provides unique digital identity, accessing common service centres providing high number of services by demanding seamless integration of services across different departments (**FIDC News, 2022**). Financial inclusion has become a subject of interest for scholars and policy-makers. Academicians are stressing on the importance of financial inclusion highlighting the role of financial institutions like banks in promoting financial inclusion. Therefore, it is imperious to examine the role and bank’s commitment in promotion of financial inclusion mainly banks that came into existence for the promotion of social and economic justice by redistributing wealth in the society. Banks, financial service providers can be categorised based on their banking business model (Nawaz, 2018).

Technological Advantage

- **Cloud Native Stack** - made on an API-led, micro-service architecture, digital banking platform of the bank is integrated easily with partners FinTech that allows fast deployment of financial services in remote regions.
- **AI & Predictive Analytics** – with more than 100 AI and ML models in production, rapid credit risk assessments are performed by the banks on customers with thin-file, turning non-traditional data into viable credit history.

The case of “IDFC First Bank’s Technology-led Banking Services and Digital Media Promotion” is regarding different initiatives that are being launched by IDFC First Bank to be a leader in technology-based banking services in India. This case begins with a short history of this bank. It explains the merger of IDFC Bank and Capital First Ltd. (Capital First). The case also describes use of digital technology by IDFC Bank and launches of financial services. It also explains how banks are using digital media for promotion of their products and services and also promoting brand name of IDFC FIRST bank (ICMR, 2020). Digital banking in India has been redefined by IDFC FIRST Bank by blending advanced technologies with a deep-rooted committed to customer-centricity. Digital strategy of banks is attached with security, accessibility and inclusivity ensuring that digital solutions are empowering, intuitive and easy to use. Whether an individual is managing their personal finance or running a business, they can access both the account in one single mobile application, giving them supreme convenience catering to rural customers and high-net-worth individuals (HNIs). By strategic ecosystem partnership and advancing digital infrastructure, mobile application of IDFC FIRST Bank is empowering their customers with a combined view of their finances, smart transaction filter and personalized insights maintaining a strong competitive benefit in digital-first economy. IDFC FIRST Bank’s innovation goes beyond banking services and have launched IDFC FIRST Academy, which is a digital literacy platform that offers more than 250 learning modules across 35 topics in multiple languages.

This platform is accessible through mobile app; the curriculum was designed for the promotion of financial literacy and inclusion at scale. By its forward-thinking approach. IDFC FIRST Bank constantly sets a new benchmark in digital banking. The main purpose behind majority of FinTech firms is revolutionization and disruption of financial services with the common goal being banking and for that IDFC First Bank is the best example. This new bank has joined with other famous banks like Yes Bank and RBL Bank, IDFC First Bank was eagerly waiting to partner with startups. Just like RBL and Yes bank, IDFC is also considering such strategy and has been the source for many FinTech founders (Singh, 2021). The banking system forms the backbone of the economic system of the country. With the evolving banking sector of India, it has given way from the traditional to the new age system. The new-age banking system of India has provided banking services with improved results in the past few decades. Every sector in today’s era has been upgraded through technology advancement like introduction of digital banking system in India. Advancement of banking technology have brought many solution-like online deposits, digital money transfers, e-bill payments, and usage of mobile wallet. Such technology advancement had reduced delayed transactions and long turnaround times. Incorporation of newer technologies is transformation of Indian banking substantially. Banks are adopting emerging technologies that provides ultimate banking environment to its customers. Operational efficacy, security infrastructure are also enhanced within the process. IDFC FIRST Bank being the new-age bank of India are best example to such transformation in banking industry. With features like “Account Aggregator” and ease of online applications, the mobile banking app of IDFC FIRST bank stays at the forefront of the banking revolution (Team FinFirst, 2022).

Core Issues

IDFC FIRST Bank has adopted a digital-first banking model to expand financial inclusion by delivering affordable, technology-enabled banking services to underserved and unbanked populations. The bank leverages AI, digital infrastructure, and ecosystem partnerships to enhance customer accessibility, improve operational efficiency, and promote financial literacy. However, sustaining digital innovation while ensuring security, customer trust, and inclusive growth across rural and semi-urban markets remains a significant strategic challenge.

Key Questions

1. How has IDFC FIRST Bank's digital-first banking model contributed to promoting financial inclusion in emerging economies?
2. What role do technologies such as AI, cloud-native architecture, and digital payment infrastructure play in enhancing customer experience and operational efficiency at IDFC FIRST Bank?
3. How do IDFC FIRST Bank's financial inclusion initiatives support the banking needs of underserved rural and low-income communities?
4. What strategic measures should IDFC FIRST Bank adopt to sustain digital innovation, strengthen customer trust, and maintain long-term competitive advantage in the evolving banking sector?

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Groww as an Online Investment Platform: A Case study of Growth and Expansion

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Introduction:

Founded in 2017 by former Flipkart employees, Groww is a stockbroking and online investment platform. Retail wealth market got disrupted by this platform as it has transformed complicated investing into a seamless and mobile-first experience. It has become India's largest stockbroking platform by commanding around 23.4% of active market share of client on NSE. Investments have become accessible and simple by Groww as it uses "Google Kubernetes Engine" ensuring a reliable investment platforms for clients, making data-backed decisions for growing their business with "BigQuery". With other investment platforms, there are bound to be at peak and non-peak hours during traffic. Regular spikes take place in during early mornings and evenings for Groww when customers are more relaxed. The nature of FinTech industry is highly volatile. Investors, being human and their investment decisions can be quickly influenced by any news. Market cap of Groww broke past ₹1.10 lakh cr. is more than a milestone of FinTech, it is an example about how deeply investing culture of India is evolving. It represents the rise of retail clients, technology driven broking and FinTech driven creation of wealth. Investing has been redefined for millions of Indian by Groww as it had made it simple, accessible and transparent. With the assistance of smart phone things have become easier, things that needed physical forms once, and in-person brokers along with confusing jargon have been quite easy. It has low-cost structure, clean design, and strong concentration on financial education bringing out confident investors.

Overview of the Company

Lalit Keshre, Harsh Jain, Neeraj Singh, and Ishan Bansal – the former Flipkart employees, founded Groww in 2017. They started the app to make it an easy-to-use platform to make investment in mutual funds, but this platform grew into a full online stock broker. Groww have a mobile-first design, it does not charge any commission on equity delivery trades and a clear focus to assist first-time investors that made Groww to stood out in crowded finance market of India. Groww has built a strong base of customer with more than 50 million clients, majorly under 40 years of age. Among them, active investors are 13.23 million and 23.4% share on NSE, which is highest in India. Despite after strong competitors in the market like Upstox and Zerodha, Groww has attained a leading position in investment broking industry that offers access to more than 5 thousand mutual funds through web platforms and mobile applications. One of the main reasons behind the popularity and success of Groww is their simplicity as well as accessibility. Groww as an investment platform was designed mainly for retail investors and millennials that enable them to begin investing with minimal documentation and low capital. Over the time, expansion of Groww into equity trading and advanced products of investment and strengthen their market position further, it helped them to surpass competitors becoming one of the largest investment platforms of India by active clients (**Kathotia**).

A Digital Investment Journey of Groww

It is MobileFirst and web-based platform on which Groww operates, it is designed for easiness, speed as well as transparency. The process of onboarding is fully digital, it allows users to complete KYC, linking bank accounts and start investing within minutes. It started gaining major momentum around 2020 and 2021, this was a period that marked increased adoption of digital system and rising interest in retail investment during the pandemic. Groww's strategic

diversification from mutual funds into stock trading and investments in IPO accelerated user's growth significantly along with revenue expansion. As an outcome, rapid scaling was witnessed by the platform that attracted millions of customers across all over the India.

Main features of the platform include:

- ✓ Simple dashboards for tracking of the portfolio
- ✓ Setup for mutual fund and easy SIP
- ✓ IPO applications on one-click
- ✓ Real-time trading of stock and analytics

With the removal of traditional points of friction, Groww has made investing to be felt more approachable, which is a main reason behind its strong adoption among Gen-Zs and millennials.

Groww - As a Saviors of India

In India, people like to save. As per the data in 2021, gross saving rate of India is 30%, while the household saving rate is 10%. GDP of India stands at \$3 Trillion. The total savings at an estimate of 20% came out to be \$600 billion each year. The preferences of historical investor are investing in fixed assets like real estate and instruments with low yield. Equity market has experienced less than 5% of total investments translating into a massive opportunity (Nilesh et al., 2021).

Investment platform Groww launches Stock Investing

The broader impact of Groww on FinTech ecosystem of India has been significant. With democratised access to the financial market and promotion of digital investments the company has made contribution to the rise in retail participation in creation of wealth. The innovations also motivated better transparency and competition in online brokerage sector. Bidding to invest in capital markets a simple thing to rising number of retail investors, Groww an investment platform based in Bengaluru launched Stocks Investing. Stocks account has been opened by more than 1 lakh investors on invitation and more than 2 million of transactions were done at the launch (Revathy, 2020).

\$251 million was raised by Groww in series E funding to Expand its Business

One of the largest FinTech platforms, Groww raised series E funding of \$251 million on October 2021 at a valuation of \$3 billion. The investment was led by "ICONIQ" Growth along with investors that include "Alkeon, Lone Pine Capital and Steadfast". Existing investors of Groww who were also significant participants in the round were "Sequoia Capital, Ribbit Capital, YC Continuity, Tiger Global, and Propel Venture Partners". Groww being the emerging FinTech platform has plans to make investment to expand their business operations in order to reach to the under-penetrated geographies by solidification of their team, and scaling up the infrastructure. It keeps making substantial investments to improve accessibility of their financial services for Indian people along with educating them on the same.

The Indian Fintech Industry revolutionised by Groww

Zero commission investment is offered by Groww in direct mutual funds and stocks through web platforms, Android apps and iOS. Investors also invest in US Stocks and Gold on the Groww platform apart from only stocks and mutual funds. Concentrating on building customer-focused financial service company, Groww charges lowest brokerage charge for investing in stock. Groww has earned the trust and satisfaction of more than 8 million of users since their

inception. Initially, company did face some challenges related to dealing with the hard-earned money of people and had to come out with safe as well as secured product (**Kari, 2020**).

With the rising FinTech innovation, investing has got democratised with the applications like “robo-advisors, micro-investing apps, and algorithmic trading platforms”. It had lowered the barriers to entry and automating management of portfolio. Advanced technologies are leveraged by these apps such as machine learning, artificial intelligence and big data analytics offering personalized investment strategies, optimization of portfolio and real-time trading. Groww and other Indian brokerages like Zerodha reported a rise of more than 50% in retail account openings in the year 2020, which is highly driven by pandemic and the easiness of trading based on apps. Young retail investors who are assembled in the market are highly facilitated by the rising digital platforms that are user-friendly like Upstox, Zerodha and Groww. Prominence of young investors who are under 30 years of age and increase in Demat account show a democratization of financial market of India (**Gurjar et al. 2024**).

CEO of Microsoft, Satya Nadella invested in stock market as well as Groww a mutual fund investment platform, its co-founder Lalit Keshre once said that Groww has one of the world's best CEOs as an advisor and investor. Microsoft CEO Nadella's investment came after the amount of \$251 million raised by Bangalore-based startup at a valuation of \$3 billion. The company had raised \$83 billion in April last year as series D capital, which is led by Tiger Global (**Outlook News Desk, 2024**). As per the study conducted by Groww in 2020, around 76% of population in India would be millennials who would be the most digital-savvy generation. Their perspectives with regards to investment is very different when compared to previous generation. Basically, looking at the present mutual fund space, the average age of investors is around 40 years. But today, the story is changing with the assistance and availability of new age apps. The average age of investors is only 26 years on Groww. With the arrival of technology, the promotion of mutual funds along with other changes in economic landscape of the nation, investments have become highly popular among millennials. Groww provides a user-friendly and intelligent navigable UX and UI. There is definitely one angle of content, but they have put across the information with more clarity and transparency that provides users with simplified information. By incorporation of simple, it has the ability of reducing the learning curve of the app. The content is free of complex financial jargon. A lot of time has been spent to understand millennials and product strikes the correct balance in terms of available content related to the product, its design and flow of investment (**Team YS, 2019**). Groww being a premier platform of investment in mutual funds that functions as a web-based service, it empowers individual to get engaged in stocks and mutual funds. The main purpose of Groww is to simplify the process of investment, providing transparent and user-friendly and technology driven platform to new investors that would ensure easy and convenient experience to their clients. Looking at the profits and revenue of the company, it has managed to earn a revenue of INR 1,294 cr. in FY 2023, which is 3 times higher from corresponding of INR 367 cr. as reported in FY 2022 having a market share of 19.9% that was stabilised over the past 6 years. Easy to use mobile app of Groww is known for its user-friendly dynamics, the apps can be used for catering into the new market. They must design value propositions incorporating new approached towards distribution and customer engagement. There is one way by which it can enter the new market is through forming a joint venture with other company who is planning to enter the same market that would help both of them to take benefit of each other (KHEMA, 2024).

Technology is the heart of everything done at Groww; technology helps in the creation of distinct investor buckets and customize the flow of user accordingly. So, a first-time user,

whose KYC is not verified would have a different experience than others who are a repeat investor or who are tracking their external funds at Groww. Such level of segmentation and unique creation of user's journey is attained by extraordinary models of machine learning used by Groww.

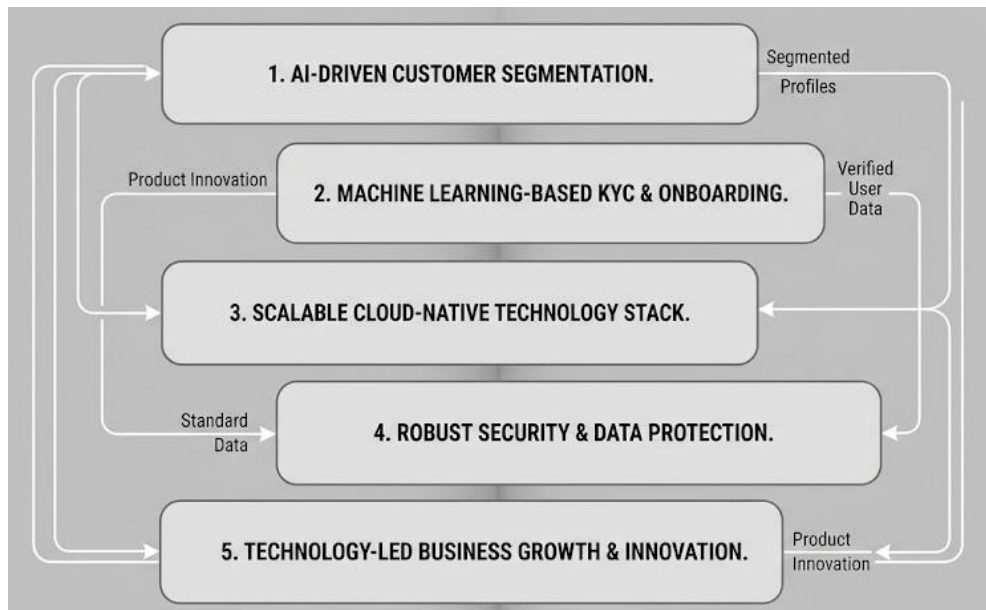


Figure 1 Key Technology Factors of Groww

Image processing and machine learning are employed during the process of KYC for verification of document and onboarding for reduction of any chance of error and for making the process more instant. Presently, the tech stack of Groww includes “React native, Springboot, Springcloud, and a micro-service” based architecture permitting Groww to scale up. Making investment on Groww is fully safe. Stringent checks are in place ensuring data and money both are safe during the complete investment journey. The personal information of users is stored using 256-bit encryption along with regular vulnerability scans are conducted by the company leaving no room for errors. Groww is an intermediary and all transactions are routed through BSE (Udas, 2020). Groww, in 2021, saw their valuation to jump from \$250 million to \$3 Billion + by massive rounds of funding and backing from likes of “Tiger Global, Lone Pine Capital” etc. Since then, the company has expanded their lineup of investment technical products and added more products in 2022-2023. Among all other UPI apps, Groww has ranked 28th in October 23, it has facilitated 5.89 million of transactions that totals to INR 3,354 Crore in value. It has a long way to catch up with “PhonePe, Google Pay, Paytm and CRED” as these are the top four UPI apps in India at present (Subramaniam, 2023). Figure 1 shows the key technology factors of Groww at glance.

Core Issues

Groww has transformed the Indian investment ecosystem by offering a simple, technology-driven, and mobile-first platform that has significantly increased retail participation in financial markets. The company leverages artificial intelligence, machine learning, cloud-native architecture, and robust security to deliver personalized investment experiences and scalable operations. However, sustaining rapid growth amidst intense competition, evolving customer expectations, and the need for continuous technological innovation remains a major strategic challenge.

Key Questions

1. How has Groww's technology-driven and mobile-first business model enabled it to become one of India's leading online investment platforms?
2. What role do artificial intelligence, machine learning, and digital technologies play in enhancing customer experience, operational efficiency, and platform scalability at Groww?
3. What competitive challenges does Groww face in sustaining its leadership position in the rapidly evolving Indian fintech and digital investment industry?
4. What strategic initiatives should Groww adopt to strengthen customer acquisition, expand its product portfolio, and maintain long-term growth in an increasingly competitive market?

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AI-driven Content Strategies of Netflix for Competitive Advantage in Indian Consumer Markets

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Introduction:

The rise of over-the-top (OTT) streaming services in the global media and entertainment industry has ushered in a new era, with Netflix leading the pack through its effective use of artificial intelligence (AI). In the Indian market, which is both vast and diverse in terms of language, culture, and socio-economic backgrounds, Netflix's AI-driven content strategies play a crucial role in enhancing its competitive advantage. They include recommendation algorithms, personalised content, data-driven content creation, and localised content, which all help to increase user engagement, retention, and market share (Vicente & Burnay, 2024). This case study critically analyses the role of AI technologies in enabling and enhancing Netflix's competitive advantage in the Indian consumer market.

Data lies at the core of Netflix's business model. Traditional media companies target their content to viewers based on broad audience categorisation; Netflix targets content based on AI technologies that go beyond the broad categorisation of the viewer, and instead mine data at the individual user level, including viewing history, pause points, search keywords and user interactions (Sharma et al., 2024). The data are then used to build personalised recommendations for the user using machine learning algorithms such as collaborative filtering, content-based filtering, and hybrid systems (Bhoye et al., 2025). Research indicates that recommendation systems are also part of Netflix's business, as they have contributed to reducing search costs and enhancing the relevance of suggested content, thereby boosting the satisfaction and engagement of users (Mondal & Panda, 2025). This customisation is essential for the Indian market, where consumers are burdened with a huge amount of content.

The recommendation system is a key component of Netflix's AI strategy, and it significantly influences the viewing experience of its customers. The Netflix Recommender System (NRS) will not only try to predict the preferences of the user but also try to influence the user by carefully picking up what the user will watch. Pajkovic (2021) argues that a fundamental difference of the "streaming wars" lies in the recommendations given to users, which influence the interactions with the content library. Netflix's knack for highly personalized recommendations contributes to a superior user experience and boosts retention rates, especially in the Indian market, where users demand a wide array of content, languages, and cultural narratives.

Another key component of Netflix's competitive edge is its ability to personalise its service. Apart from recommendations, Netflix is also using AI to create personalised user interfaces, thumbnails, and promotions to enhance the user experience (Meghana et al., 2025). This creates a unique viewing experience, making every user feel as though they are using a personalized version of Netflix. This type of personalization is especially important in India, given the diverse preferences of users across different regions.

Localization is a key element in the Indian market. India has a high level of cultural and linguistic diversity, and several regional film industries (such as Bollywood, Tollywood and Kollywood). Netflix uses AI audience analysis to inform the regional content strategy. This will enable Netflix to determine markets that are not being served and target interests with specialized content to those markets.

AI is also being leveraged by Netflix in their operations and video streaming. The AI algorithms optimize video encoding and streaming quality based on network conditions. This is particularly crucial in India, given the diverse internet speeds across the country. By delivering a consistent viewing

experience even with poor connectivity, Netflix improves viewer experience and reaches out to semi-urban and rural regions.

The core issues in the case are:

The core angle of this scenario is the use of Artificial Intelligence (AI) by Netflix to gain a competitive advantage in India's OTT market. The case illustrates the benefits of customer engagement and retention that can be achieved through AI-powered recommendation systems, tailored content delivery, and data analysis. In addition, it highlights the localization strategy of Netflix and how AI plays a role in comprehending the varying preferences in India. Meanwhile, the case highlights some serious questions about algorithmic bias, data privacy, growing competition from other OTT providers, and the potential for content homogenisation from too much reliance on algorithms.

Case Questions:

1. How does Netflix leverage AI-driven recommendation systems to gain competitive advantage in India?
2. Examine how localisation and personalised content strategies helped Netflix to become successful in India.
3. What are the major ethical and operational issues with Netflix leveraging AI technologies?
4. How to combine data-driven decisions with creativity and innovation in the production of content at Netflix?

Role of AI in Changing the Quick Commerce Industry in India: A Case Study of Blinkit

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Introduction:

The blistering development of the digital business in India has given birth to the new paradigm of retail, which is called quick commerce (q-commerce), and is aimed at the delivery of goods to customers in minutes, not days. This has been greatly facilitated by the development of artificial intelligence (AI), data analytics and real-time logistics systems. One of the market leaders in this field, Blinkit has become a force to reckon with, disrupting the consumer expectations and business models. This case study discusses how AI has been an essential aspect in reinventing the quick commerce sector in India with particular emphasis on the business model, technological architecture, operational approaches, and the overall effect of the same on the retail ecosystem of Blinkit. Blinkit (previously known as Grofers) shifted its format from an online grocery store to a quick commerce platform that prioritizes speed and efficiency. This change necessitated a radical change in its operation model, as it was no longer centralized with a warehouse but a network of decentralized micro-warehouses called dark stores. Such dark stores are placed in highly demanded cities, which enables the company to cut the delivery time to a minimum. But it would not be possible to control such a distributed network effectively without AI-driven systems capable of forecasting demand, optimizing inventory, and scheduling deliveries on-the-fly.

Demand forecasting is one of the most important uses of AI in the operation of Blinkit. In quick commerce, proper demand forecasting is critical as inventory should be located near consumers avoiding over- or under-stocking. Blinkit relies on machine learning algorithms to construct forecasts of demand at a hyper-local scale using historical data, seasonal factors, weather, and local consumption patterns. This will help the company to ensure that the right products are at the right place at the right time. Inventory management is another important use of AI implemented by Blinkit. With a fast trade system, optimum inventory is essential since the products should be in place to be easily shipped off. The AI systems track the stock levels in more than one dark store and can automatically generate replenishment processes when the stock level is low. Another area that AI has changed the operations of Blinkit is in logistics optimization. Shipment of goods in a few minutes necessitates accurate coordination among warehouses, delivery staff and consumers. AI-based routing strategies enable optimization of delivery routes in terms of traffic conditions, distance, and density of orders. Blinkit utilizes AI not only in its operations in the back end but also in the customer front-end. The company uses the AI-based recommendation systems to personalize the shopping experience to the users. These systems recommend suitable products by examining the behavior of users, their purchasing history and browsing behaviors, which further heightens the chances of making more purchases.

Core Issues: Unit economics and path to sustained profitability; high fixed costs of dark-store networks; data-privacy and algorithmic-bias risks; competitive intensity from Zepto, Swiggy Instamart and others; scalability beyond metro cities.

Key Questions:

1. How has AI enabled Blinkit to achieve hyper-local demand forecasting and inventory optimisation?
2. What operational challenges arise from relying on AI for last-mile logistics in Indian cities?
3. How can Blinkit improve unit economics while maintaining delivery speed promises?
4. What risks does heavy dependence on AI pose for customer trust and regulatory compliance?

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About US

Established in 2010, iFEEL is a premier management institution dedicated to nurturing future-ready, ethical business leaders, innovators, and entrepreneurs. The institute offers a Post Graduate Diploma in Management (PGDM) designed to provide students with strong academic foundations, practical exposure, industry interaction, leadership development, and entrepreneurial thinking. The PGDM programme offers specializations in Finance, Marketing, Operations, and Human Resources, enabling students to develop specialized knowledge and industry-relevant skills for their chosen career paths.

At the heart of iFEEL's journey is the vision of its Director, Dr. Sanjay Salunkhe, who believes in empowering the next generation of future leaders and changemakers through rigorous, values-driven education. His vision emphasizes continuous innovation and meaningful societal transformation. By instilling strong ethical principles alongside cutting-edge business acumen, iFEEL aims to prepare students not only to succeed in the corporate world but also to actively contribute towards building a better and more sustainable future. Under the leadership of Director, Dr. Sanjay Salunkhe, iFEEL strives to create a highly collaborative ecosystem dedicated to academic excellence, profound impact, and true inclusivity. The institute actively empowers its students, faculty, and industry partners to become agile, purpose-driven leaders who can navigate complex challenges with confidence. Through dynamic learning and holistic development, iFEEL works towards shaping a resilient, future-ready India.

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We hope these case studies inspire meaningful classroom discussions, critical analysis and innovative thinking for real-world impact.



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