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AN EXPLORATIVE ANALYSIS OF BUSINESS MODEL DEVELOPMENT THROUGH TECHNOLOGY AND SCIENTIFIC RESEARCH*

ABSTRACT

Entrepreneurs achieve success by creating value in the marketplace when they combine resources in new and different ways to gain a competitive edge over rivals. From Alexander Fleming's pioneering work that resulted in treatment for infections (penicillin) and the founder's of the Rocket Chemical Company's fortieth try to create an industrial lubricant (WD-40) to Jeff Bozos' innovative use of the World Wide Web in retailing (Amazon.com) and Ted Turner's unique approach to the availability of television news (CNN), entrepreneurs' ideas have transformed the world.

India is a land where business thrived through the ages and continues to thrive even today. India has also made great strides in science and information technology.

But, in India thousands of Small and Medium Enterprises close their shutters every year as non-viable units. Even though India is considered innovative in several areas of science and technology, research and development in most cases do not go into commercialization. Further, lack of appropriate marketing skills fritter away the lead made by innovation.

This paper is an attempt to analyze the leads India could not commercialize whereas other nations have prospered through them.

INTRODUCTION

Technology has always defined and redefined our business, our attitude and ultimately our lives. If eighteenth century changed our lives, by the Invention of steam engine, nineteenth century made the world closer through the innovation of the telephone; the twentieth century is an era of Computer technology. Traditionally, a person was considered educated if he/she was conversant with three 'R', reading, writing and Reasoning (Arithmetic). Today's education cannot be completed without computer literacy. Computers have become a part of our very existence.

Business is a necessity of life and therefore follows lives closely. It is done by people for the people and has necessarily to Communicate in a language everybody understands. For centuries, technology has impacted every aspect of business, our mental and physical well-being and even the way we think. Business has travelled from the silk routes to the jet age, thanks to the technology.

RESEARCH METHODOLOGY

The paper is an explorative analysis into the recent innovation made by Indians in the area of science and technology which are being commercialized by others that are changing the very face of business the world over.

LITERATURE REVIEW

Chapter on 'Entering Foreign Market' by Mike W. Peng and Deepak K. Srivastava in the book Global Business.

Chapter 'Inside the Entrepreneurial Mind: from Ideas to Reality' by Thomas W. Zimmerer and Norman M. Scarborough.

Wikipedia on recent researches (January, February, 2014).

NEW MODEL DEVELOPMENT

Business is becoming bigger and bigger. Large omnibus business organizations are the future of the world business. The business model with the help of technology, acquisitions, innovations and cost control are ensured three ways to create the business giants of future.

The future of business/ industry can be elaborated in three ways:-

1. The new business model: Innovation and commercialization' Acqui-hires. Consumer Adoption through mergers and acquisitions.

The Social Media giant FACEBOOK has bought Bangalore-based Software product start-up, 'Little Eye Labs' under 'acqui-hires by which big companies buyout smaller ones and use their manpower and resource For small, medium or even big businesses, the best way to achieve all under the present agreement, the little eye labs team would move to Facebook headquarters in Menlo Park, California and help FACEBOOK to develop mobile devices apps. It will help them to develop Android code base to make more efficient, higher performing apps. The deal is life-

blood of our ecosystem and is an indicator that India is moving forward to become a products nation .iSprirt has been working to facilitate such merger and acquisitions through its M&A Connect Program, which helps Indian product companies, find global buyers. Other important M&A in technology categories are:

- Google paid technical giant Nest Labs \$3.2 billion to purchase their portfolio of thermostat and smoke alarms in Cash. Nest's products track not just a home's temperature and the presence of smoke but also when people wake up, leave and return home. By incorporating hardware and software and using sensors and algorithms to learn behaviour, they program themselves and can be controlled remotely with a phone. Creating the so-called connected home through products like nest's is a major goal for the technology industry, even if it has not yet made its way into the mainstream. Apple, Phillips, Bose, Dropcam and Lively, among others, make internet connected devices to dim lights, close Garage etc.
- Google has in the past talked about connecting home devices, known as the "Internet of Things", for several years, but has made little traction. Now, it is expanding beyond its search engine roots into hardware, including through its \$1.3 billion acquisition of Motorola Mobility and its development of devices like Google Glass and Chromecast, for internet-connected television. GOOGLE bought Flutter (US-based Indian-founded firm) this year. It has also acquired companies that make robots and gesture-recognition technology.

This is also a case of acqui-hires as Mr.Fadell (nest's chief executive) will report to Larry Page , CEO of Google and help the latter incorporate

all the features of Nest's products into the product offer of Google allowing the later to not only enter your rooms, cars but even your body.

India has played a big role in the innovations in technology up gradation as well as to improve the eco-system. Some of the recent Merger and acquisitions to improve spectrum or eco-systems are the followings.

- LINKEDIN bought Slide Share (co-founded by Rashmi Sinha) to improve its coverage.
- Cadence Design acquired Cosmic Circuits (Bangalore based Firm).
- RED HAT acquired Gluster (US based firm with development centre in Bangalore).
- SALESFORCE bought Dim Dim (backed by Index Venture, Nexus India Capital and Draper Richards) to make a mark in the share market.
- Microsoft and Nokia announced the takeover of Nokia Lumia and Asha handsets of Nokia for a staggering amount of \$7.5 billion. With mobiles now positioned as the world's fastest growing and largest computing platform, the move was a clever gamble; Nokia was chosen to be the cornerstone of Microsoft's business for future success. Given its almost complete reliance on Nokia for windows phone devices, Microsoft is now equipped with the competitive eco- system strength of Google and Apple. Microsoft could benefit significantly- most importantly through the acquired devices as it tries to claw market share from Android and Apple. More than 1.5 billion people own smart phones and the market is steadily growing.
- Additionally, Skype, the dominant voice-over-Internet service owned by Microsoft, could become more powerful. Microsoft can

now push Skype across its Xbox gaming/TV console, Nokia devices, Surface tablets, and all devices.' Skype is being steadily integrated more deeply into Windows; it will be preinstalled in Windows 8.1 on the desktop. It could become a way for Microsoft to integrate mobile devices and desktops to compete with conventional cellular carriers on voice and messaging.

2. **Improving the market penetration, operational efficiency and ensuring sustained growth of the market share with control on costs.**

The world has become one. Today, we have blue tooth technology developed in America but introduced in India first. We also have Hollywood movies premiered in India and Indian movies premiered in USA. This has made business more competitive and promotion of products more costly. To-day, transnational rules the market. Businesses are trying out every marketing and promotional trick to push consumption from value-added package offers, tweaked price and product mixes to stepping up distribution penetration in untapped markets and shoring up untapped alternative channels. But the real and sustained growth is possible only with innovative products, processes and packaging. Indian organizations, both private and government, are increasingly driven to improve operational efficiency, share information, and integrate processes across operational and jurisdictional boundaries while maintaining control over costs'

For small, medium or even big businesses, the best way to achieve all these are to go for cloud computing.

- Cloud Computing. It requires thorough

understanding of how Business drivers can leverage cloud. Most organizations are exploring the benefits of cloud computing within their own private cloud. Whether it is faster provisioning, on demand access agile resource scheduling based on policies, or charge back rules to ensure business accountability, or control over environment, business need to move from reactive to proactive and predictive approach to cloud computing. Cloud computing has become very common in industries like telecom, BFSI, retail, education, Healthcare and various departments of the Government in India.

- Public cloud computing is the model that enables organizations to achieve daunting objectives like making and managing a dynamic and agile infrastructure to exponentially increase the business. In Broadband sectors the demand for public cloud has recently shown an increase in the mobile and, pharmacy, manufacturing e- Commerce, retail and travel in small and medium enterprises as well as larger enterprises.
- Development of a common switch between all bank ATMs – has permitted anytime, anywhere banking possible. It has linked all ATMs to enable the card holders of any bank to operate in any other bank run ATMs 24X7- making financial operations convenient for all segments of society while making it more transparent and affordable.

3. The security and cost aspects of technology adaptation

For an emerging economy like India technology adaptation for business purposes propose very heavy

expenditure on research and developments The following technologies offer high business value but adaptation is very costly and are fraught with serious security concerns.

- The preservation of Stem Cells for future use up to 50 Years.
- The disaster Management required for alternate data sourcing.
- Presently only BSNL/MTNL and Reliance have networking thought out the globe which is being shared by all the service providers in India. The infrastructure like networking needs high investments and is absolutely essential for faster movement and security.
- Security aspects and problems regarding spectrum allocation on account of security problems.
- Constant hacking of classified documents by enemy countries etc.

4. CONCLUSION

We are living in at best of times in the era of technology and are witnessing the application of technology in our lives like never before. Just count the goodies technology has endowed us to make our lives and activities comfortable, fast, and enjoyable. To quote a few, the railway, air & holiday reservation, bank cards, remittances & net banking, entertainment in the form of Movies, TV and gaming, Internet, mobile telephony, messaging, medicine & diagnostics, on

line trade e-commerce, Digital music, photography, imaging, GRPS, telephone & video conferencing, and a lot more. The virtual stores, 3D imaging, biometry, voice recognition technology, and other technological innovations have increased our safety and security on the one hand and helped engineers, artisans, manufacturers and businessmen on the other. In the short span of 50 or so years, the change and up gradation technology has brought about has impacted each one of us. If you remember the time spent in Queue earlier for every necessity of life which you can now do on line real time, the extent and result of what technology has brought about can be felt without any need to say more.

India needs to tread a long way to develop business models to become the world economic leader! We have to build giant organizations to compete in world standard, strategically, financially and technologically. We have just started on our journey...

REFERENCES:

- *Global Business. Mike W. Peng and Deepak K. Srivastava.
- *Essential of Entrepreneurship and Small Business Management.
- *International Business. Strategy and the Multinational Company. John B. Cullen and K Praveen Parboteeah.
- *Wikipedia. January, February, 2014.