

Use the question numbering below for your written responses for this assignment.

1. Review their business case, area of application, approach/ methods, tools used, results, actions, benefits. Write a summary/ critique of one case study that you chose. Min. 10-12 sentences, diagrams or figures taken from the case study or prepared by you are desirable. You must include suitable references, i.e. to any material from the case study or other sources. (5%)

Case Studies Utilizing Real-Time Data Analytics

Review business case paper

This paper explored opinions about real time data applications and operations by interviewing over 40 innovation leaders within the analytics division.

With the development of technology, business executives are forced to make a change. Firms must adjust operational processes and make new corporate strategies and business models.

The author of the paper interviewed among large and medium-sized businesses within forty sectors of the economy including consumer products, technology, oil and gas, and retailing.

Definition of “real-time business”

“Real-time business” refers to processes that allow companies to conduct a range of business activities instantly. Real-time intelligence puts the data directly into RAM and allow some extremely fast query search.

Area of application

The study of real-time business was focused mainly in four sectors of the economy: consumer products, technology, oil and gas, and retailing.

Approach/methods

The author of the paper interviewed large and medium-sized business units.

Actions

Looking ahead, real-time business will only grow more influential in the upcoming years. 30% of the business analytics tools will be in use and 30% of business intelligence applications will use predictive forecasting.

Figure: Real-time operations are most pervasive

Sector	% of implementation
Consumer experience	65%
Supply chain management	63%
Production process	62%
Sales and marketing	61%
Financial and business risk	57%
Product design and innovation	53%

Results

The paper discussed results such as executives realized that they need to take their business into real time.

Figure: production processes seen at most effective

Production processes	%responding
Customer experience	69%
Production process	65%
Supply chain management	62%
Product design	61%
Financial and business risk	58%
Sales and marketing	55%

Benefits

The main strategic goals of executives choosing to implement real-time business techniques are to increase market share and enhance service and quality advantages. In the end, real-time business has proved to be effective in delivering improvements in customer experience, production processes and supply chain management. At an operational level, taking business to real time could speed up data capture and simplify processes. At the management level, taking business to real time could accelerate decision-making and planning.

Figure: Key drivers

Key drivers	% responding
Build service/ quality advantage	86%
Market share	82%
Build cost advantage	81%
Match industry leaders	78%
Market leadership	77%
Addressable market	76%

Real-time operations could help companies to make better decisions and speed time to market. Among some real-time operation early firm adopters, 77% of them have revenue gains. According to the paper, oil and gas firms have revenue gains of 36%; business-to-business operations have a gain of 27%, followed by business-to-consumer units of 13%.

Challenges

1. Respondents said a lack of technology is a main obstacle.
2. Respondents' lack of technology is also a main obstacle
3. Although nearly all respondents agree that taking their firms into real time is a good decision, only one-third of the business owners have already implemented real-time business applications.

By sector, consumer products firms have a lack of available technology to adopt real-time operations.

Review of the business case:**Area of application**

Traffic dataset in Swedish metropolitan areas from case study 1: KTH - Royal Institute of Technology

KTH, Sweden's leading technical university gathered real-time traffic data from a variety of sources such as GPS from many numbers of vehicles. The goal for the data analytics is to better manage traffic in the metropolitan area.

Approach/ methods

KTH used a unique software tool to collect data that analyzed large volumes of real-time data. The data is then used to identify current conditions and estimate how long it would take from point to point in the city.

Tools used

InfoSphere Streams software

Actions

This data set used GPS locations, weather conditions, speeds from sensors on motorways and entered data into the InfoSphere Streams software in which can handle all types of data.

Results

The innovative software tool KTH used could offer advice on various travel alternatives such as routes and eventually improve traffic in the metropolitan area. The InfoSphere Streams software can handle large traffic and traffic-related data streams to enable researchers to analyze current traffic conditions and development more efficient management stream in the metropolitan city.

Benefits

Upon data analyzation, this software tool will eventually improve traffic in the metropolitan area.

Reference:

<https://www.slideshare.net/Isakoda/case-studies-utilizing-real-time-data-analytics>