Digital Reengineering:
Corporate Success in the Post-COVID World

In the digital era, the only way for organisations and employees to remain relevant in the marketplace is by constantly innovating and reinventing themselves. To do this, talent development must recognise that by acquiring new skills, capabilities can be enriched or enhanced. It should be feasible to identify specific skill sets required for specific roles, and along with the previously acquired capabilities and experience, equip oneself to handle new assignments. Hence, organisations need to start mapping the skills inventory, help employees draw up aspirational career tracks based on the skill gaps against role requirements and provide upskilling opportunities to attain the desired goals.

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Digital transformation has been spoken of as the panacea for all corporate ills for over a decade now with new technologies hitting the business organisation from shop floor to top floor with amazing regularity, forcing digital discussions into the board room of most modern organisations. Unless properly planned and executed, most digital transformation missions do not deliver the full impact and outcomes they promised. Many CEOs are wondering what happened to the big promises of complete transformation made by consultants and internal staff a few years ago.

The chief executive officer supported the concept of three-phase transformation with the chief information officer handling mission-critical 'lights on' applications, the chief digital officer developing a digital innovation strategy and getting cloud computing, mobility, big data and edge applications such as augmented reality and Internet of Things (IoT) into the organisation, and the chief marketing officer fighting for and getting her own technology team to pilot new customer delight applications and garner a bigger market share. But at the end of the year, when the board asks, 'Have we been able to quantify the benefits and is it more than our investments?', not every CEO has been able to confidently say, 'Yes, of course, and here is the proof.'

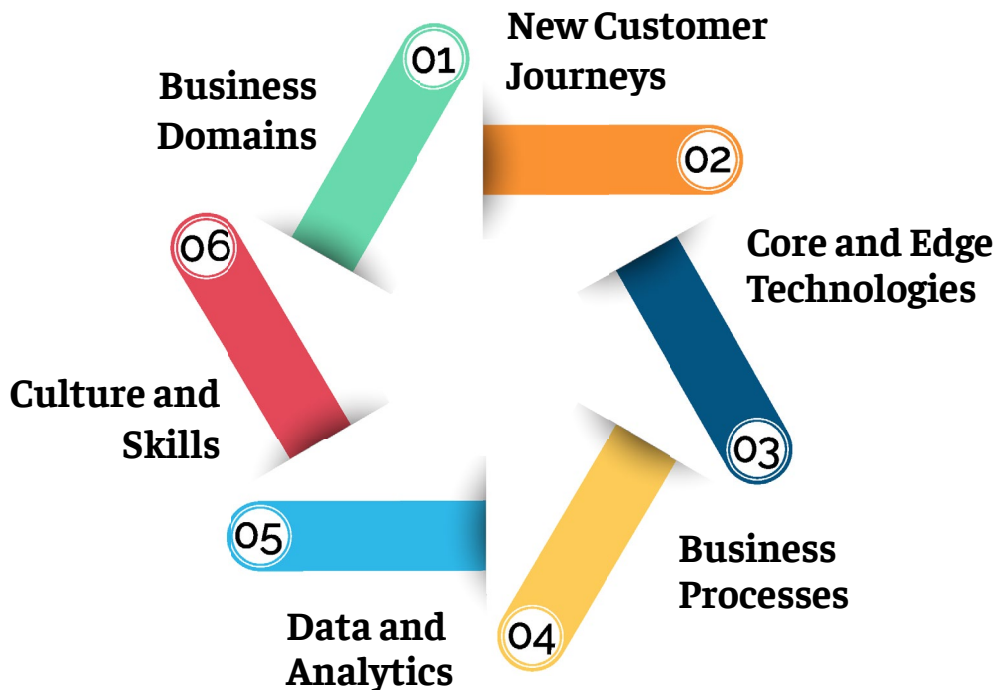During 2020, the pandemic, which first rose its head in Wuhan, China,

and spread to every part of the world by the time winter became spring, caused most business organisations to revisit the fundamentals of business. With social distancing becoming the norm and more companies experiencing a radical shift in performing work enabled by communications and collaborations technology, the very paradigm of work underwent change. Digital business, which was difficult to conceive in the last six years, was being done rather smoothly in six months. The push of technology was accelerated by the pull of a fast-spreading global pandemic. The scenario was best put in the words of an IT CEO, "From a dozen offices worldwide to 100,000 offices in every employee's home."

Suddenly there was a scramble, first to move equipment and communications technology to enable employees to work from home, then work reallocation and collaboration to maximise productivity and finally, a rethinking of managerial tasks to be less input-driven and more focused on output and outcomes. Soon the challenges and opportunities involved in communicating with other stakeholders—customers, supply and demand chain partners and investors—had to be addressed, and clear differentiation between a choice of technologies for office collaborations, webinars and large events became the norm.

As the pandemic completes its course, hopefully to be quelled in 2021 in a battle with multiple vaccines, it is important to understand that organisations have to reimagine their future and embark on a true process of digital reengineering. And for this, each of the forces that compel and enable the reengineering journey have to be understood and integrated to create organisations of the future.

THE SIX FORCES OF REENGINEERING

In the eighties, two professors at Harvard Business School evolved a concept called the Stages Theory, wherein they postulated that the organisation, in its attempt to embrace information technology, would be dragged down at any stage by the weakest link. In a later doctoral research at IIT Bombay (now Mumbai), I did a similar analysis in an attempt to develop a "Capability Maturity Model for Knowledge Management", where the forces that could contribute to or deter the path to maturity were determined as technology, processes, culture, and leadership. In similar vein, our research at 5F World has found that an organisation that embarks on a path towards digital resilience and reengineering will need to consider six parameters that will contribute to accelerated success.

Business Domains

01 New Customer Journeys

02 Core and Edge Technologies

06 Culture and Skills

03 Business Processes

05 Data and Analytics

04

1 Customer Journeys

In various consulting engagements with successful organisations worldwide which have used "design thinking" to map customer actions and behaviour, it was always intriguing to find the multiplicity of new ways in which customers came to know of a product; experimented with competing brands; engaged in competitor and price discovery; and finally, choose what to buy, how to buy and when to buy it. For any organisation, particularly those in the insurance and retail domains with a direct business-to-consumer connect, digital has provided many ways of establishing and sustaining a connect with the brand. One has to anticipate where in the physical or digital exploration, the consideration of a product or service begins, how the evaluation of alternatives and price discovery takes place and where and when the buying decision gets triggered. Providing digital support to every decision point makes the customer journeys truly enriched and leads to more business for the digital service provider.

2 Core and Edge Technologies

What started with a simple phenomenon of capital expenditure being shunned in favour of 'pay-per-use operating expenditure' as companies migrated from in-house data centres to everything – software, data, platforms and infrastructure – as a service, has now exploded into a full-fledged set of technologies that facilitate multiple processes and outcomes. At the core level, apart from cloud computing, there is the ubiquitous mobile phone and social media with entities like Google, Facebook, and Amazon transforming both

shopping and payment experiences.

Depending on the industry, multiple-edge technologies have also become differentiators – IoT, robotics and automation for manufacturing, augmented and virtual reality for healthcare, user experience and user interfaces for all retail-oriented businesses, blockchain for financial services and smart contracting, and finally, artificial intelligence and machine learning for virtually every business. Add to this the cyber security imperative and the tasks of the chief information officer and the chief digital officer in large organisations are not enviable ones.

To ensure that all the latest ideas are explored and a pragmatic choice made for the benefit of the organisation, a judicious mix of internal and external innovation eco-systems is essential. Internal innovation has the advantage of the innovators having access to all the data generated within the company and no fear of data theft or wrongful usage by partners. This should, however, not perpetuate the 'not invented here' syndrome which could result in more incremental and less breakthrough innovation happening in the firm.
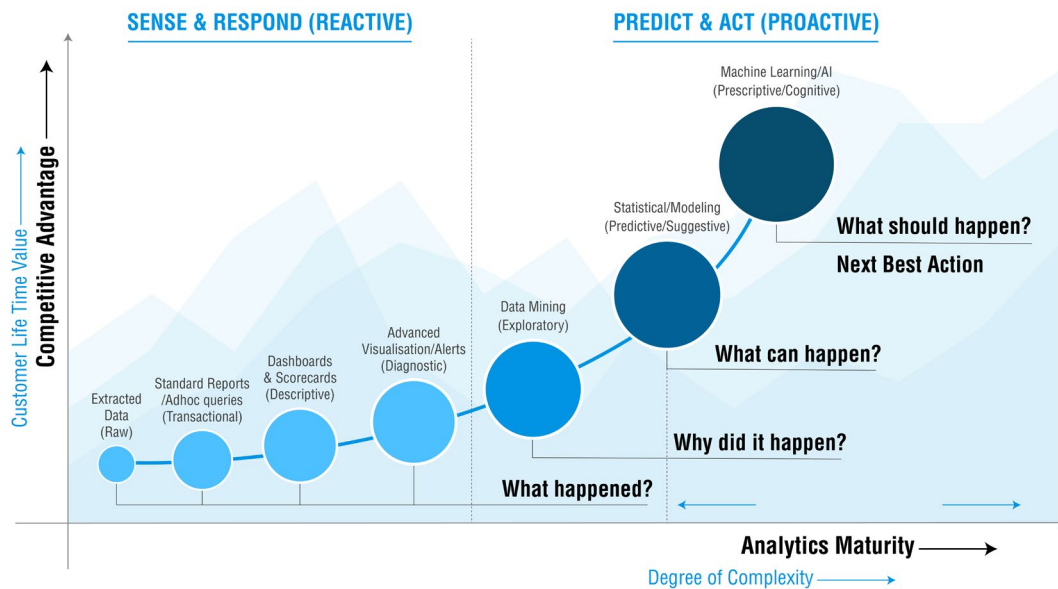
Take the example of Bajaj Finserv which has assiduously gone about the process of finding external entrepreneurial participants in their startup journey or indeed Zensar Technologies which even a decade ago encouraged internal employees to come up with ideas for innovation and part funded them to start new entities with a full idea and execution support eco-system provided by the company. Many forms of internal and external innovation eco-systems can be created which help organisations to become market leaders in their industry.

③ Business Processes

There is an old piece of advice we used to dole out in top management sessions in the nineties – do not try to implement fifth-generation technologies using third-generation processes and first-generation people. While we will come to people, culture, and skills, later, business processes reengineering and ensuring that these processes are not archaic but flexible enough to leverage the power of digital, is an essential part of the reengineering effort. Today, cognitive robotic process automation models are also available, and the entire goal should be to maximise the efficiency and effectiveness of all manufacturing and business processes in the firm.

④ Data and Analytics

"Data is the new oil" has become such a cliché that many companies still run the risk of capturing all kinds of data from internal and external sources, and not using analytics well enough to create actionable insights and create new solutions as well as solve problems. The reason is that businesses capture the data and throw it into a data mart or warehouse and even generate some reports but are not recognising the potential to transform their businesses. The chart below explains the stages through which companies will have to move to really get the benefits.

SENSE & RESPOND (REACTIVE)

PREDICT & ACT (PROACTIVE)

Machine Learning/AI
(Prescriptive/Cognitive)

Statistical/Modeling
(Predictive/Suggestive)

Data Mining
(Exploratory)

Advanced
Visualisation/Alerts
(Diagnostic)

Dashboards
& Scorecards
(Descriptive)

Standard Reports
/Adhoc queries
(Transactional)

Extracted
Data
(Raw)

Customer Life Time Value

Competitive Advantage

What should happen?

Next Best Action

What can happen?

Why did it happen?

What happened?

Analytics Maturity →

Degree of Complexity →

Analytics Maturity Journey (Courtesy: Systech Inc., Glendale California)

Any business of the future will have to create the ability to move to a stage where predictive and prescriptive analytics enabled by artificial intelligence and machine learning becomes the way people work.

⑤ Culture and Skills

In the digital era the only way for organisations and employees to remain relevant in the marketplace is by constantly innovating and reinventing themselves. To do this, talent development must recognise that by acquiring new skills, capabilities can be enriched or enhanced. It should be feasible to identify specific skill sets required for specific roles and along with the previously acquired capabilities and experiences, equip oneself to handle new assignments. Hence,

organisations need to start mapping the skills inventory, help employees draw up aspirational career tracks based on the skill gaps against role requirements and provide upskilling opportunities to attain the desired goals. Businesses can thus leverage the experience of their talent pool and simultaneously create pathways to acquire the required capabilities in the shortest possible time. New talent acquisition will also have to be made based on skill requirements and subsequent orientations and inductions can be focused on the skill gaps mapped, thus, shifting the ownership of upskilling to the individuals as their success is intrinsically linked with their continual skill development.

Skills-focused Training Approach
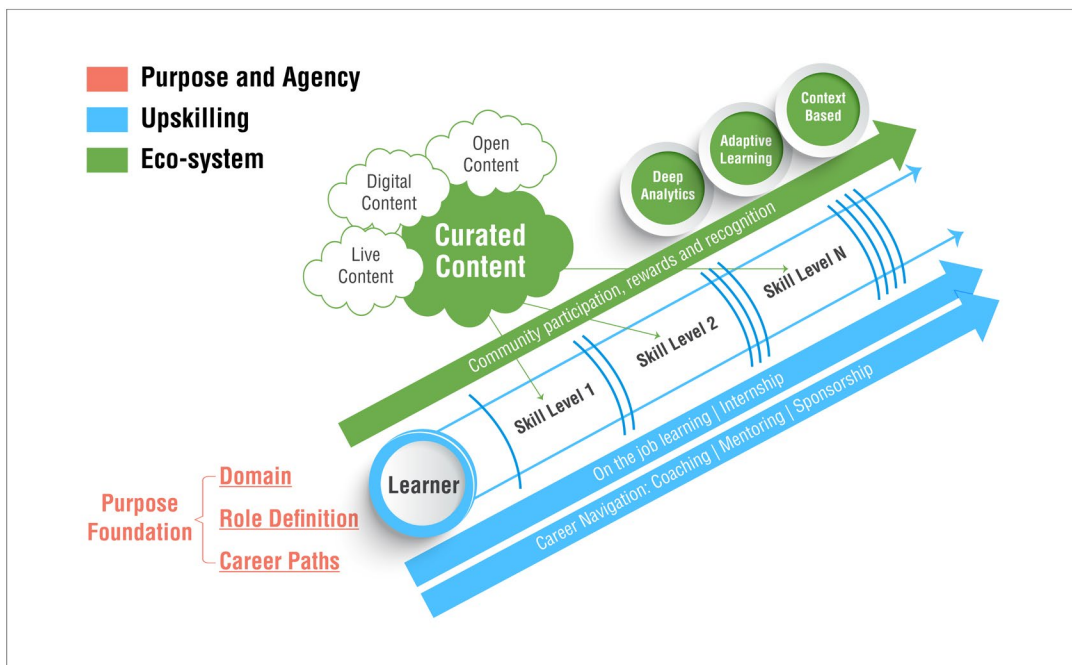
Organisation Employee Alignment (Courtesy: Provided by the author)

If these pathways of enhancing skills have to be pursued by every employee of an organisation, skill development must move out of the classroom and into the devices of the learners. A digital platform we have invested in from 5FWorld enables career management, skills acquisition, mentoring and coaching and peer learning integration to be a seamless and learner-pulled process.
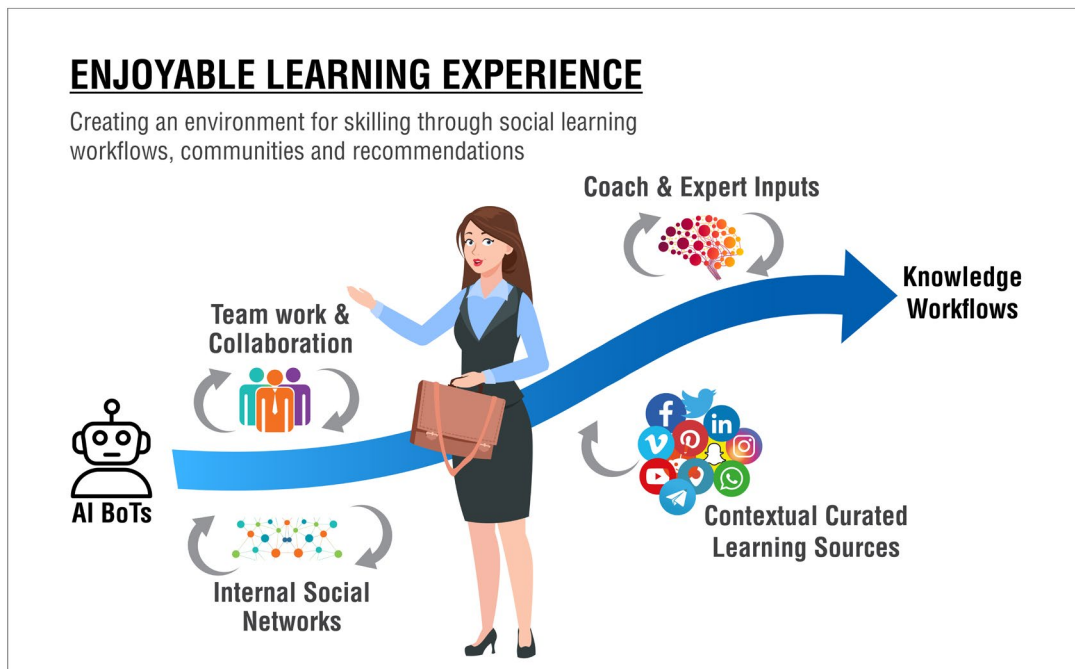
Learning Experience Framework (Courtesy: Skills Alpha)

6 Business Domains

In digital reengineering, there is no concept of "one size fits all". Each vertical domain has its own characteristics and while some ideas are fungible, for instance, between retail and insurance, it is important to

realise that every industry has specific needs, and the choice of which processes within a firm will benefit most from digitalisation can determine the competitive advantage the firm drives.

Whatever be the value discipline chosen by the firm – product/service superiority, operational excellence or innovation, tailoring the solution to prepare the organisation for future success is critical.

Getting to a Digital Business

Digital has the power to be whatever one wants it to be for an organisation—it can substantially improve productivity, enhance customer experiences, and build new businesses. Amazon, the true exemplar of digital business, has transformed from being a simple internet bookseller to one of the most successful e-commerce and related business builders of our generation. Further, it has shown the efficacy of the cost model. Others like Alibaba and even Google and Facebook to some extent, have taken this approach to building

hugely successful businesses riding on extremely low costs and free consumption patterns for all consumers. LinkedIn has succeeded more than some others with a free and premium model and many others have exploited the cost model and enabled easy price comparisons and assisted the choice of the product or service. Some others such as Uber and Ola, AirBnB and Oyo Rooms and even the food and apparel sites provide a wide range of choices to the consumer.

Netflix, Disney and Apple to an extent have chosen the experience model built on extensive automation, personalisation and instant gratification, to build a set of empowered and satisfied customers who enjoy the friction-free environment they provide. More and more consumer-oriented models will attempt to emulate them even as human beings increasingly prefer anonymity and reduce human contact.

The truly exciting model of the future will be the platform model which has been perfected by Amazon for e-commerce but can now lend itself to multiple single-focus as well as multi-stakeholder businesses. Data orchestrators will build digital marketplaces, use crowdsourcing extensively as a means of building millions of participants and thrive in an ecosystem of mutually supportive and complementary users and customers. The rise of digital platforms, the ability to harness technology through superior business processes, and the ability to use well-trained people to transform stakeholder experiences are phenomena that take centre stage as we understand the new world of digital business and all its connotations and ramifications.

THE FINAL WORD

One could approach the entire reengineering model as one where there are three parallel pathways to be adopted and supported by three foundation activities. Stakeholder journeys, processes and technology are the pathways; while data and analytics, culture and competencies, and the innovation ecosystem are the foundation. To reimagine stakeholder journeys, mapping the transformed physical–digital options and creating roadmaps with digital touchpoints, fully cognizant at all times of pandemic-induced and human fear-initiated restrictions at all times, will be key. Technology optimisation will entail optimising current and future options, evaluating their impact on processes and people, and ensuring the highest levels of security. Processes will be redesigned both to leverage the digital touchpoints and new capabilities of core and edge technologies and also to meet changing market requirements and customer expectations and leverage internal and external capabilities in the supply, demand and partner networks.

Becoming a digital business is a magical possibility. The pull of COVID-19 and the push of business and technology have opened vistas of opportunity. The imperative is to make it happen!

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This article is adapted from a book co-authored by Dr Ganesh Natarajan with Dr Uma Ganesh and Ms Lavanya Jayaram, being published by Bloomsbury this year. In the book, the authors recommend predicting and creating customer journeys that would be truly experience-centric, built on seamless technology architecture, a future-focused and insight-driven data and analytics strategy, and responsive and streamlined business processes.