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Ook Lee
Claremont Graduate School

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The EMIS(Evolution Model for Information Management Strategy)---A SPIS(Strategic Planning of Information Systems) Methodology as BPR(Business Process Reengineering) Facilitator

Ook Lee
Department of Information Science
The Claremont Graduate School
Claremont, California 91711 USA

1. Introduction.

Our argument is based on the inference that a certain type of SPIS(Strategic Planning of Information Systems) activity will let the organization which adopts this type of SPIS have the very desirable features regarding IT(Information Technology) and IT-related aspects of the organization when it comes to any future IT-enabled BPR(Business Process Reengineering) in the organization. There are pre-existing conditions of the organization that can facilitate the success of BPR projects in the organization and a certain type of SPIS activity can nurture the growth of these conditions in the organization. In other words, SPIS can have an overwhelming influence on these precondition factors.

2. Definition of SPIS(Strategic Planning of Information Systems).

The SPIS(Strategic Planning of Information Systems) can be defined in several ways according to different authors. In general, SPIS means a planning activity regarding information systems of the organization which produces a long term plan that may create information systems which can give a competitive advantage to the organization. To rephrase, SPIS also means strategic information systems planning where the strategic information systems are defined as the information systems which are designed to bring competitive advantage or have resulted in a competitive edge for the organization.

Nowadays more and more scholars think that the definition of strategic information systems planning should include a wider concept that expands the previous emphasis on information systems only. Lederer and Sethi define it as "the process of deciding the objectives for organizational computing and identifying the potential computer applications which the organization should implement"(Lederer and Sethi, 1988). This definition adds to the aspects of strategic information systems the objective of aligning systems planning to business goals.

In other words, SPIS should consider the integration and alignment of systems planning with business aspects of the organization. The need for integration has been widely known and accepted, but in practice, management involvement in SPIS is not as active as might be expected. There are different methodologies of SPIS of which some are aimed at achieving this objective and some aren't. Top-down and bottom-Up methods of SPIS were used to link IT development to business strategies. But these methods are not incorporating an interactive organizational process which can result in the strategic plan which accomplishes the integration and alignment with business objectives best.

Furthermore, some researcher like Reponen advocates a new definition of SPIS based on the idea of incorporating an interactive organizational process. According to Reponen(Reponen, 1993b), Strategic planning of information systems can be an interactive learning process for the creation of a strategy for business process redesign and development incorporating information technology. The strategy should present plans for information systems design, implementation and operation for this purpose.

Notice that Reponen advocates the synergy between the BPR(Business Process Redesign) and SPIS. In other words, Reponen implicitly argues that strategic planning activity of information systems should be in

parallel with business process redesign activity, which can result in the strategic plan that takes the best account of business aspects.

Different methodologies of SPIS produce different types of strategic plans which if implemented, can be either facilitative to BPR projects which may utilize the information systems that is created as the result of SPIS, or not facilitative to BPR projects at all.

3. The EMIS(Evolution Model for Information Management Strategy).

a) Definition of EMIS.

As a SPIS methodology that can facilitate BPR, we now present a SPIS methodology called the EMIS(Evolution Model for Information Management Strategy) developed by Reponen(Reponen, 1993a; Reponen, 1993b). The interactive learning and integration of background knowledge of participants are the major characteristics of the EMIS. The participants are essentially cross functional team members who are from all corridors of the organization including senior management, line management, EDP management, developers, users, and facilitators. The major difference between the cross-functional teams of BPR and EMIS is the use of facilitators on EMIS. In the EMIS, the facilitators are the researchers who did the action research by actively participating in the team activity as facilitators. The facilitator had to teach the concept of the EMIS and provide the expert knowledge on IS and lead people in the organization into the right direction during the process.

The reason that a usual BPR cross-functional team does not have outside facilitator is because IS people in the organization is presumed to provide expert knowledge on IS and it does not have to follow specific guidelines for its operation unlike the case with the EMIS. Therefore the existence of facilitator in the cross-functional team of EMIS is a technical consideration to conduct the research, not a genuine requirement for EMIS practice. In short, the cross-functional team of EMIS is identical to the one of BPR.

b) The Characteristics of EMIS as a BPR facilitator.

The EMIS not only produces a strategic plan that can implement information systems which are facilitative to any future BPR projects, but also influences positively the factors that are important for the success of the BPR projects as a byproduct of the EMIS activity. The evolutionary, learning and interactive nature of the EMIS activity does make changes in the organization which has gone through the experience of the EMIS activity. We will look at how the conditions that are important for BPR success defined by Bashein et al.(Bashein et al., 1994) can be affected by the result of the EMIS.

<The positive conditions that are affected by the EMIS>

(1) Senior management commitment and sponsorship.

: In the successful EMIS, even the senior management people participate and learn about IS, which naturally leads the increased commitment and sponsorship when it comes to an IT-enabled BPR project since the senior management people internalize the lessons of the EMIS experience of which is benefit of IT-enabled organizational change.

(2) Realistic expectations.

: In the successful EMIS, the participants who are not IS people will learn about the actual nature of information technology that they will try to implement, i.e., they become to have more realistic expectations of IT's power compared to the situation in which there is no such learning experience. Therefore any future IT-enabled BPR activity can be benefited by the fact that people in the organization do not have unrealistic expectation of IT's power.

(3) Empowered and collaborative workers.

: In the successful EMIS, workers who will be the users of future information systems actively participate in the whole process of decision making, which means the workers are empowered to have their own inputs into the future information systems development. Workers also learn to work in a collaborative style by participating cross-functional team activities during the EMIS period. This experience can be duplicated when a BPR project is initiated and the cross-functional team needs empowered and collaborative workers.

(4) Strategic context of growth and expansion.

: In the successful EMIS, the resulting plan of information systems is indicative of the strategic orientation of the organization. In other words, if the organization successfully goes through the EMIS activity, the organization must be thinking its future in terms of growth and expansion because if it is not the case, the EMIS activity can not be finished successfully.

(5) Shared Vision.

: In the successful EMIS, the interaction and learning among participants who are from all corridors of the organization make the participants have a shared vision for the organization. This will help a future BPR project that needs an environment where people have the shared vision in terms of not only IT but also business strategies.

(6) Sound Management Processes.

: In the successful EMIS, the evolutionary process can result in the unexpected finding of managerial problems; this thinking process can enable business people to discover new ideas for their own sphere of responsibility. In other words, the EMIS experience can result in the correction or improvement of management processes which can become a facilitating factor to any future BPR project which needs sound management processes.

<The negative preconditions that are affected by the EMIS>

(1) A "do it to me" attitude.

: In the successful EMIS, the active involvement in the process is very much encouraged to the point that it can be considered as almost an requirement. Therefore a successful EMIS experience can eliminate "do it to me" attitude in terms of not only IT but also business strategies. It is obvious that a future BPR project will benefit from this.

(2) Narrow technical focus.

: In the successful EMIS, the strong reaction and learning helped the IS people who participate in the cross-functional team to broaden their scope from narrow technical focus to wider whole-organization-oriented focus. Once the IS people eliminate the narrow technical view of IT, any future BPR projects which use the expertise of these IS people will be greatly benefited. And also the information systems that are to be implemented according to the resulting strategic plan must be facilitative to any future BPR project because the information systems are whole-organization-oriented, rather than IS-department-oriented.

(3) Animosity toward and by IS and human resources specialists.

: In the successful EMIS, the learning and interaction among all the participants who include IS and human resources specialists together will eliminate the animosity toward and by IS and human resources

specialists. By internalizing these lessons through the successful EMIS, the IS and human resources people will not be a problem when it comes to a future BPR project.

4. Conclusion.

We now realize that the EMIS can produce positive effect on the conditions that can be imperative for the success of a future BPR project by the very experience of going through the EMIS activity. In other words, Even though the implemented information system must be facilitative to any future BPR projects, it is also imposing a limitation on the BPR projects because only the BPR projects that utilize the implemented information systems can be benefited by this information system. On the other hand, the information systems that are implemented as the product of the successful EMIS must be the same information systems that the BPR project will eventually create due to the convergence between the EMIS and the BPR.

5. References.

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