



DIGITAL TRANSFORMATION - INTERPLAY OF STRATEGIES AND TECHNOLOGIES FOR CUSTOMERS' DELIGHT IN BANKING INDUSTRY



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Introduction

In the present Industry 4.0 era, almost all large business entities across industry sectors have embarked upon the journey of digital transformation. They have reinforced, further automated and weaponised their operating and financial policies, processes, and ICT

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<https://www.simplilearn.com/steps-to-digital-transformation-in-banking-article>

systems with the help of technologies to stay ahead of and/or relevant with competitive advantages. Micro, small, and medium entities are also gradually joining them in this journey. Many startups are helping these entities with digital solutions built with 'innovative' applications of eight deep digital technologies.

Many of such solutions, aka strategically designed digital weapons, are of 'destructive' and 'bizruptive' nature. The former means destructively disruptive solutions. These have either destroyed certain conventional methodologies for manufacturing, marketing, and supply chain operations. or replaced traditional products by combining many functional capabilities in one device. For example, robotic process automation has brought in a new era of man-machine collaboration and smart phones have almost killed traditional/amateur cameras and torches. Bizruptive solutions are unique strategy driven innovations for P2P, B2C and B2B networking, as well as time and cost-efficient processes for service deliveries with safety, speed and quality. Case in point is Ola and Uber completely redefining Meru's taxi hailing services and helped riders by adding a digital money wallet to their App.

Objective

This article aims at appreciating the process through which organisations can fruitfully embark on a digital transformation journey and implement specifically crafted business strategies to attain sustainable competitive advantages. Its objective is also to narrate how the interplay takes place between business strategies and digital technologies. CXOs and solution designers would be able to draw inferences from that interplay. This in turn would help selection and adoption of technologies. Therefore, another objective of this article is help achieving a perfect blended infusion of strategies and digital technologies for solving problems, creating new products with new business and revenue models. At the end the author would provide an illustrative list of use cases to convey ideas about how globally banks are achieving sustainable competitive advantages through digital transformation of their business processes and designing new digital technology-based products for more revenue and profit.

Strategy Revisited

It will be useful at the outset to revisit the orthodox definition of strategy, which originates from the word stratagem. According to the Oxford Dictionary stratagem means, *“A plan or scheme, especially the one used to outwit an opponent or achieve an end.”* And strategy *“is a plan of action designed to achieve a long-term overall gain ... the art of planning and directing overall military operations and movements in a war time.”* These definitions import the essence of battlefield and are equally relevant for industry trade and commerce because every industry sector is a battlefield, and every player therein wants to outwit the other by their strategic initiatives. Banking institutions are no exception to these.

A synthesis of definitions of

‘business strategy’, as articulated by learned academicians and research scholars, can finally lead to the following definition of strategy – *“A strategy is an integrated set of choices for actions which positions a firm in an industry so as to generate superior financial returns over the long run.”* Here ‘integrated set of choices’ denotes plans for activities to be initiated from internal environment and ‘over the long run’ signifies dynamics of competitive advantages for sustainable growth and prosperity. At this stage none should forget the axiomatic advice of Sun Tzu¹ which every strategist must always remember *“Strategy without tactics is a slow path to uncertain success. Tactics without strategy is the noise before defeat.”* These words of advice are equally apt and relevant even after twenty-six centuries. A business organisation must not stop at framing only strategies, CXOs must always plan action steps or tactics for implementation of strategies for reaping desired results.

Strategic Digital Initiatives - Financial Sector

At national level several strategic initiatives of government of India (GoI) and apex service organisations have triggered paradigm shift from the way financial services sector operated until recently. Digital transformation initiatives like ‘Unified Payment Interface’(UPI) and Immediate Payment Service (IMPS) have facilitated fast payments systems with millions of transactions being handled daily. Digital Payments Index (DPI) of Reserve bank of India has revealed substantial growth considering 100 as the base of March 2018. The index increased from 207.84 in March 2020 to 270.59 in March 2021. The year-on-year rate of increase is circa 30%. Volume of such transactions has touched USD 100 billion in the month of October 2021.

Such a rate of growth represents common people’s approach to digital transformation and rapid adoption of instant user-friendly facilities. One of the strategic objectives behind implementation of digital solutions is to reduce printing and circulation of physical currencies and handling of cash by banks, processes for both of which are expensive. Such payments will also help reduce volume unaccounted transactions by business entities at retail level. This in turn will improve compliance of tax laws and higher revenue collection. Barendra Kumar Bhoi², former Head of the Monetary Policy Department of RBI said, *“...sea changes taking place all around – including the payment and settlement system, digital banking and mobile financial services - calls for constant attention of regulators to stay ahead of the curve to ensure safety, security and orderly developments amid the emerging and evolving risks”*.

Digital technologies have helped attaining capabilities for instantaneous exchange of data/information and inter-platform collaboration, powered by the ability to process large databases. Such technological advancements have also made citizens’ Aadhaar Number one of the key facilitators and risk-enablers for eKYC and transaction authentication. This has helped introducing the much-awaited process for large scale direct and instant transfers of billions of Rupees to bank accounts of beneficiaries under various welfare schemes of GoI without any leakage and malpractices. Aadhar Nos. serve as the key digital identity, common single link, and validator for the Cowin App. The later has positioned India at the forefront of handling vaccination to fight out Covid-19 Pandemic. This digital initiative has been commended by the whole world and may be emulated by certain nations.

Interplay of Strategy and Technology – Banking Sector

Banking industry is no exception to the above digital transformation (DT) processes. Worldwide organisations under financial services sector in general, and banking in particular, are forerunners in embarking DT journey. Banks of India, like in developed nations, have also encouraged young engineers and startups to participate in ‘hackathons’ for solving problems with unique digital solutions and/or developing unique service products and methods for delivery through handheld devices. This unique route of hackathon for crowdsourcing of solutions using digital technologies are increasingly being popular in other industry sectors also.

Certain startup entities have emerged on their way to be unicorns as an entirely new category of financial service providers, albeit not having banking licence. Those are called NeoBanks. Initially they started with payment banking services and have further progressed in partnership with traditional banks through digitally integrated processes to serve strategic objectives of both. Cases in point are Paytm, PhonePe, Google Pay, Bankbazaar, Lendingkart etc. Given the unique opportunity, certain business organisations have also converged like Airtel group starting the business of Airtel Bank and Airtel Money. Another unique example of this is formation of a new company by fifteen banks of India, comprising of ten, four and one banks from public, private, and foreign segments. The objective is to design, build, and run a Blockchain Platform for conducting trade finance transactions. The name of the company has been christened as ‘Indian Banks’ Blockchain Infrastructure Co. Pvt. Ltd. (IBBIC)³.

Digital Technology and Transformation

When an organisation embarks on a

transformation journey, embracing digital technologies, two of their main objectives are to outmanoeuvre competitors and attain sustainable competitive advantages or growth and prosperity. When ‘trans-created’ solutions are offered by an entity to solve customers’ problems, meet their latent demands, and/or simplify operating processes, that business entity starts operating in a strategically created ‘blue ocean’ market space in that traditional sector. Innovative applications of digital technologies help them to implement the strategic plan and enjoy first mover’s advantages. A few of such examples have briefly been referred in a subsequent segment.

Such interplays of strategies and technologies can be termed as ‘innovation’, which is a combination of three tasks. viz., innovation, invention, and creation driven by distinctively formulated strategies. The objective is to generate and share values. Here value also includes value for time, quality, greener technology, and minimised risks, in addition to additions to organisations’ profit measurable in monetary terms. The phrase ‘trans-created’ means creation of a new versatile product and/or related business model transforming a traditional one run by legacy systems.

The customers perhaps were long waiting for such transcreations because from their individualistic perspective the new one is simpler, cost and time efficient, and risk-enabled while being used on the move. An example of this is money transfer from one phone number to another, linked to their respective bank accounts, without none opening Apps of banks for net banking. The latter App is by itself a digital solution and now trans-created by others for application through a smartphone, without being dictated by the bank.

Interplay of Strategy and Digital Technology for Banks

The parametric elements for formulation of strategies by banks are customer centricity payment facilitators and infrastructure, demand side factors, supply-side factors, and payment/collection performance. Performance metrics are used as an indicative measure of business value creation from the digital technology initiatives. According to Bharadwaj et.al.⁴, the emerging idea on digital business strategies may be categorized under four major groups viz, scope, scale, agility, and sources of value creation. These would be the influencing factors for scoping digital strategies for those business entities which want to leverage digital technologies for value creation by integration of operating business processes. Banking institution would have to leverage external networks, including social media of customers and digital eco-systems created by them to innovate the scale and speed of digital strategy.

Research scholars Chanias and Hess in their seminal work⁵ concluded that *“Digital transformation strategies are predominantly shaped by a diversity of emergent strategizing activities of separate organizational subcommunities through a bottom-up process and prior to the initiation of a holistic digital transformation strategy by top management. As a result, top management’s deliberate strategies seek to accomplish the subsequent alignment of pre-existing emergent strategy contents with their intentions and to simultaneously increase the share of deliberate contents.”* These two researchers have graphically explained the process of interplay of business strategy formulation and technology through the following diagram.

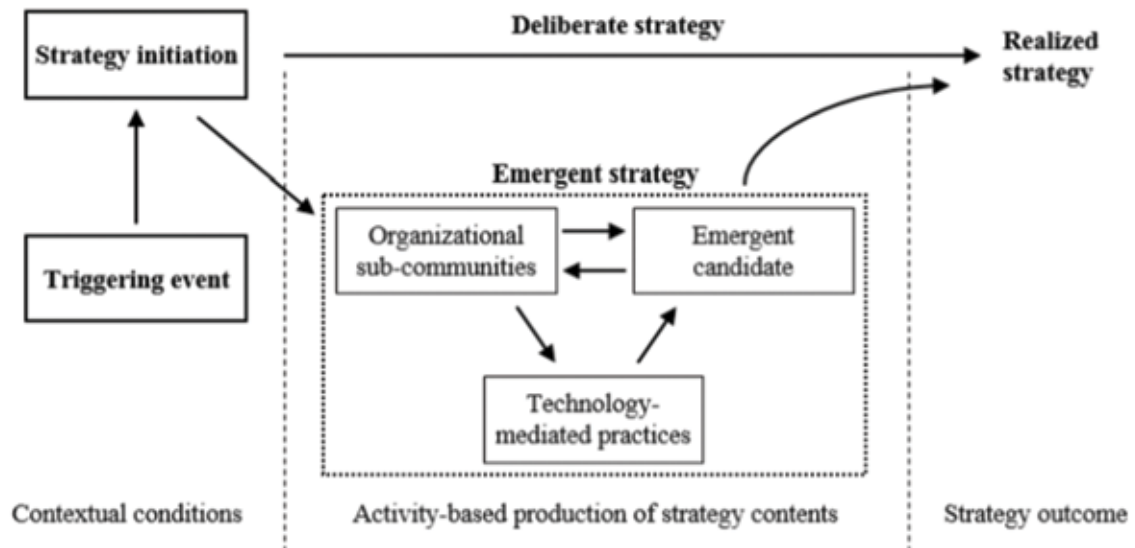


Figure 1. The activity-based process model (adapted from Henfridsson and Lind (2014)).

Source: As stated under serial No. 5 of Bibliography and Webliography

The triggering event for the entire process of interplay between strategy and digital technologies is identification of the emergent need(s), problem(s) and risks of customers, solution for which was a long persisting latent demand of governmental and/or societal ecosystem. Such a process of identifying an opportunity for an entirely new business and revenue model can also be prompted by digital transformation while business strategies are infused into technology and vice versa. The author in one of his previous articles under this Column has introduced ‘Physical-Digital-Physical Loop’ (PDP Loop).

A business entity generates loads of data while conducting transactions at the physical marketplace. Particularly a bank generates billions of transactional data conducted with millions of customers. Such data can further be collated for transaction types, time duration, repeats for errors, geographical regions, age group, gender, range values, language, time of the day, etc. once captured. Cognitive tools from the stables of Artificial Intelligence, Machine Learning and Big Data Analytics, can now be used for further processing of such data. When done, the processed information

can enable CXOs to draw many inferences in the context of business that has been done and/or can be done. Further reflection on such information can trigger innovative thoughts to craft out new business designs that can be offered to customers through digital solutions, mode, and media. These can then be taken to the physical customers’ marketplace for implementation and revenue generation. This is called the PDP Loop. Therefore, the process of interplay starts even before formulation of strategy and/or while formulating the same.

Strategic DT Initiatives by Banks

DT of business processes and strategic initiatives for crafting new products in the value chain of banking services, and their deliveries, if need be, through digitally driven channels, starts with articulating and aligning of ‘Digital Vision and Mission’ with its ‘Digital Technology Strategy.’ The next step is to leverage digital technologies to restructure, reform, automate and weaponise operations for accomplishing differentiated competitive strength. For this a bank has to master several technologies, viz., AI, ML and Big Data Analytics, Blockchain, RPA, AR & VR to

help risk-enabled performance management. There would be many uses of Application Program Interfaces (APIs) for network building. The following is an illustrative list of some of the unique applications of digital technologies by banks around the world in search of excellence in service deliveries and attaining stakeholders’ delight in both tangible and intangible terms:

Artificial Intelligence, Machine Learning, Data Analytics and RPA

- ▲ Designing Electronic Virtual Assistants (EVA) and online Chatbots to help customers for online banking, using net banking and mobile banking Apps.
- ▲ Robotic Process Automation (RPA) of routine mundane back-office activities, accounting, generating MIS for monitoring of business activities.
- ▲ Conducting due diligence by using bigdata analytics tools for analysing randomly accessed documents and information before onboarding individual and

corporate customers.

- ▲ Analysing day-to-day transactions of both individual and corporate borrowers' Loan Accounts to predict whether a customer is prone to fail in timely repayment of instalments and payment of interest.
- ▲ Advising staff members of banks while servicing customers so that in turn they can advise customers on an online real-time basis for various service products, including wealth management and investments, sanction retail loans, etc.
- ▲ Designing and deploying robots and humanoids for conversing with customers covering many banking related advisory services, e. g., wealth management investment planning, selling of fee-based products like MF Funds, Demat Accounts, Insurance Policies, etc.
- ▲ Connecting and coordinating with customers' virtual assistants or chatbots, e. g., Amazon's Alexa and Apple's Siri with the bank's own Chatbots for taking instructions. The primary objective for this is to enable customers to give verbal instructions for banking transactions which in turn can be relayed to the banks EVA for execution.
- ▲ Creating a digital platform, powered by AI, ML and Data Analytics tools, which can enable customers of MSME sector to analyse their own transactions and perform risk scenario modelling. The customers would be able access that platform and create their respective risk profiles in terms of probability of occurrence and value at risk that may exist in their respective entities.

- ▲ Designing and deploying agile software tools as antidotes for cyberattacks and spawning of malwares. These would help banks remain ever vigilant and fight out attacks to ensure privacy safety and security of customers' data, and protecting digital assets of the bank.

◎ Application Programme Interface (API)

An API is a software tool that can establish links with a bank's customer centric operating system with certain facilities provided by social media platforms, e. g. Messenger Service of Facebook through respective customers' smart phones. A customer can use the said messenger service for instructing banks for conducting payment transactions.

◎ Immersive Technologies – Augmented Reality and Virtual Reality

- ▲ Designing systems and process for conducting online video KYC of customers before onboarding of new customers.

◎ Blockchain Technology Platforms

- ▲ End to end management of its own borrowing instruments like Bonds, Debentures, etc. while raising funds from financial markets for its own purposes.
- ▲ Management and safe keeping of soft copies of customers documents and credentials, loan agreements, title deeds for tangible and intangible assets, etc.

The above applications have been identified through the author's study own research and an ongoing research-based work in which the author is also a participant. Readers may also note while many of these applications are already in use, others are in varying

stages of being developed, tested, and implemented.

Conclusion

The subject matter of this article is one of wide spectrum relevance and should have been narrated in much more details. Given the limited space under this Column the author has made efforts to briefly narrate how the interplay of business strategies and digital technologies can help CXOs and digital solution designers to adopt the process of digital transformation, design digital solutions for businesses problems and create new products with new business and service models. The author would consider that the work has received a bit of success if readers and new generation entrepreneurs feel inquisitive to take a deep dive into the subject and become excited for contributing to India's successful journey to the digital world.

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