

Digitalisation of Business & Commerce

Chartered Accountancy Business Level 2 Digital Business Strategy (DBS)

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BL -8 Digital Business Strategy

CA Business Level 2

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The Technological Environment

Technological change is rapid and affects businesses in many ways. Because of this change, organizations that are impacted by technology must adapt themselves to it. This results in differences between businesses that operate in the digital environment, which have had to evolve, compared to businesses that remain largely in the traditional business environment. However, it should be noted that, increasingly, the majority of businesses are being impacted by technology, even in relatively limited ways. The difference therefore becomes the degree to which organisations have had to evolve

Impacts of technology

- The types of products or services that are made and sold. For example, consumer markets have seen the emergence of personal computers, tablets and smartphones; and industrial markets have seen the emergence of custom-built microchips, robots and local area networks for office information systems.
- The way in which products are made.
 - Reduces the need of labor
 - Technology can develop new raw materials

Impacts of technology

- The way in which services are provided, for example, travel agencies over the internet. The case study below highlights how changes in technology have impacted newspaper readership numbers in Scotland.
- The way in which markets are identified. Database systems make it much easier to analyze the marketplace.
- The way in which firms are managed. IT has helped in the 'delaying' of organisational hierarchies (in other words, the reduction of management layers between the senior managers and the workforce) but requires greater workforce skills. Using technology often requires changes in working methods. Information technology requires skills at manipulating and interpreting abstract data.

Potential important of social consequence

- (a) Whereas people were once collected together to work in factories and offices, home working will become more important.
- (b) Certain sorts of skill, related to interpretation of data and information processes, are likely to become more valued than manual or physical skills.
- (c) Technology increases manufacturing productivity, so that more people will be involved in service jobs.

Traditional vs Digital Business

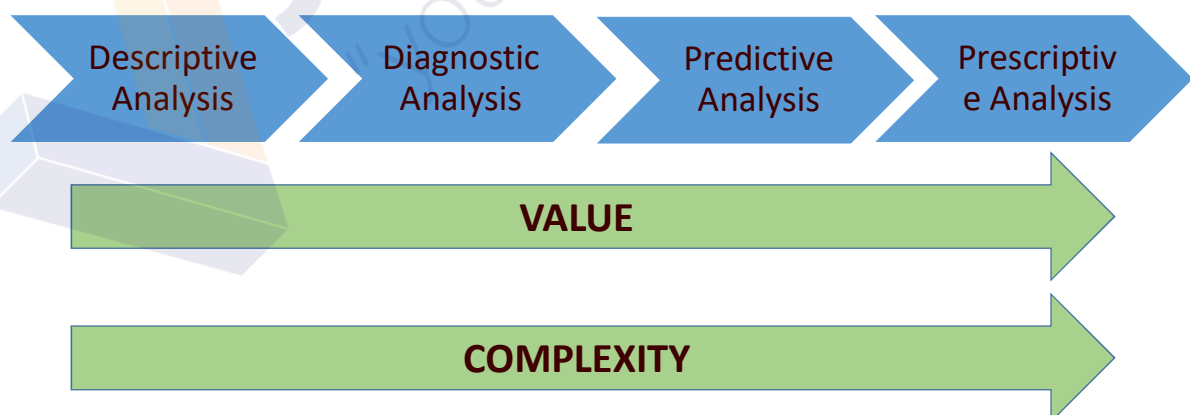
Attributes	Digital	Traditional
Communication	Digital and multichannel Email, web, SMS	Hybrid Combination of paper and digital. Send documents by the post and by email
Tools	Digital and web-based tools All their tools are integrated	Legacy systems Acquired over the course of company's history

Strategic Approach

Attributes	Digital	Traditional
Processors	Automation Digital processes build in web-based tools	Manual Having to manually compensate for legacy systems short comings
Culture	Smaller & younger company Easier to enact changes	Established company Experienced managers with proven ways to do things
Experience	Fearless More likely to have a trial and error approach	Years of experience Very knowledgeable
Data	New data Easier to collect and process	Goldmine of data Sometimes difficult to exploit

Benefits of Digital Business

24/7 Customer interaction and feedback loop.
Instant access to data to provide analytics and insight.



Benefits of Digital Business

- I. **Descriptive analytics** looks at data statistically to tell you what happened in the past.
- II. **Diagnostic analytics** takes descriptive data a step further and provides deeper analysis to answer the question: Why did this happen? Often, diagnostic analysis is referred to as root cause analysis. This includes using processes such as data discovery, data mining, and drill down and drill through.
- III. **Predictive analytics** takes historical data and feeds it into a machine learning model that considers key trends and patterns. The model is then applied to current data to predict what will happen next.
- IV. **Prescriptive analytics** takes predictive data to the next level. Now that you have an idea of what will likely happen in the future, what should you do? It suggests various courses of action and outlines what the potential implications would be for each.

Benefits of Digital Business

Customized and better User Experience (UX).

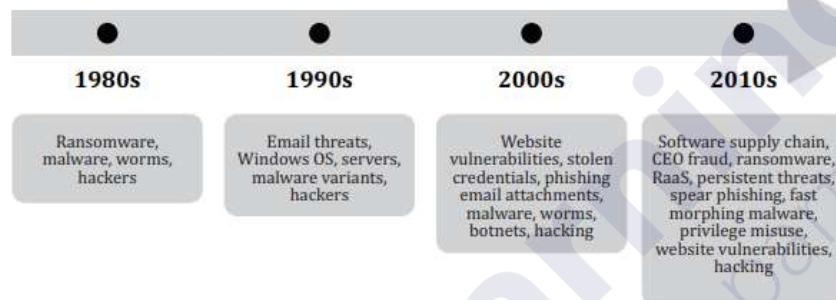
Connectivity and integration to cloud-based solutions, third party applications and internal systems.

Scalability for systems and data.

Drawbacks and limitations of Digital Business

- Immediate feedback
- Privacy
- Security
- Fake News

The Evolution of Cyber Security Attack Methods



Drawbacks and limitations of Digital Business

- Data mining and enhanced customer analytics
- Targeted advertising
- Crypto Currency
- Connectivity and IOT
- Automation and Machine learning

Technological Development Predictions

- The following points highlight some of the key areas of focus when looking at technology prediction.
- Futurology is the science and study of sociological and technological developments, values and trends, with a view to planning for the future
- The Delphi model involves a panel of experts providing views on various events to be forecast, such as inventions and breakthroughs, or even regulations or changes over a time period into the future.
- In some cases, instead of technological developments being used to predict future technologies, future social developments can be predicted in order to predict future customer needs. It is also possible that one particular invention or technique will have wideranging applications. Such a technology might be called a meta-tec

Meta tech Examples

- **Eye surgery**
- **Industrial cutting**
- **Illuminating public monuments at night**
- **Reading data from DVDs**
- **Nightclubs**