



Strategic Information Systems Planning in Cooperative Inter- Organization Relationships

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Changes in Business Environment



Definition:

Strategic Information Systems Planning in cooperative Inter-Organizational Relationships (IOSISP)

“SISP in cooperative business networks focuses on to identify an appropriate application portfolio, that of IOSs, to support and impact on inter-organizational strategies.”

Components of the definition

1. Strategic Information Systems Planning
2. Cooperative Inter-Organizational Relationships
3. Inter-Organizational Information Systems

This study is based on previous papers on these three subjects

Strategic Information Systems Planning

Critical issue for information systems executives for last 4 decades (Brancheau and Webherte, 1987; Newkirk et al., 2003)

Business \leftrightarrow IT alignment highlighted

Also strategic information systems impact on firm's strategies acknowledged

With the advent of new technologies (e.g. Internet), alignment is perhaps more significant and difficult than ever (Salmela and Spil, 2002)

SISP Claims

SISP-1: Selection of planning approach should be done according to qualities of business environment and management culture of the target network. Some approaches provide better results in certain environments and cultures, but overall most successful approach seems to be learning-organizational-evolutionary approach.

SISP-2: IT and Business alignment is perhaps the most discussed issue of successful SISP. Balanced approach to planning should be applied, as IT provides little value in itself. The real benefits lie in business change that IT enables.

Cooperative Inter-Organizational Relationships

Increased competition forces companies to
Specialization (core competencies)
Outsourcing (non-core competencies)

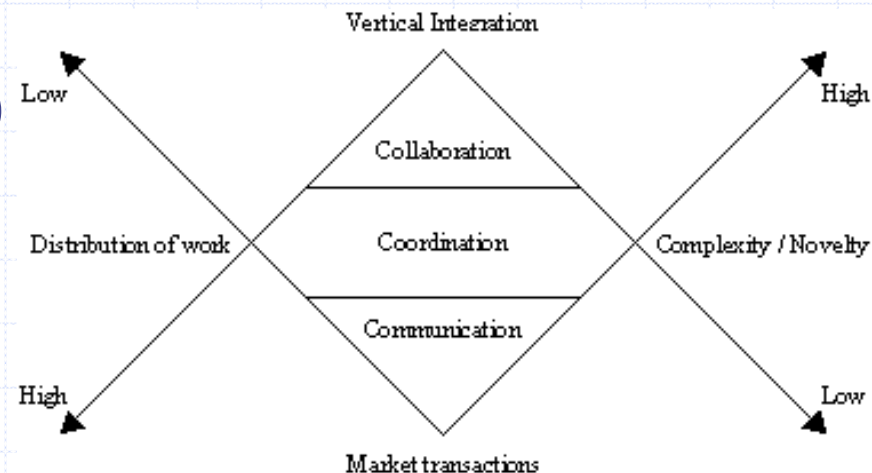
This development causes dependencies
between trading partners

Requisite for cooperation

Operational (communication)

Tactical (coordination)

Strategic (collaboration)



Collaborative IOR claims

CBN-1: It is worthwhile to divide the entire business network to smaller sub-networks with special development focus. It is not reasonable to draw all business partners with highly different development interests beside the same table but to select participant with similar development challenges and interests.

CBN-2: Many new inter-organizational business models are only manageable because of developments in ICT. As IOSs enable new organizational and inter-organizational forms, IT-strategy should be planned parallel with network planning to find out possibilities and opportunities that technology can offer.

Inter-Organizational Information Systems

Role of IT changing

from a competition weapon to a cooperation enabler
(Hong, 2002)

Traditional IS was easier to adopt because (Suomi, 1988)

One organization can always fully control the
information system

The cost caused by the information system can
always be addressed to one single organization,
so can the benefits they create

IOS claims

1/3

IOS-1: Changes in business environment should be analyzed to be able to evaluate competitive factors and to identify possible threats and opportunities.

IOS-2: Available technological solutions should be compared to existing IT-infrastructure to identify weaknesses and strengths of current IT-infrastructure (e.g. heterogeneity of IT-platforms) and threats and opportunities of available technologies.

IOS claims

2/3

IOS-3: The expected benefits should be planned before hand, as it is difficult to reach goals that are not identified. IOSs are never an answer in themselves; they are at best a catalyst and an enabler.

IOS-4: Establishing relationships on trust and mutual understanding is even more important in inter-organizational context that in intra-organizational, as formal authority might not exist to bring the changes.

IOS claims

3/3

IOS-5: Different organizations and different participants might have different levels of IT-skills, knowledge and maturity to use IT. Planning process should be organized as learning process so that those with weaker skills and lesser knowledge on IT-issues can learn to understand the benefits and challenges of cooperative systems.

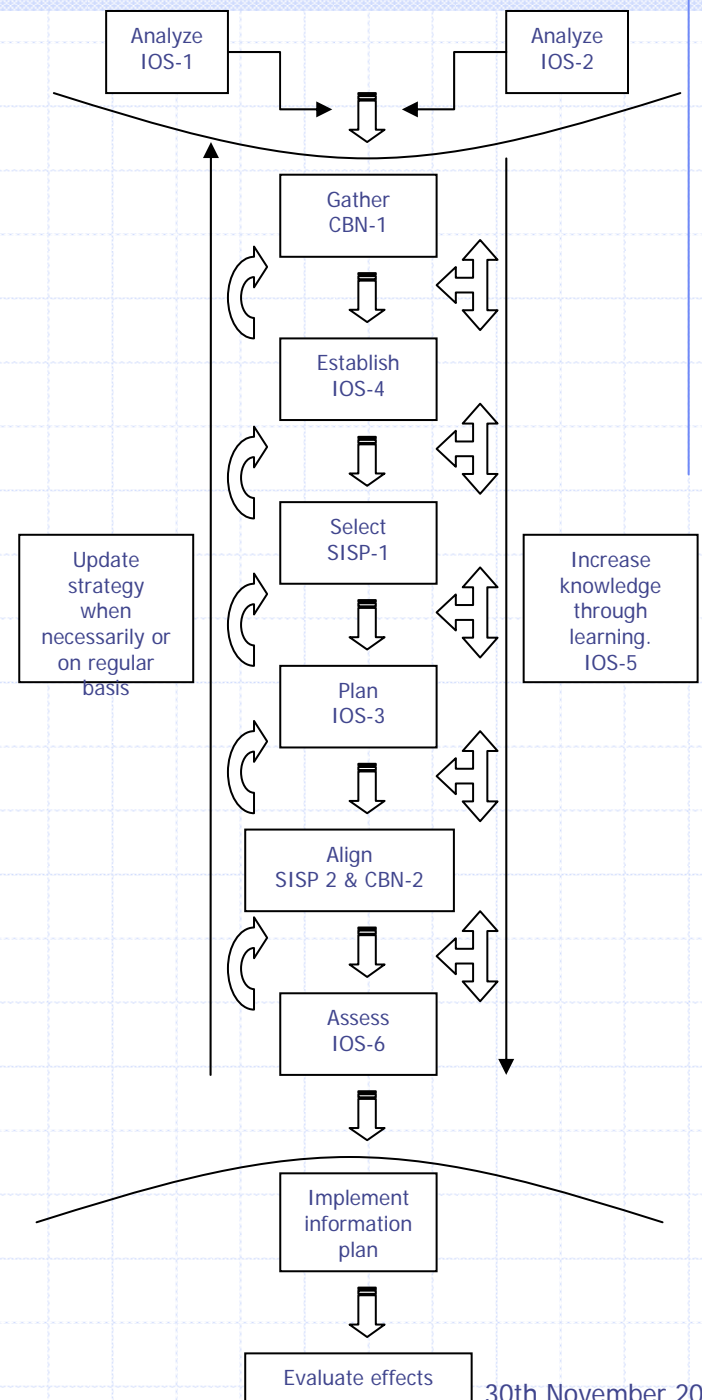
IOS-6: Assessing risks and potential sources of failure is important before proceeding with implementation. If there are substantial risks in sight companies might not want to proceed, unless there are compelling pressures or enormous opportunities.

Meta-Method

Doesn't take a stand on
used method

Only suggests that these
kind of issues should
be considered

"Theory of SISP in IOR"



Evaluation the theory against the best competitor

Finnegan et al. (2003) developed guidelines for "Systems Planning in Business-to-Business Electronic Commerce Environments".

Nine general guidelines:

- F-1a. Guidelines need to enable individual organizations to investigate their **positions** in the network, and **determine their role** in the planning environments.
- F-1b. Facilitate design of IOS planning process for **individual organizations, and at a network level**, appropriate for their role in the planning environment.
- F-2. **Delineate inter-organizational roles** and assigning people to these consistent with planning environment.
- F-3. Co-ordinate network participants in an effort to **match business requirements with IOS infrastructure** consistent with appropriate planning environments.
- F-4a. Determine the **effects of IOS on organizational activity** that recognizes the dependence of such considerations on IOS planning environments.
- F-4b. Proactively determine **organizational changes** that facilitate the considerations of external parties.
- F-4c. Aid inter-organizational planning for **structural integration** recognizing the substantive issue as being beyond systems and technology.
- F-5a. Cover **data planning** issues of ownership, sharing methods and editing rights.
- F-5b. Facilitate planning for systems and technology that is **inclusive of all stakeholder needs**. These should consider communication standards and protocols as well as integration with internal systems.

Evaluation summary

Finnegan et al.'s [13] guidelines:

- ◆ F-1a took wrong approach
- ◆ F-1b and F-2 were weaker than SISP-1 and IOS-4.
- ◆ Proposal F-3 was directly comparable
- ◆ Proposals F-4a-b are missing from new meta-method.
- ◆ Proposal F-4c, on the other hand, is somewhat similar to SISP-1 and CBN-2.
- ◆ Proposal F-5a was though to be implicitly but not explicitly covered in SISP-2 and CBN-2. This is strength of Finnegan et al.'s [13] paper.
- ◆ Proposal F-5b was seen partly weaker, partly similar to IOS-4.
- ◆ However, Finnegan et al. [13] did not consider several issues presented in this paper: IOS-1, IOS-2, IOS-3, IOS-5, IOS-6, SISP-1, and CBN-1.

Conclusions

The meta-method presented in this paper is more extensive in whole than the best challenger.

Selected approach to draw conclusions from three related subjects was a fruitful approach to provide fresh understanding of phenomenon and contributed the body of literature.

More research is needed to study the relationship between inter-organizational and organizational level issues.

The end.

Thank you for your attention!

Questions, comments?

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