

# 6CC011: Strategic Information Systems Planning

Theory, Practice and Challenges for  
Future Research

*Galliers New Problem Oriented Strategizing Framework*

Lecture Content is based upon Information Systems Strategy – Theory, Practices, and Challenges for Future Research, 2013, by Dr Rolf Teubner.

# Introduction

- ❑ A History of IS Strategy & The Current Debate.
- ❑ Research v Practice
- ❑ The Shift from Strategy to Strategizing
- ❑ Gallier's New Problem Oriented Strategizing Framework
- ❑ The Exploration, Exploitation and Change Management Strategy
- ❑ Advantages and Criticisms
- ❑ Using the New Strategizing Framework in Practice

# History of IS Strategy

## Alignment

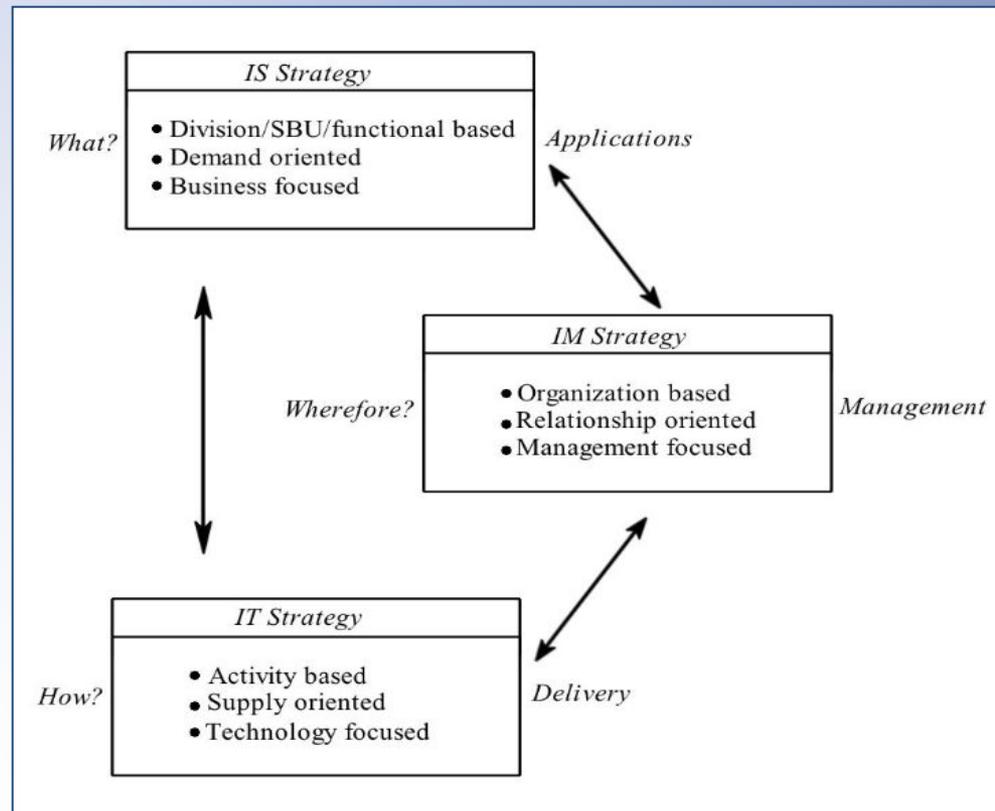
- ❑ 1960 – No alignment between IS strategy and Business strategy
- ❑ 1970 - Link one way, business to IS
- ❑ 1990 – Strategic alignment between IS strategy and Business strategy

## Competitive Advantage

- ❑ 1980 – Competitive advantage became popular
- ❑ 2000 - IT alone does not create competitive advantage

# History of IS Strategy

## □ Earls (1989) Model



Source: (Earl, 1989, p.64)

# IS Strategy – Current Debate

“SISP is commonly seen as the process in which IT-based application systems are developed in support of achieving a company’s business goals”

Teubner, R., 2013, Information Systems Strategy – Theory, Practice and Challenges for Future Research

This basic understanding has existed throughout the four ages of SISP - Data Processing, Management IS, Strategic IS, eBusiness

However, what has changed is the focus on the different components of SISP

- MIS – SISP focussed on supplying a demand for specific IS in a company
- SIS – SISP focussed on developing and implementing IS for competitive advantage
- e-Business – SISP now focusses on enabling new business strategies and new business options

# Research v Practice

Academic interest in SISP has decreased significantly over the last few years, however the acknowledgement by businesses of the importance of IS Strategy has risen during the same period.

The reasons for the increase in business interest are:-

- Information Systems now exist throughout organisations
- Scarcity of resources forces organisations to carefully consider how they use I.T

One possible reason for this mismatch is that IS Strategy and SISP are fully understood in academia, only knowledge transfer from research to practice is missing.

Another possible reason is that practice and research have different understandings of IS Strategy and its contents.

In many cases the way in which practice interprets IS Strategy hardly corresponds to academic texts

# Research v Practice

Teubner identifies 9 distinct IS Strategy Planning Areas. Academic discussion and Professional practice focus on very different areas.

IS Strategy Contents in Academic Discussion: -

- IT and competitive advantage
- IT Outsourcing
- Information as a resource
- Application Systems

IS Strategy Contents in Professional Practice: -

- Application Systems
- IT Infrastructure
- IT Architecture
- IT Security
- IT Organisation

# A New Perspective on IS Strategy

With initial research on IS Strategy decreasing, academia is beginning to focus on the problems of traditional IS Strategy research.

A debate has now begun concerning new challenges and approaches to investigating IS Strategy. This debate includes: -

- ❑ If and how a Digital Business Strategy can help overcome the shortcomings of existing IS Strategy concepts.
- ❑ Whether traditional SISP Research is still valid in the current economic, social and technical environment

One approach to IS Strategy that is currently being considered is 'The Problem Oriented Strategizing Framework' proposed by Bob Galliers.

# The Shift from Strategy to Strategizing

It has become increasingly noticeable that long term fully documented IS Strategies are in many cases implemented in small parts but rarely implemented fully.

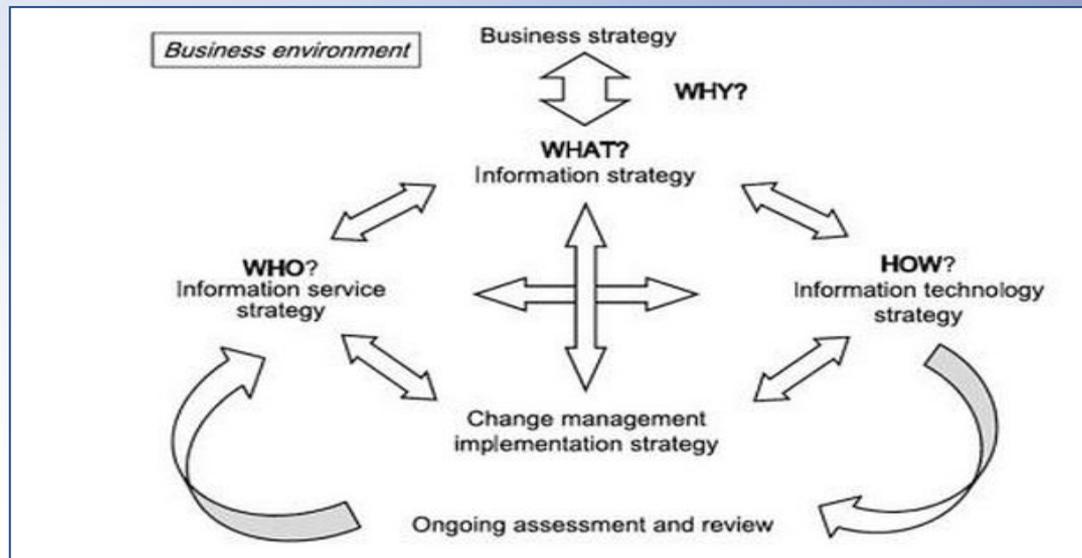
There are many reasons for this: -

- Lack of top management support.
- Unsubstantiated investment appraisals.
- Organisational resistance.
- Planning risks.

During and beyond the 'Information Age' , marked by advancing globalisation, short innovation cycles, intense competition, changes in society, IS Strategies once devised have very short life spans.

# Galliers Original IS Strategy Framework

- Galliers Original IS Strategy Framework has now become outdated



Source: (Teubner, 2013, p.252)

- A New Problem Oriented Strategizing Framework has been proposed.

# Galliers New Problem Oriented Strategizing Framework

When we compare this framework with Gallier's earlier framework we can see that there has been a real change in how we view IS Strategy.

The earlier framework: -

- ❑ Focussed on organising contents of the IS Strategy, Gallier's suggested the IS Strategy (how), IM Strategy / Information Strategy (what), and a IT Strategy / Service Strategy (who).
- ❑ The Business Strategy is an external entity outside the framework, related and continually aligned

# Galliers New Problem Oriented Strategizing Framework

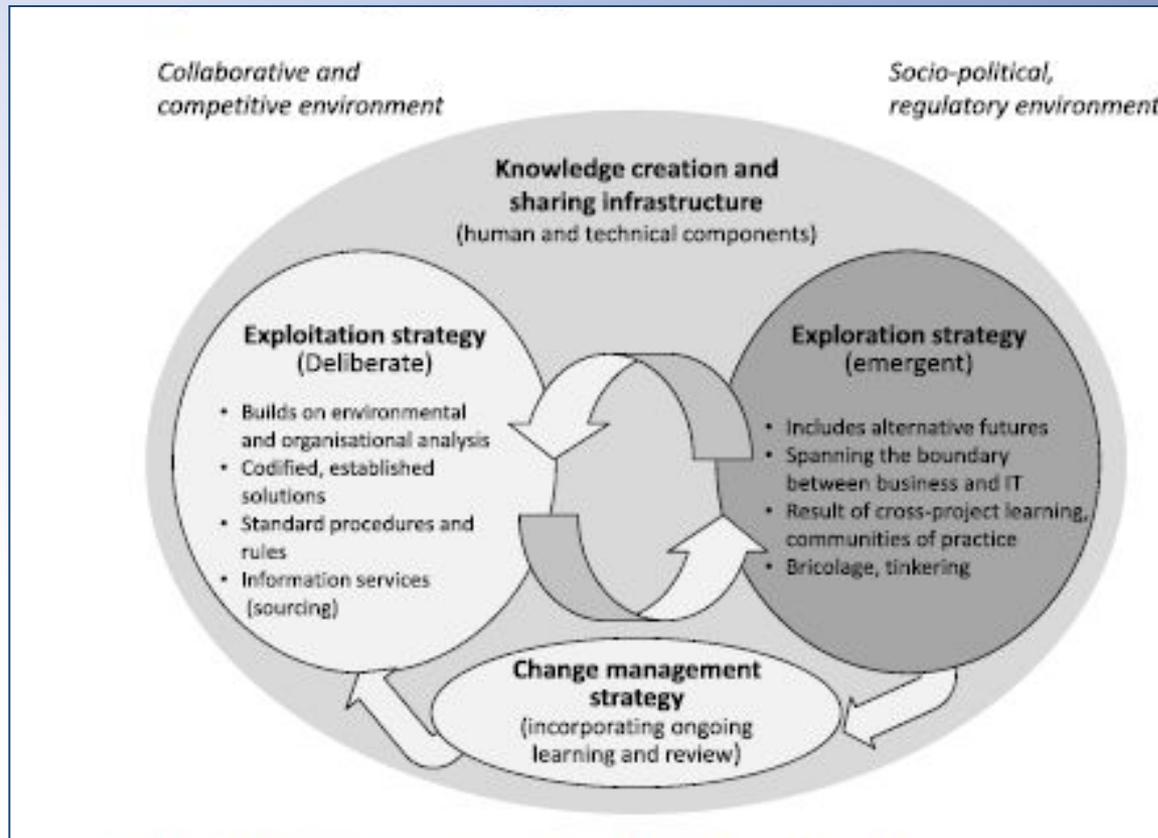
The New Strategizing Framework: -

- ❑ Considers the IS Strategy to be an integral part and a prerequisite of the Business Strategy. Strategic Alignment is no longer needed.
- ❑ Abolishes the explicit differentiation between IS Strategy, IM Strategy and IT Strategy because it no longer focusses on the content of IS Strategy

The New Strategizing Framework focuses on areas of concern and dispositions of strategizing, with three areas of strategy that need to be addressed:-

- ❑ The Exploitation Strategy – Exploitation of IT for operational activities
- ❑ The Exploration Strategy – Exploring novel and innovative IT based business opportunities, IT for competitive advantage.
- ❑ The Change Management Strategy – Partly equivalent to the Implementation Strategy in the original model but with less emphasis on the technology and more on the organisational change caused by IT.

# Galliers New Problem Oriented Strategizing Framework



Source: (Teubner, 2013, p.252)

# The Exploitation Strategy

The aim of the Exploitation Strategy is to enable efficient business operations.

- ❑ For example, the implementation of ERP software to support core operational activities.
- ❑ Sets in place standard procedures and rules.
- ❑ Information Services.

# The Exploration Strategy

The Exploration Strategy is seen as an emergent strategy, with an emergent planning process and change management becoming more important as the complexity of the business and technical environments increase.

- ❑ This strategy is seen as on-going and is based upon learning from new advances in technology and improvisation.
- ❑ The strategy should be able to respond to new emergent ideas and the consequences of strategic decisions
- ❑ Importance is given to generating and exchanging knowledge
- ❑ Importance is given to sharing infrastructure that supports communication, collaboration and learning.

# The Change Management Strategy

- ❑ Focuses on organisational change occurring from the use of new technologies
- ❑ Integrates on-going learning and review

# Advantages of Gallier's New Problem Oriented Strategizing Framework

Addresses past issues of IS Strategy

- ❑ Difficulties of Alignment
- ❑ Competitive advantage, now we look for innovative uses of IT.
- ❑ Exploration Strategy now gives flexibility
- ❑ Formal approach replaced with an informal approach based on-going learning and sharing of knowledge
- ❑ Relevant in today's continually changing economic and technical environment

# Criticisms of the New Strategizing Framework

- ❑ Focus on process of strategy rather than outcome, therefore practitioners may still find it difficult to use.
- ❑ The focus is more on Exploration, whereas in practice there is more focus on Change Management and Exploitation.
- ❑ Gallier's believes that Emergent processes are hard to formally plan, whereas others including Teubner argue that there can be formal planning and that in fact systematic planning approaches can outperform incremental planning approaches even in turbulent environments.
- ❑ Organisations may find it hard to apply framework

# How can we use Gallier's Strategizing Framework in Practice?

The framework should be used as a guide to help the strategizing process within organisations.

Organisations may ask questions:

- Does the organisation focus more on exploitation or exploration?
- Does the organisation have a knowledge creation and sharing infrastructure in place?
- “To what extent does ongoing learning and review take place as part of the change management and implementation strategy?” (Galliers and Currie, 2011, p.338)

Framework adapted differently depending on organisation

Should always apply a process for continuous learning

# Summary

Gallier's does not doubt that we still can and should plan IS strategically, however it is acknowledged that we can no longer carry out this activity the way we did in the past.

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Planning is still about predetermining future actions and so the primary outcome should be:-

- A set of decisions concerning future actions.
- The resources required to carry out those actions