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**An exploratory study into the use of information
technology as an important enabler of
organisational differentiation in the
financial sector**

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An Exploratory Study into the Use of Information Technology as an Important Enabler of Organisational Differentiation in the Financial Sector

Abstract:

Organisations need to differentiate themselves from their competitors if they are to survive. This research project explores the role of information technology as an important enabler of organisational differentiation. Senior executives were interviewed from 9 New Zealand financial organisations to determine if information technology was an important enabler of organisational differentiation. No examples, where information technology was to used as an important enabler of organisational differentiation, were found.

Keywords: Information technology, Organisational differentiation.

“No two species that make their living in an identical way can coexist.”

Gause's Principle of Competitive Exclusion

Introduction

Applying this principle to business, Henderson (1989) says “Competitors that make their living in the same way cannot coexist - no more in business than in nature.” For an organisation to survive in business it must differentiate itself enough to have a unique advantage over its competitors. This is the concept of organisational differentiation.

Consider, for example, the retail industry. Many organisations sell what is essentially the same product, yet each continues to exist. Each retail organisation has a unique characteristic - location, price, brand-name etc. - that makes its product more acceptable to buyers than its competitors' product.

To stay in business, therefore, each organisation must implement, either consciously or unconsciously, one or more of the three generic strategies - cost leadership, product differentiation or market focus (Porter 1980). These generic differentiating strategies are those most frequently cited in strategic management literature (Chrisman et al. 1988).

Schulthesis and Sumner (1992) define them as:

- *Cost leadership* - reducing costs to improving productivity without incurring additional costs,
- *Product differentiation* - adding value or unique features to the product to improve its image, quality or service,
- *Market focus* - concentrating on a particular market or product niche.

Enablers

An enabler is a mechanism used by an organisation to achieve its differentiating strategy, for example, marketing, training or superior business processes. Usually one enabler emerges as being the most important in allowing the organisation to implement its strategy.

Information technology can be an important enabler of organisational differentiation, providing an organisation with new business opportunities or changing the way the organisation conducts its business or relates to its clients. Information technology includes everything from desk-top computers to sophisticated telecommunications technology, or from in-house networked computers to direct links with suppliers' or customers' computers.

Wiseman (1988) and Porter and Miller (1985) both give examples of how information technology can be used as an important enabler in implementing the generic differentiating strategies of cost leadership and product differentiation. Cost leadership, for example, can be achieved by using information technology to automate the manufacturing process, to provide better scheduling information or to reduce product costs. Examples of information technology used as an important enabler to differentiate a product include: providing new distribution channels (e.g., ATMs), providing additional service (e.g., self-diagnosis of problems) or providing flexible product specifications.

Numerous papers (Reich and Huff [1991], Freid and Johnson [1992], Breath and Ives [1986], Johnston and Vitale [1988] and Madnick [1987]) have been published giving further examples of information technology being used as an important enabler of organisational strategy.

No examples, however, are given by writers to illustrate how information technology might be used to enable an organisation to implement the generic differentiating strategy of market focus.

There is almost unanimous and unquestioning acceptance that information technology can and will be used to make organisations uniquely different. This research paper questions that acceptance by exploring whether or not information technology is being used as an important enabler of organisational differentiation.

Method

This research project was conducted by interviewing senior executives in the financial sector, specifically banking and insurance organisations. This sector was chosen because:

- information is an integral part of the products it offers, suggesting that this industry would be more likely to use information technology
- the products offered are relatively homogeneous, thereby requiring the organisations to have strongly differentiating strategies.

Only the senior executive in each organisation was interviewed because it was expected that:

- the senior executive would be able to clearly identify the differentiating strategy
- if information technology was important in differentiating the organisation, the senior executive would know if information technology was an important enabler of organisational differentiation.

Each interview was conducted in conjunction with questions for another research project which focused on the role of information technology in the organisation. The two questions asked for the project reported in this paper were:

1. For organisations to remain viable they have to be different from their competitors. What factor(s) do you believe differentiates your organisation from your competitors?
2. You identified your organisation as being different from competitors in the following way(s) Is information technology used to support these differentiating factors? Give a brief description of the information technology used.

The questions for the other research project focused on the sector, the organisation and the present and future roles of information technology in the organisation.

Organisations were selected from the top 30 financial institutions (Deloitte Touche Tomatsu 1993). Letters were sent to 12 organisations asking a senior executive to participate in the interview. No 'follow-up' was done on organisations who did not reply or who refused to participate.

Results

From interviews conducted in nine organisations, 15 differentiating strategies were identified. They are listed in Table 1 and summarised in Table 2. Only one organisation claimed to have no differentiating strategy.

Organisation	Differentiating Strategy	Description of Strategy	Enabled by IT
1	Reputation Quality	Conservative, non-aggressive, up-market To prevent errors	Transaction processing system
2	Service	To provide value-added service to the customers	
3	Quality	Providing quality service to the customer	
4	Reputation	Name	
5	Reputation	Name, strong financial status, long-term player	
6	Innovation Reputation Service Diversity & Focus	New products Solid organisation Providing quality service Structuring the organisation to specialise in certain market areas	Allows customers to phone for immediate insurance
7	People Reputation Service Structure	Friendly, approachable staff Community involvement Easy access to products Centralised DP providing innovation and flexibility	Telebanking
8	People	Most important asset	
9	None identified		

Table 1. List of differentiating strategies

Differentiating Strategies	No. of Instances	Enabled by IT
Reputation	5	
Quality	2	1
Service	3	1
Innovation	1	1
Diversity & Focus	1	
Structure	1	
People	2	

Table 2. Summary of Differentiating Strategies.

Only three of the organisations were able to identify information technology as an enabler of their differentiating strategy.

This paper, however, is interested in information technology as an important enabler of organisational differentiation. If an organisation's existence is based on its ability to implement a unique differentiating strategy, and if information technology is an important enabler of this differentiation, then information technology must also be unique to the organisation. Yet, when the results from the organisations that used information technology as an enabler were analysed, it was found that the technology deployed was *not* unique. Therefore, while information technology was used as an enabler of organisational differentiation, we would question whether information technology was an *important* enabler of organisational differentiation.

Analysis also showed that information technology cannot always be an important enabler of an organisation's differentiating strategy. For example, reputation: how can information technology be used as an enabler, much less an important enabler, of this differentiating strategy? It can't. Of the seven strategies identified, only three (quality, service and innovation) seem to have high information technology potential.

Discussion

Interpreting the results of any exploratory study is not easy. Although the results of this study show that information technology is not an important enabler of any organisational differentiation, this may be due to the sample group selected or to lack of rigour in the conduct of this research project.

Sample Group

The results may be unique to the sample: the New Zealand financial sector.

This sector has been affected by major changes in the economy over the past five years: deregulation, low inflation and new competitors. These changes have greatly affected customers needs for financial products and the types of products that these organisations can now offer. We believe, however, that financial sector organisations, while recognising the changes, have not responded to them. This belief is supported by the claims of several senior executives that they are still exploring how to differentiate their organisations. It is unlikely that an organisation which is still identifying a differentiating strategy, or implementing one, will have developed a unique information technology solution.

The major changes in the economy have also affected the use of information technology within organisations. All the organisations investigated are currently redeveloping their information technology to create an integrated infrastructure. Until that infrastructure is developed, the organisation has neither the ability nor the resources to develop information technology as an important enabler of organisational differentiation.

The findings of this research project may, therefore, be unique to the New Zealand financial sector. Any further research on information technology as an important enabler must also incorporate other sectors.

Research Rigour

To understand why the results in this research project occurred or to substantiate or refute the findings in this paper, a more rigorous research project is necessary. For example the current project has highlighted several problems in data collection.

1. Assumption of Unique Difference

One of the questions asked:

'For organisations to remain viable they have to be different from their competitors. What factor(s) do you believe differentiates your organisation from your competitors?'

This question assumes that organisations are uniquely different. The assumption was challenged by a senior executive who said that his organisation was *not* different from any other organisation in the industry. (This organisation claimed to have no differentiating strategy.)

Research, therefore should be done, initially through a literature search, to determine the validity of this assumption.

2. Application of Differentiation

One senior executive wanted to know 'to whom was the organisation differentiating. He perceived differentiation as dependent upon the stakeholder (ie customer, shareholder or employee). Another senior executive suggested that the customers will differentiate the organisation by product; for example, a customer wanting a mortgage may differentiate by price, but when opening a savings account may differentiate by reputation.

It seems, therefore, that an organisation may have several differentiating strategies which it applies according to the stakeholder or the product.

3. Understanding the Differentiating Strategy

Each differentiating strategy was recorded exactly as described by the senior executives. For example, the differentiating strategies of quality and service seem synonymous, from the descriptions provided. To overcome this problem, questioning should be extended to other members of the organisation and to people external to the it, such as competitors, customers and industry experts.

4 The Problem

The second question asked was:

'You identified your organisation as being different from competitors in the following way(s) Is information technology used to support these differentiating factors? Give a brief description of the information technology used.'

The wording of this question led senior executives to identify whether "information technology was being used", rather than to decide if "information technology was the important enabler" of the differentiating strategy. A better question would have been:

"What was the most important mechanism that enabled you to implement this differentiating strategy"?

If information technology had been stated as an important enabler then it could be assumed that information technology was important in enabling the differentiating strategy.

Again, a comprehensive framework of enablers, together with questioning of other employees of the organisation would improve the consistency of answers given to this question.

Summary

The object of exploratory research is to understand the area of research, not to answer the research question. Analysis of the results of this research has questioned the concept of organisational differentiation and the role of information technology as an important enabler of that differentiation.

Further research should be concentrated in two areas: understanding why the results of this project occurred, and in substantiating or refuting the findings.

The questions to be asked are:

1. Does the information technology solution need to be unique to be classified as an important enabler?
2. For which differentiating strategies can information technology be used an important enabler?
3. Are the results of this exploratory study unique to the New Zealand financial industry?

4. Are organisations uniquely different?
5. Do organisations have multiple differentiating strategies which are applied according to stakeholder or product?

This research project has questioned the importance of information technology as an enabler of organisational differentiation. If further research substantiates the findings of this paper then we will need to reconsider the role of information technology in the organisation.

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