

Spiral Management for E-Business

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Abstract: In this paper, we propose Spiral Management for E-business. It is saying that for E-business, the hierarchical type management or network type management will not be adopted enough, since the structure and governance of E-business will be organized by non-market and market forces. In General, it is saying that network type management is most adoptable for E-business, so many managements applied it for more productive but occur to face inter-operation gaps at decision phase in some case. At these case, the management use to fix with Ad-hoc management, not rational management. The concept of Spiral Management is rational combing with the network type management and the hierarchical type management for sustainable business.

Keywords: *Hierarchical type management, Network type management, Inter-management gaps,
Spiral management.*

1. Introduction

In actual business, E-business will be hindered by business practices, business traditions, local culture ,local regulations, and so on. Despite management for E-business activities need flexibility in business competitiveness, recently common perception is the network type management would better for E-business segments.

Point of view for governance of total business, in some case, not work well. Major reason for this issue, may not clear for management responsibility in making of many business decision. For this issue would be better Spiral management for E-business.

In this decade, many startup companies enter E-business with network type management that utilize for in-source and out-source, after the net-business boom, startups are failed in many E-business, although applied by network type management.

The concept of Spiral management is look to combing with network type management and hierarchical type management, this would be apply to sustainable business.

For sustainable business, very important to focus on linking business planning and management reviewing in effectively.

In this paper, we show some empirical management problems, and verify proposed management for resolution of E-business management problems. It is shown that using Spiral Management will be engage many

firms, and more solid enterprise activities and get reliabilities by many stakeholders.

2. Network type management spreading

In growth IT based business (E-business), business management style changed rapidly, because traditional management may not effective many portions of this segments. Introduction high performance information device (like PC) into many offices or/and workplace through out 1990s, state of art technologies in computer and communication are creating new business evolutions in this decade. Per introduction of Tele-video conferencing, collaborative system, group ware system and Network systems, converge foundation of new type workplace.

This new type workplace will be unrestrained by geography, time, and organizational boundaries, it will be a virtual workplace, where productivity, and collaboration will reach unprecedented new style.

Many organizations have downsized and there are continuing pressures to implement increasingly more effective organization structures.

While the new organizational structures may achieve gains in efficiency, distribute employees in organizationally, which makes it more difficult for those members to collaborate in effective.

Benefits of collaborative systems will bring to be more network and flat organizations to create teams whose members may no longer be located together, or may even include members from outside the organization.

Fortunately, this period of radical organizational change has been accompanied by an equally radical change in computer and telecommunications technology.

Virtual teams are groups of geographically and/or organizationally dispersed workers that are assembled using a combination of computer and telecommunication technology to accomplish an organization reshape as network organization.

Virtual teams provide additional benefits in that they also can be used to address evolving inter-organizational challenges that occur when organizations outsource some of their key process to more specialized firms.

By creating virtual teams, both within virtual organizations and within organization undergoing other forms of changing, firms can realize acceleration of teamwork and exploit the evolution in computer and telecommunications technology.

Although the new type organization faces a number of challenges in its competitive environment, the imperative for moving from traditional face-to-face teams to virtual teams derives primarily from five factors:

- Making agile business decision with leading edge computer and telecommunication technology.
- Increasing shift to network organizational structures.
- Increasing inter-organizational collaborations.
- Shift decision weight from Hierarchical to Network type management.
- Changes in workers' responsibilities (to lower levels).

The emergence of flat and network organization is largely a response to intensifying competitive environments brought about by increased global competition and recent advancements in both information and transportation technology.

Organizational flatness pushes decision authority to lower levels in organization, reducing the need for several

layers of management. With fewer layers of centralized, hierarchical management structure, organizations become increasingly characterized by structurally and geographically distributed human resources.

This kind of environment occasions the need to reconstitute the benefit of large, resource rich organization within the context of the new flattened organization. Although this segmentation enables more efficient management of each individual process, it often fails to provide an overarching structure by which these specialized organizations can compete within a large market.

These cooperation of organization become increasingly interdependent, with the success of each individual organization enhancing the success of the cooperative organizational system.

Refer Network type management’s features in Table1.”Comparison: Hierarchical type, Network type management”.

Network type management would be better for emerging market that need agility, deriving startups firm or/and leading edge technology base firm.

But this interdependency is deriving some management problem.

Table1. Comparison, Hierarchical type, Network type management

	Hierarchical type	Network type
Organization style	Layered, heavy	Flat, flexible
Normative basis	Employment relationship	Complementary strengths
Means of communication	Routines	Relational
Methods of resolution	Administrative	Norm of reciprocity
Degree of flexibility	Low	Middle
Amount of commitment Among the parties	Medium to high	Medium to high
Tone	Formal, bureaucratic	Open-ended, mutual benefits
Actor preferences	Dependent	Interdependent
Resource utilization	limited	Flexible
Job process	Reliable and rigid	Complexity
Decision	Slow	Agile

Source: W.W. Powell “neither Market nor Hierarchy: Network Forms of Organization” 1990,
Modified Jun/2003

3. Management issues in E-business

Network type management created to provide strategic responses to rapidly changing market conditions will operate in most fluid of all virtual environments.

Virtual organization may be implemented as response to one or a number of conditions detailed in preceding sections. In turn, these underlying reasons for the introduction of virtual teams should determine the configuration of individual, dictate their mission, and ultimately determine the type of technical system required and the requisite skills and orientation of the team and its members.

The following description of two types of team roles, while certainly not exhaustive, illustrates some of the range of the role and function of virtual team.

Just as in any team environment, managers will need to clearly establish expectations about the virtual team’s performance and criteria for assessing the team’s success. Because of the dispersion of team members, effective

supervision and control of the virtual team may appear problematic. However, the virtual team's rich communicative environment, along with the system's capacity for archiving data and communications, actually empowers considerably more need managerial monitoring than is possible in traditional environment.

Managers could, for example, actually view archived recordings of team meetings to assess member contribution and team progress.

Finally, the reporting and administrative relationship between the team and external manager or manager must be clearly established .

Again, because none of the team members will necessarily be located in same place as external management, clear schedules must be established of when the team will provide interim deliverables, and final products.

It is also critically important that managers clearly define the virtual team's role within the context of the organization's greater mission, including the limits of the team's scope and responsibility.

This will help the team to focus its efforts on activities that support the strategic direction of the firm.

Table2. Summery issues on network management

Item	Description
Total management	Complexity for inter-organization
Management review	Difficulty to management review
Business sustainability	Difficulty to consistency of business strategy
Inter-management gap	Difficulty Time to time mgmt. inter-organizations
Job responsibility	Uncertain job responsibility boundaries

Above table shows the issues and/or problems of network management in E-business, In general, E-business use many resource at inside organization and outside peoples, so may complexity of management because the communication came from many concerned peoples over inter-organization.

Any E-business case, it need management review at any phase, but in inter-organization peoples look loose at administrative viewpoint but only on contracting. About business sustainability, almost firms desire sustainable their business, but network management characterized as to focus intensify maximized human resource collaboration. Inter-management gap occur between working peoples in inter-organizations, examples in communication role, job process, firm's system flow and etc, working peoples feel different organization, these will be occur worker feel out of place. It is not smooth make job flows.

About job responsibility, fiat to the job in hierarchical type management, but in network type, by norm of reciprocity or on contracting , some case means unclear job responsibility.

Some case in network type management is altruism occurring.

4. Spiral Management

Spiral Management is combing management style, network type with hierarchical type management in E-business. Reciprocity is the basis of exchange in a network. Reciprocity is strengthened by long-term, secure, and stable relationship. Powell cites Axelrod's "shadow of the future"-cooperation in short-term is shaped by future expectation of mutual interests.

In E-business, not adaptive traditional management style, because not so flexible in information evolution Industries. Network build reliance over the long haul and create indebtedness among the workers.

The worker establish to network because of their complementary strengths but not permanent. Network are open and focus on workers and/or organizations on mutual benefits. This is more adaptive to small business or startup business because their organization not established. Network organization means act coordination oriented also network more flexible in specially non market environment.

Network management feature with equality, communication and reciprocity for open ended relationship, hierarchical management feature with long term relationship, down ward communications, clear boundaries, reliability for closed relationship

But some project will be failure by asymmetric information and/or some risk problem in network management.

Roots of cause are lack of inter-organization relationship activity and gaps management information in almost failure cases. If the management not acknowledges suspicious problems, project will be out of control, critical situation or to failure and go on way to absolution of project or company bankruptcy in worst case.

Prevent such kind of out of control or failure, must managerial review at phase to phase by higher level management in action like hierarchical management system for more project and/or management reliance.

We propose to combine Network Management with Hierarchical Management for dynamism, flexible and sustainable reliance in E-business.

This combing of management style calls Spiral management that relational, interdependence, reciprocity by network management and add responsibility, reliance by hierarchical management.

This will complement enforce to network management with review on business policy, mission and strategy.

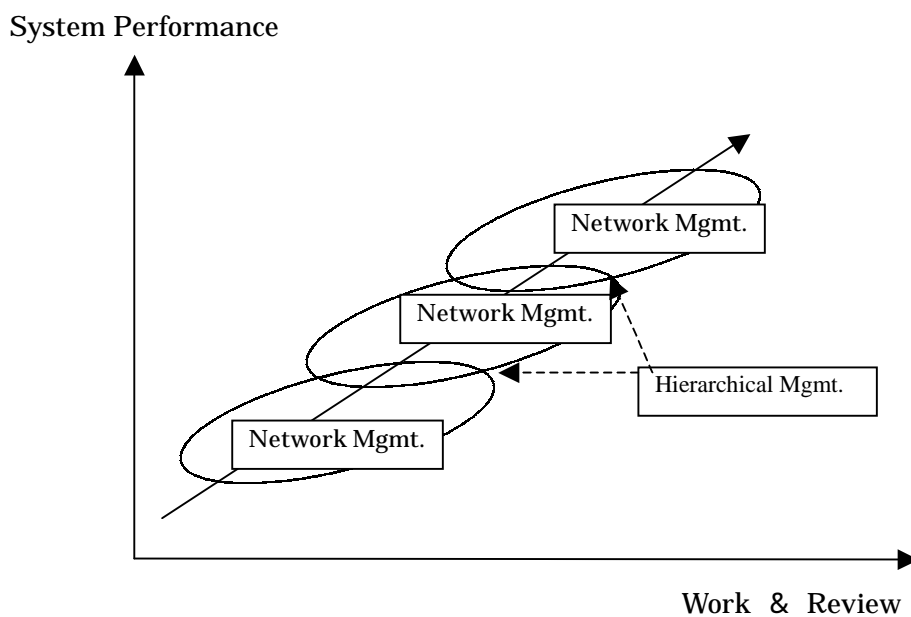


Fig-1 Spiral management

Refer to shown in Fig-1 Spiral management concept. This show combining concept that network management connect at management (project) phase in-out as “Management Review” by hierarchical management.

This enforce for demerits of network management that no management reliance and poor business sustainability.

In business, management need many decisions as total management (policy, strategy, priority, compromise..).

But, some times, network management will occur total management decisions issues in inter-management gaps. So far, real managements apply Ad-hoc solution for temporary, not rational management proposal in most case.

These will be cause management problems in most important business decision, worst case, firms will be go out bankruptcy.

For avoiding these severe problems occurring (well-balanced management), propose combing management which network management with Hierarchical management for management phase for rational job process.

If firms establish to stable in E-business, propose to use the spiral management.

5. Conclusion

In this paper we proposed the concept of the spiral management for E-business. Since new leading edge technology conduct competitive business world, may business operation into speed and agility, our proposed concept called the spiral management will provide a solution in the area of E-business. In resent years, said network management was best adapt in E-business, but in this paper, say network management is not perfect in management at point of review for continuing business execution. Therefore we propose “Spiral Management” into E-business for better managing to complement with demerits of network management.

Many firms which operate E-business manage with agile activities. And they apply network type management to their business, it is more adaptive them and one of important reason was no exist traditional management structure. It means they were almost startup E-business and they kept speed and agility.

Almost startup E-business in ‘90s, they no care to apply hierarchical management because they did not such traditional management experiences as many existing old business. In general, at emerging market, existing experience, existing sophisticated management, existing marketing skill are not effective, in startup business, very important items are business inspiration, creation, and collaborations.

In E-business, must collaborate with inter-organizations, reciprocity, mutual benefits among organization of inside and outside. For these, network management is better but perfect any operations of business.

We suggest that hierarchical management is still effective at some case, project review, strategy review and etc. Jarvenppa, Tiller and Kirsch descried “Death announcements and the reduced economic relevance of hierarchical organizations and long-term contracts of governance are premature”.

Network management is said more flexible than hierarchies. Networks build reliance over among organizations and establish stable relations but permanent.

Internet economy may have influence the business governance structures, and impact into legal, political, social, and technological. In E-business, these came up important review points. Network management is very flexible but a little free governance than hierarchical management, this will be keep dynamic in open ended collaboration, but occur demerit not so much reliable management. Our proposal “Spiral Management” must over this demerits for sustainable in E-business.

References

1. The Economist Newspaper Group, "Business and the Internet", IEEE Engineering Management Review Volume 27, Number 4, pp6-16, Winter 1999.
2. N. Venkatraman and John C. Henderson, "Real Strategies for Virtual Organizing", IEEE Engineering Management Review Volume 27, Number 4, pp26-38, Winter 1999, pp26-38.
3. David A. Nadler and Michael L. Tushman, The Organization of the Future, IEEE Engineering Management Review Volume 27, Number 4, pp96-107, Winter 1999.
4. Paul J. Kampas, "Road Map to the E-Revolution", IEEE Engineering Management Review Volume 29, Number 1, pp81-93, First Quarter 2001.
5. Sirkka Jarvenpaa, Emerson H. Tiller and Laurie J. Kirsch, "The Network Organization of the Future, Information Technology and the future enterprise", pp239-258, Prentice Hall.
6. W. W. Powell "Neither Market nor Hierarchy: Network Forms of Organization" in Research in Organization Behavior, Volume12 ,p300, 1990, JAI Press, ed. B. Staw