

# NEW HORIZON COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND  
ENGINEERING

NEWSLETTER

**BUSINESS AND INFORMATION TECHNOLOGY**

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## **The Importance of Information Technology In Business Today**

Information technology drives innovation and innovation is the path to business success. Innovation in business has the same impact that steam had on the industrial revolution.

In fact, it's hard to imagine any business that has not benefited from the digital revolution. Even something as hands on as agriculture uses computers. Farmers use computers for production records, financial planning, research on technical issues, and procurement.

Nowadays the formula for business success is simple: drive innovation with information technology. So, the first thing startups in any industry try to figure out is how to make smart IT recruiting choices. Without a backbone of information technology, a business is not going to go far.

## **The Love Affair with Innovation**

We like to imagine that the human race has always been innovative. But innovation was a slow and steady affair for most of the 20th century. It was the work of individual genius or think tanks. For the most part, brilliant people innovated and the public slowly adopted the idea. The mainstream love affair with innovation began with the invention of the computer. It attained momentum with the birth of the Internet.

In the 1980s, innovation was not necessary for business success. A business could do well just deploying a proven business model. Efficiency was not a prime directive.

Following tradition was a sensible way to stay in business. A store owner, for example, was content with using a cash register similar to the one invented by James Ritty in 1879 to prevent his employees from pilfering his saloon profits in Dayton, Ohio.

All this changed on 6 August 1991, a little-remembered date, when the World Wide Web went live to the world. There was hardly a mention of it in any newspaper on the planet. Most people around globe had no idea that the Internet existed. Although Tim Berners-Lee's invention changed the world as we know it, it was only toward the end of the decade that the Internet became popular.

## The Rise of Innovation

The rise of innovation can be traced to the human race getting smarter. According to the Flynn Effect, general IQ has begun to rise since the 1930s. The average IQ has risen from 80 points to 100 points.

While innovations in travel and multimedia improved collective intelligence, these were mainly passive forms of learning. Today, computer applications and the global brain have switched on active learning and improved how fast people learn new things.

## Innovation in Business

Information technology fosters innovation in business. Innovation results in smarter apps, improved data storage, faster processing, and wider information distribution. Innovation makes businesses run more efficiently. And innovation increases value, enhances quality, and boosts productivity.

Innovation through information technology has created the following radical changes in business:

- Online shopping is more efficient than shopping in a store.
- Digital marketing is more efficient than high cost newspaper, television, and radio advertising.
- Social networking is more efficient than going to clubs.
- VoiP communication is more efficient than legacy telephony.



- Cloud computing is more efficient than a private computer network.

Businesses that have embraced the innovation paradigm tend to have the following characteristics:

- They have more accurate business planning
- They have more effective marketing
- They have higher global sales
- They have more systematic management
- They use real time monitoring
- They offer instant customer support

In fact, it's hard to think of long term business growth without the push of information technology.

## 5 Reasons for Accelerated Business Growth

The technological revolution has improved businesses this century in the following five primary ways:

*1. Information technology has given business the tools to solve complex problems.*

Improved hardware (more memory, faster processors, sharper visual displays, etc) combined with smarter applications (Mindmapping software like X Mind, collaborative software like Kanban boards, organizers like Google calendar, etc) have made it easier to research data, analyze it, and plan scalability. Many tools available to solve complex problems.

*2. Information technology allows businesses to make better decisions.*

Good decisions in business are based on solid market research. This can be done through engaging teams through video conferences, reviewing public sentiment on social media and industry forums, and using online surveys to get customer feedback. There are also tools like Microsoft CRM Dynamics and Google Analytics.

*3. Information technology has improved marketing.*

Internet marketing using online advertising methods (SEO, PPC, Facebook Ads) are far more accurate ways than traditional marketing of finding target audiences, discovering their needs, and building a marketing campaign to persuade them to buy. It's difficult to see how many people read a newspaper ad. It's easy to figure out how many people clicked on an online banner.

*4. Information technology has improved customer support.*

Customers can receive support from multiple channels telephone, emails, social media platforms, webinars, and so on. Additionally, customer relationship management systems help businesses understand customer behavior.

*5. Information technology has improved resource management.*

Cloud computing allows a company's employees to use any device anywhere in the world to access their enterprise level software.

## Innovation is the Wave of the Future

If the purpose of business is to increase profits, then innovation is the way to make more profits, faster. The story of Jan Koum gives us a clue how much big businesses value innovation. He went from food stamps to billionaire because of his invention of WhatsApp.



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