### **Big Data As a Service**





Many organization lack the time, resources or analytical expertise (data scientists) to solve Big Data challenges in-house. Companies are slammed with internal data and operate in established structures that make innovating on existing frameworks challenging. Internal Big Data projects could experience schedule slippages, cost overruns, etc. due to the lack of prior experience in Big Data delivery. Lack of prior experience in Big Data Analytics makes the problem too difficult to be solved internally or the steps to arrive at a pragmatic solution are considered beyond the organization's capabilities or are regarded as overtly complicated. OK, so what do these assertions point to? To me, the answer is crowdsourcing. There isn't a single of the four points listed above that open innovation and an expert crowd of hundred of thousands can't solve. The first is simple — in-house supply is depleted or non-existent. That's a perfect opportunity to crowdsource and tap into global expertise to solve your challenges. Crowdsourcing is not outsourcing (White Paper), but rather a way to augment staff on demand to work on particular challenges with results you've never considered possible. You pay only what you wish to offer for particular contest winners, and you can start and stop at any time without committing to huge engagements.

Data structures are large and unwieldy. In that case, let data scientists run complex algorithms against those data sets and simplify (abstract) them from complex domains into math problems. That's at the heart of data science. Cost overruns and lack of experience? Hundreds of thousands of experts can meet your challenge better and for far less than internal initiatives.

Crowdsourcing and data science don't subscribe to the notion that problems are too difficult. Together, they have changed a fundamental process of Harvard Medical School's immunogenomic studies. Crowds have realigned the solar arrays of the International Space Station in such a way that (i) captures the maximum solar energy for each second of the ISS ' 92-minute orbit, while also (ii) ensuring that the heat capture does not warp the arrays' tethers (longerons).



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## NEW HORIZON COLLEGE OF ENGINEERING



# BUSINESS AND INFORMATION TECHNOLOGY



DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

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#### Introduction

**Innovation** is the great way to success in this digital age. The path of innovation in business means doing something different, smarter or better that will make a positive difference in terms of value, quality or productivity by using emerging or proved technologies of the world. The technology which has already proved itself in last two decades is of course the information technology (IT). It has dramatically changed the lives of the individuals and organisations. Currently online shopping, digital marketing, social networking, digital communication and cloud computing etc are the best examples of change which came through the wave of information technology. Now accurate business planning, effective marketing, global sales, systematic management, real time monitoring, instant customer support and long term business growth cannot be achieved at the optimum level without IT.

#### The importance of IT in Business

The success of every business depends on certain factors. Some of which are accurate analysis, choosing the right technology and the future vision. Research from the last two decade has proved that those organisations that do invest in technology and choose the path of innovation increase their market share, financial figures and overall competitiveness. Information technology is the only technology which provides you the opportunity to analyse specific data and plan your business journey accordingly. It also provides you many tools which can solve complex problems and plan the scalability (future growth) of your business. In the modern age, it is proved that digital marketing is a great tool which let you promote your products or services to the global market while sitting in the comfort of your remote office or home.

#### **Decision Making**

Speed and accuracy are at the heart of making right decision for your business. Every successful organisation has to go through a comprehensive market research process which enables management to make the right decision. Market research can be done in many ways through online surveys, forums, blogs, group discussions using World Wide Web and of course through in-person interviews as well. Currently Big data, Google Analytics and Microsoft CRM Dynamics are also great tools to extract useful information which can impact on decision making. These online tools not only provide real time responses from the potential audience but also ensure the accuracy of data by minimising the risk of human errors.

#### **Marketing and Business Growth**

The heart of the business success lies in its marketing which enables the management to identify its target audience first and then observe their trends and needs. The overall marketing covers public relation, advertising, promotion and sales which subsequently impact on business growth. Many types of marketing can help you reach your potential customers. But I will briefly explain digital marketing here which was the dream in the past without Internet technology. Digital Marketing is a modern phenomenon which let you promote your products or services all over the world. It is a broad term which includes many concepts like search engine optimisation (SEO), pay per click (PPC), blogging, discussion forum, email shot, SMS, MMS, social media marketing and Smartphone app advertisement etc..

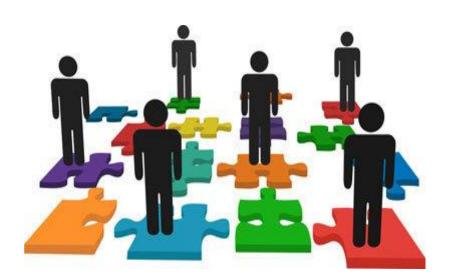












#### **Resource Management and Globalisation**

Resource management plays a crucial role in business success. When it comes to medium or large organisation, it is very hard for the top management to manage all the resources manually. These resources may include tangible, financial or human resources etc. Information technology has played a vital role in automating such complex problems by introducing user friendly solutions. A decade ago, most of the resource management solutions were desktop based. Thanks to the internet and cloud technology which enables software engineers to introduce cloud based ERP (Enterprise Resource Planning) solutions. Now, the managers can manage or monitor their organisational resources virtually anywhere in the world by using their personal computer, laptops, tablets or Smartphone. This concept has introduced the idea of globalisation. Most of multinational companies (Microsoft, Google, Amazon, McDonalds etc) in the world use these cloud based solutions to manage their virtual or physical offices and staff worldwide.

#### **Conclusion**

I think, it is impossible to attain long term business success without leveraging the benefits of information technology in this digital age. The companies have to bear a reasonable cost to achieve this success because using an innovative approach in business strategy, employing highly trained IT professionals and making right decisions at right time are the prerequisite of business success. As IT solutions continue to increase the productivity, efficiency and effectiveness of business operations and communication, business will continue to rely on Information Technology for success.

