

A Review: Digital Reinvention for Business Success

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Abstract:

Innovation is the norm in the current economic scenario. World-wide, businesses are getting competitive to earn their share of the pie in the rapid fire of quick and ephemeral products. Its imperative for business incumbents to be aware of technological advancements and challenges to remain in the race. In case the product upgrade doesn't happen well in time, the traditional revenue will be lost sooner than later. Businesses are slowly albeit steadily learning to partner, innovate or adopt newer technologies like IoT, block chain technology, predictive analytics etc. Routine incremental innovation is being supplemented with disruptive innovation. Information Technology has disrupted a number of business value chains. Analysis of existing data bases are being leveraged to predict future outcomes and trends. The buzz word is Big Data Predictive Analytics. Predictive tools can forecast the probability of the occurrence of an event. Globally, descriptive, predictive, and prescriptive analytical tools are being used in all segments of business. Strategies based on analytical tools help in efficient performance management, inventory management, cost control, budget optimization etc.

Open Innovation, propounded by Henry Chesbrough has facilitated innovation in the recent years. The world is venturing out of silos and exploring data that is put out for all to use without any encumbrances. Open Innovation techniques have saved cost giving unbridled access to a sea of intellectual resources. Similarly, technology in modern Supply Chain Logistics has become all pervasive. Smart methods have saved costs for e-commerce retail companies and freight liners. This has also enhanced customer delight as customers are able to feel quicker gratification through faster receipt of goods.

Key Words: *Disruptive Technology, Digital Reinvention, Artificial Intelligence, Supply Chain Integration*

Introduction

McKinsey and Company, 2016 found that only 16% of companies worldwide had shifted their business models based on aggressive digitization. Less than 20% of the companies had boarded the digital highway and the remaining were in a state of inertia and not reinventing. They were clearly not rising up to the digital challenge.

High-tech companies are comparatively faster adopters of technology. They reinvent 2.5 times more than all other sectors and buffer themselves better against the digital turbulence. Auto industry in comparison is barely half this rate of reinvention. Modern businesses, to relevant, need dual offensive strategy. The primary offensive being defending their core business with digital upgradation and parallel offensive being diversification.

Innovation

Innovation is incremental or disruptive in nature. Incremental changes are self-paced processes and products. On the other hand, disruptive innovation is an aggressive shake-up of the traditional processes and products. Which means, that a new product will trill the business incumbents to act in quick urgency. A perfect generic example is the advent of smart phone. It has put many a gadget to disuse. Calculator, PDA, digital camera, alarm clock etc are redundant now. 3D printing which for some years was an apparent gimmick, is challenging traditional production methods now. In healthcare, a startup by the name Sensely has developed Molly -digital nurse. Molly helps monitor patient's condition between doctor visit and collates data for reference. The program has leveraged the fundamentals of machine learning. Wearable health trackers from FitBit, Apple and Garmin use artificial intelligence systems to monitor heart rate and levels of physical activity. Trackers are capable of sending alerts to the doctors as well as the wearer for early medical intervention.

Many technology giants like Apple have paved way for strategic reinvention for the business fraternity. It has stayed ahead of it's competitors. Similarly, IBM uses webinars to capture a prospect's attention.

Banks and financial institutions have garnered blockchain technology to automate their processes (Atwood, January 23, 2018). Innovator Satoshi Nakamoto introduced the concept of digital currency (Bitcoin) transactions to the world. Bitcoin is finding new technological uses. It is like a shared ledger that tracks international remittances and trade finance. Banking is also heavily relying on intelligent self-learning digital assistants called chatbot for customer interaction.

Competitive businesses these days are apportioning research as an additional task for its managers. Managers are expected to keep track of published research and studies. They are encouraged to partner and network for useful insights increasing their probability to stay on the innovation bandwagon.

Way Forward

Partnerships, Ventures, Accelerators, Acquisitions

Partnerships are a time-tested method to bring together knowledge and resources of the participating partners. Equally passionate field experts team up on innovative projects. This saves time and money for the participants. iPhone and Facebook are notable examples of smart companies who have partnered with app makers. So is YouTube which has partnered with private channels.

Ventures are investments made by the investors into early stage startups. As a bottomline, the investor gets a share of revenue (if business is successful) and definite access to new technologies. Samsung has benefited from investment in Mobeam, a mobile payment company.

Accelerators as a step ahead not only provide initial investment but also facilities for facilitating business scale-ups. Samsung acquired SmartThings, an IoT (Internet of Things) company acting as an accelerator and saved time on R&D. At times, accelerators do acquisitions to acquire talent to accelerate their innovation agenda for incredible efficiency.

Open Innovation

Companies like Apple and Google have been secretive about their research. But, certain companies are dropping security protocols to stay competitive. Concept of Open Innovation (Chesbrough, 2006) has gained momentum this century. This concept challenges the silo mentality of corporate research labs to encourage cross fertilization of ideas across multiple domains. It refers to "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology". (Chesbrough, Open Innovation: The new imperative for creating and profiting from technology, 1 March, 2003). The main idea behind open innovation is to make the benefits of innovation accessible to companies who cannot afford to do their own research.

Common Platform Architecture (CPA) by Cisco is a popular example of open innovation for big data applications. Researchers or software developers can access Cisco's search engines and processing capabilities through APIs (application programming interfaces) from anywhere in the world thus saving infrastructure development costs. Another example is Quirky - a crowd sourcing site for product ideas. Idea inputs from community members help develop a product which is then sold on the Quirky store. This saves the need for investing in own company. The idea presenter earns royalties proportionate to the success of the product.

In healthcare, "Open access malaria box" project by Medicine Malaria Venture provides free access to 400 anti-malarial medical probables in a race to produce cure for malaria, skin sores and sleeping sickness (Alexander Schuhmacher, 2018). The United Genomes Project (UGP) give access to genetic database to create personalized medicine such as for cancer. 'Genome-Driven' cancer drugs have shown more promise to treat small minority of patients who do not respond to traditional drugs.

Disagreements to open innovation also exist exemplified by the famed patent violations dispute between Apple and Samsung. The consequent good done by open innovation is far more than harm.

Integrated Supply Chain Approach

Internet of Things (IoT) has immensely helped parcel tracking in logistics. It monitors and facilitates exact parcel location in the supply chain, parcel arrival and even condition of the parcel in real time. To enable customer experience such as faster delivery/return/refund, supporting logistics have emerged as one of the key differentiator. As many e-commerce companies have established their own logistics networks and capability, collaborative interdependence through modern technology among suppliers, retailers and delivery firms in the supply chain, has helped match demand with supply effectively (Togar M. Simatupang, 2002).

Prescriptive analytics via advanced algorithms in Transportation Management System (TMS) has helped logistics companies to choose the optimal carrier mix and fleet size/location.

Conclusion

Technology has challenged the traditional thinking. Profitability does not rest on incremental innovation and diversification alone. Digital reinvention is the need of the hour. Businesses, that have adopted technology early on, have shown phenomenal progress. Amazon, IBM, Uber, Samsung, Apple, Airbnb are known worldwide. In India too, local brands like Flipkart, Ola, Paytm, Swiggy, Zomato are extensively piggy backing the technology cart and winning. Simple social media platforms like Facebook, WhatsApp, Instagram and Pinterest are also being used as a marketing tool to bolster a product at a lightning speed.

To remain in business and thrive, early adopters look for innovation, partnerships, ventures, digital adaptation etc. The business incumbent has to be bold and not risk averse. Integrating artificial intelligence tools and applications in existing businesses involve wise investments which in the long run increase the chances of business survival. Technology upgrades in this century are no more a matter of choice, as those who did not swim with the tide, perished sooner or later.

Not all companies have taken to technology adoption with equal enthusiasm. Caution bells have been sounded for those with delayed digital application. Business profitability for such late adopters will be severely at stake. Reinvention largely is dependent on the vision of top leadership in any company such as CEOs and executive boards. Adoption of artificial intelligence tools like machine learning algorithms and deep learning are agenda points for the future leaders.

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