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Research Article

ASSESSING ALIGNMENT BETWEEN ORGANIZATION STRATEGIES AND INFORMATION TECHNOLOGY BASED ON THE LUFTMAN CONCEPTUAL MODEL IN COLLEGE OF ADMINISTRATIVE SCIENCE AND ECONOMIC AND COLLEGE OF ENGINEERING (COMPUTER), FERDOWSI UNIVERSITY OF MASHHAD

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ABSTRACT
Alignment between Information technology (IT) and organization businesses is one of the fundamental issues for IT managers and senior managers of any organization. This study, discusses the alignment assessment of IT strategy and businesses Strategy in Faculty of Economics and Administrative Sciences and Computer Engineering Department of Mashhad Ferdowsi University using improved Luftman Alignment Maturity Model. Statistical method is census. Instruments of study included The Luftman questionnaire. Assessing the importance of the organization alignment factors shows that factors governance, partnership and skills have the highest importance in the alignment of the organization in that order. Significance of these levels priorities were studied Using the dependent T test. This test showed that the governance Factors have priority just over the scope and architecture, communications and competency / value Factors. Partnership Factors only have priority over the competency / value factors and skills, communications and competency / value factors don't have any priority over their underlying factors. Evaluation of the studied organization alignment level shows that organization is in the second level of strategic alignment maturity which is called "committed process", that indicates organization is in the beginning of the alignment process. This level of Alignment maturity indicates that the strategic role of information technology in organizations hasn't institutionalized yet, but knowing the potential opportunities for alignment has begun. Finally, short-term and long-term strategies to improve alignment in the organization are presented.

Keywords: *Alignment, Strategy, Information Technology, Business*

INTRODUCTION
In today's economy, information technology is a vital tool for companies to achieve competitive advantages and innovations. The size of investment in this area has increased significantly over the past decade. But since the majority of investments in information technology, are not aligned with the business strategies and interests, they have become a source of conflict and cause of reduced performance and effectiveness. In fact, in recent years the field of information technology has grown in a sectorial form and less attention has been paid to its Enabling role in the field of businesses. Such an approach has put business and IT alignment at the top of the list of concerns of senior executives and despite the attention of managers to this issue in over the last 20 years, this goal is still far away (Manian, 2010). The need for applying Strategic plans in field of information technology becomes more apparent than ever due to extensive development of information technology and its influence in different levels of organization. These plans are being designed, developed and implemented in order to deal systematically with the issue of capital Investment and to achieving better results in the this field. Hence strategic use of Information technology has become the key factor for organizations to gain a competitive edge and align IT strategies with organizational goals. One of the key factors in this area is strategic planning. Today, Information

technology strategic planning is regarded as one of the most fundamental elements of strategic alignment and integration of businesses and information technology (Cumps *et al.,* 2009).

Importance of The alignment of the organization has been noted as a broad topic that directly affects the company's overall performance. It has been claimed the alignment is important as a necessity to assess the IT investment merits. That importance assessment shows the organizations how to connect Information technology with the dynamic business strategies and constantly evolving technologies. The benefits of Information technology development as a basis for competitive advantage are clear, if the organization is able to support functions of business (Johnson *et al.,* 2005).

In recent years, a large portion of the research and analysis is focused on the connection between organization's business and technology. The role of partnerships between business management and technology and the need of understanding business strategies will lead to the competitive use of information technology. Not only Organizations need change within the business but also lay the foundation for the organization as a result of information technology innovation (Luftman, 2000).

Given that use of information technology is relatively new issue in our country has many challenges in its progress, one of the most important issues that arise in this context is efficient and effective strategic planning for Information technology.

Information technology strategic planning should be aligned with the organization's comprehensive planning. In fact IT department and other organizational units should strive toward a common goal in organization (Rafi'ei and Amini, 2007).

In fact by having required capabilities to proper establishment, objectives such as better support the Organizational strategies and goals, improving the system integrity, Effectively using IT to gain competitive advantage, Effective prioritization of information systems development projects, improving the support for senior management to manage Issues related to the information systems, Better investment decisions in the field of information systems, As well as improving the Allocation of information resources will be realized (Abdalvand *et al.,* 2013).

Due to the increasing growth of information technology, considerable importance of IT strategic planning and Also significant investment of organizations and local companies in this field, organizational commitment and rapid changes that occur on the external environment, study and identification of effective Factors in this field and evaluation of organization for tactical embrace of these plans seem necessary. This is the subject that to be considered in organizational assessment for process of IT and business strategic alignment.

History

Manian *et al.,* (2009) in an article entitled "A conceptual model for strategic alignment of IT and business" concluded that level of organization readiness for IT and business strategic alignment is between second level (committed) of and third level (established focus). So, after a meeting with the managers of information technology, the second level was determined as the organization's alignment level of readiness.

Amid and Mirzade (2009) in an article entitled "Alignment of information technology with business" studied the IT and business alignment according to Henderson & Venkatraman model. Attention to alignment of IT with business can considerably affect the competitiveness and business efficiency. The purpose of these models on this paper, is applying information technology to transform the organization into a successful one and one to be sustained in the future. Ali and Akbar (2006) in an article entitled "assessing alignment of organization IT strategy and business strategy" examined the alignment of IT strategy with business using Luftman alignment maturity model. Alignment Factors importance assessment results show that the partnership factors and the governance factor have the highest level of importance, and competency / value Factors and skills Factors have the lowest level of important in the studied organizations. In 2008 a research carried out by Shamekh entitled "Business-IT Strategic Alignment Concept in Theory and Practice ". This paper describes the area of territory, competency, management, and Governance of IT strategy and on next step describes the territory, competency, management, and Governance of business strategy, and finally, to address this gap describes the

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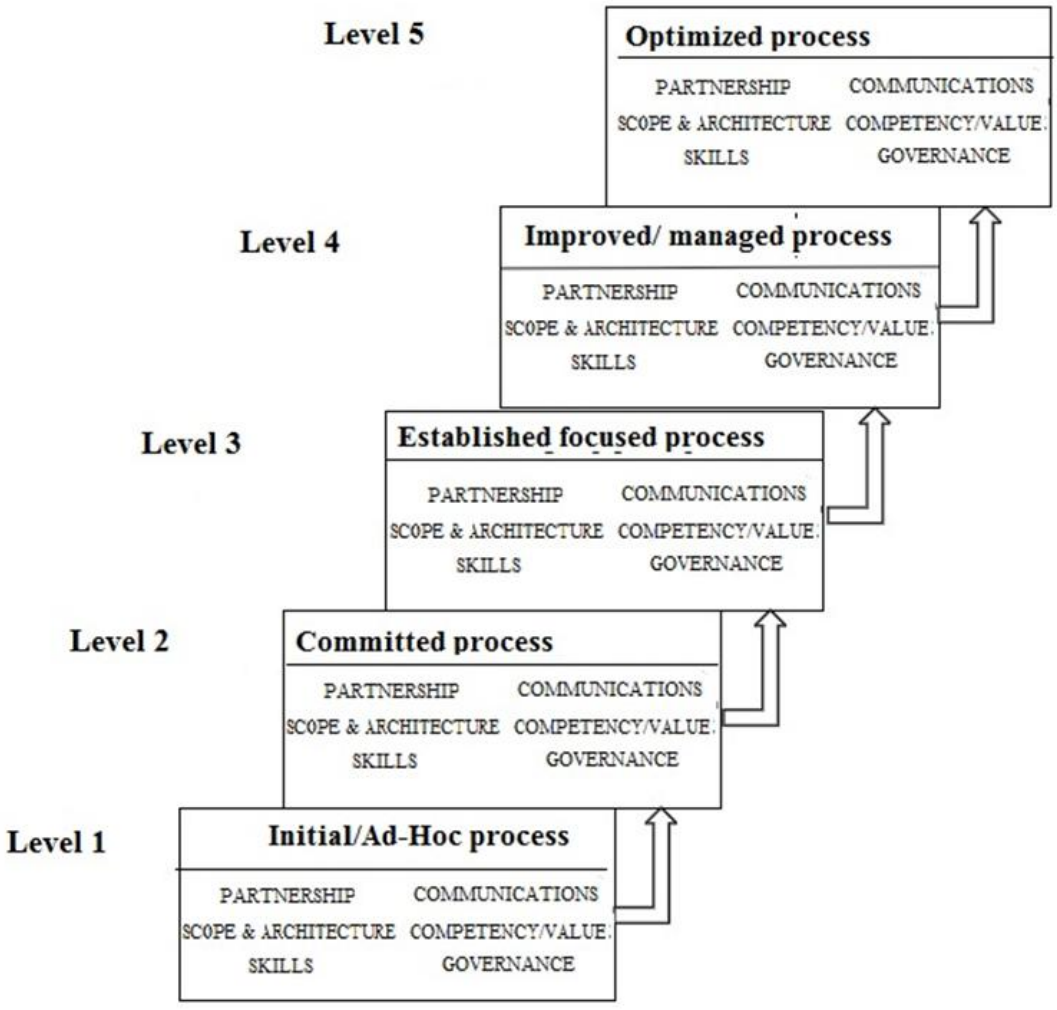
Henderson & Venkatraman model for creating alignment between the organization and information technology strategy.

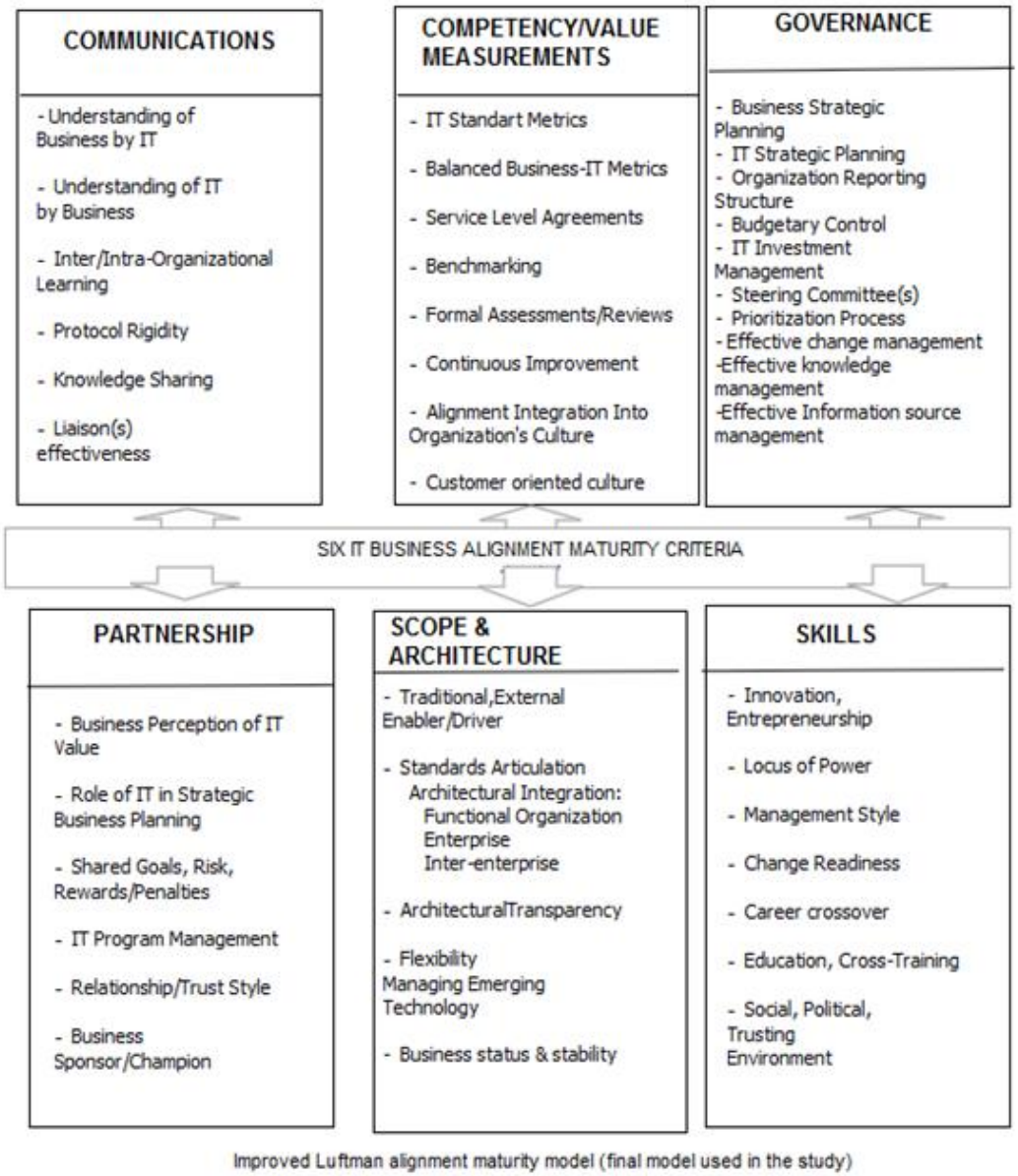
In 2003 Luftman published an article entitled"Assessing Business IT- Alignment". Based on Luftman Alignment Maturity there is a total 5 level of the maturity. To measure these levels 6 criteria were examined which included Governance, Competency/Value, Communications, Skills, Scope & Architecture, and Partnership. Luftman Study showed that organizations will not be able to take any action toward achieving the alignment. Arafat in 2007 carried out a research under the title "strategic alignment between IT and business strategy" to determine whether the adopted strategy, communications, common field domain, the partnership and involvement, common culture, and mutual trust and Understanding affects the alignment of strategy. Studies carried out on the two companies operating in different Industrial environment. In this study it was established that the partnership and involvement, Mutual trust and understanding and common knowledge domain have direct effect on strategic alignment.

The Research Model

Luftman improved alignment maturity model is used as the final model in this research as a systematic framework of organization's IT and business strategy alignment factors to measure the alignment in the organization.



five levels of strategic alignment maturity
(Cumps, 2009, 117)



Improved Luftman alignment maturity model (final model used in the study)

(Bayzidnejad & co., 2012, 2)

Five Levels Model Descriptions

Level 1 – Nitial/Ad Hoc Process

Organizations that are In this level have the of lowest IT and Business alignment maturity. For these organizations having such circumstances, achieving an aligned IT business strategy maturity is impossible.

Level 2 – Committed Process

Organizations that are in this alignment maturity level are at the beginning of the alignment process. Achieving the alignment for organizations in this level is difficult Due to business and IT limited knowledge of organizational applications.

Level 3 – Established Focused Process

Organizations that are in this level of alignment Move toward the focus on strategic alignment maturity. This level of alignment is focused on guidance of management and governance, processes and

communications toward business objectives. Organizations that are in this level use planned and managed methods in information systems for developing business strategies.

Level 4 – Improved/Managed Process

Organizations that are in this level have a management strategic alignment maturity. This maturity level of strategic alignment, offers effective management and governance and services which reinforce the concept of IT as the center of value. IT as an asset has influenced the organization and the focus of application systems is strengthening and improving business processes to create a sustainable competitive advantage. Organizations that are in the level of alignment, is considering IT as an innovative strategic contributor in their success.

Level 5 – Optimized Process

Organizations that are in this level have a completely optimized strategic alignment maturity. Stable management and governance process integrates the strategic planning process with strategic business processes. IT and its large scale influence involve the whole range of the value chain of customers and suppliers (Luftman, 2007).

The Six Strategic Alignment Maturity Criteria Descriptions

1. Communications

Effective exchange of ideas and a clear understanding of what it takes to ensure successful strategies are high on the list of enablers to alignment. Too often business sector have little knowledge of the IT and Not aware of its values and abilities. Given the dynamic environment in which most organizations find themselves, ensuring ongoing knowledge sharing across organizations is one of the most important factors. There must be a connection between IT and business sectors so that it facilitates sharing the knowledge and opinions.

2. Competency/Value Measurement

Too many times IT organizations demonstrate their value to the business in terms that the business cannot understand. Business and IT metrics and standards of value are different. IT phrases and expressions must be presented in a format that is easy to understand and engage for business.

Levels of IT services shall be expressed as way to demonstrate the commitment of IT to the organization business. IT department service levels must be expressed in terms that the organization business finds them understandable and acceptable.

This criterion is generally used for two purposes:

1- Understanding and identifying factors that reduce this criterion.

2- What should be learned to constantly improve the organizational environment.

3. Governance

IT resource allocation and IT decision making are important factors in the strategic alignment. IT managers should be involved in strategic business planning and should enjoy appropriate authorities in the field of organization's IT sector. However, these decisions should be based on the priorities of the organization's business.

4. Partnership

Having a close relationship between IT and business is one of the most important criterions for strategic alignment. IT department should have a decisive role in the formulation of business strategies. To reach alignment maturity, other factors such as Participation of other sectors in the formulation of business strategies, Trust and honesty between participants, Ensuring availability of support for organization's IT activities, and shared risks and rewards of IT activities are vital. Participation must be such that IT can stimulate and cause changes in the organization's business processes and strategies. This requires a proper business plan in such a way that the CIO and CEO achieve a common and defined vision.

5. Scope and Architecture

This criterion is used to assess the maturity of the organization's IT strategic alignment and is used to determine the extent of IT organization performance in the following categories:

- Conversion from the back office to the front office (go beyond the back office and the front office of the organization).

- Assume a role supporting a flexible infrastructure that is transparent to all business partners and customers.
- Evaluate and apply emerging technologies effectively.
- Enable or drive business processes and strategies as a true standard.
- Provide solutions customizable to customer needs.

6. Skills

These criteria are all issues relating to human resources. Issues such as training, salary, performance feedback, job opportunities, etc. are some of the factors that shape organizations social and cultural environment. Another issue which is examined in the context of this criterion is that, given the organization's dynamic environment, is organization ready to change? Does the staff have a sense of responsibility and commitment to innovation in business processes? Do the staff and organization as a whole quickly use and learn from experience? Has organizations provided a foundation for implantation and application of innovative ideas and entrepreneurial mentality? (Silvius, 2009).

Hypothesis

1."Governance" factors have higher priority over other factors in alignment.
2."Partnership" factors have higher priority over other factors in alignment.
3."Skills" factors have higher priority over other factors in alignment.
4."Communications" factors have higher priority over other factors in alignment.
5."Competency/Value" factors have higher priority over other factors in alignment.

MATERIALS AND METHODS

Research Method

This study is descriptive in nature and has practical objectives. Business managers and IT managers in the organization were considered as statistical population.

Thus, the statistical population of the study consisted of Administration and computer Professors (IT professionals) at Ferdowsi University involving 40 people.

Due to the limited number of this statistical population the census was conducted from all identified experts, and there were no sampling.

Therefore, all of the questionnaires were distributed and 90% of questionnaires were returned completed. In this study, two methods are used to collect information which included library research and field study or survey.

Independent variables included: Communications, Competency/Value, Governance, Partnership, Scope and Architecture, and Skills and dependent variable included: Alignment.

The Research questionnaire is to assess the alignment of organization’s business and IT strategy.

Luftman has designed a questionnaire containing 40 questions in 5 item Likert scale to measure the alignment.

In which the questioned have option to assign one of the “very low”, “low”, “medium”, “high”, “higher” answers to any question.

This questionnaire is a standard one and has been used in several researches which is indicating acceptable level of its apparent validity.

But to be sure, supervisor and advisor professors have been consulted about this issue and they confirmed the validity of the questionnaire.

To assess the questionnaire reliability, Cronbach's alpha value has calculated and value 0.945 is obtained. Since Cronbach's alpha value is greater than 0.9, it indicates the high reliability of the questionnaire.

To analyze the data, dependent t-tests were performed using SPSS software.

RESULTS AND DISCUSSION

Results

Table 1: Results of paired samples

Paired samples test for means difference significance								
Sig. (2-tailed)	**degrees of freedom**	**t**	**Paired differences 95% Confidence interval of difference**		**Std. deviation Error Mean**	**standard deviation**	**mean**	
			up	**Down**				
0.830	29	0.216	0.1659	-0.1342	0.07337	0.40185	0.0159	Communications - Competency/Value Pair 1
0.034	29	-2.228	-0.0140	-0.3267	0.07646	0.41878	-0.1704	Communications - Governance Pair 2
0.100	29	-1.697	0.0308	-0.3308	0.08839	0.48414	-0.1500	Communications - Partnership Pair 3
0.872	29	0.163	0.2415	-0.2059	0.10939	0.59915	0.0178	Communications - Scope and Architecture Pair 4
0.348	29	-0.954	0.1179	-0.3243	0.10810	0.59210	-0.1032	Communications - Skills Pair 5
0.011	29	-2.717	-0.0460	-0.3264	0.06855	0.37546	-0.1862	Competency/Value - Governance Pair 6
0.035	29	-2.208	-0.0122	-0.3195	0.07511	0.41142	-0.1659	Competency/Value - Partnership Pair 7
0.982	29	0.023	0.1714	-0.1676	0.08289	0.45399	0.0019	Competency/Value - Scope and Architecture Pair 8
0.160	29	-1.443	0.0497	-0.2878	0.08250	0.45188	-0.1190	Competency/Value - Skills Pair 9
0.836	29	0.209	0.2198	-0.1790	0.09749	0.53396	0.0204	Governance - Partnership Pair 10
0.041	29	2.139	0.3680	0.0083	0.08795	0.48172	0.1881	Governance - Scope and Architecture Pair 11
0.472	29	0.728	0.2559	-0.1215	0.09228	0.50543	0.0672	Governance - Skills Pair 12
0.129	29	1.561	0.3876	-0.0520	0.10747	0.58862	0.1678	Partnership - Scope and Architecture Pair 13
0.622	29	0.498	0.2393	-0.1456	0.09409	0.51536	0.0468	Partnership - Skills Pair 14
0.236	29	-1.211	0.0833	-0.3252	0.09987	0.54700	-0.1210	Scope and Architecture - Skills Pair 15

Management and Practices of Authority Hypothesis

H_0: Factors of "Management and Practices of Authority" do not encompass higher priority than other factors in an alignment.

H_1: Factors of "Management and Practices of Authority" encompass higher priority than any other factor in an alignment.

For the assessment of this Hypothesis, we should examine the following sub-hypotheses:

H_0: Factors of "Management and Practices of Authority"have not higher priority than "partnership" factors in alignment.
H_1: "Factors of "Management and Practices of Authority"have higher priority than "partnership" factors in alignment.
As we can see sig (2-tailed) of "Management and Practices of Authority " and "Partnership" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Management and Practices of Authority" and "Partnership" factors is not significant. Therefore, this Hypothesis is not confirmed.
H_0: Factors of "Management and Practices of Authority"have not higher priority than "Scope and Architecture" factors in alignment.
H_1: Factors of "Management and Practices of Authority"have higher priority than "Scope and Architecture" factors in alignment.
As we can see sig (2-tailed) of "Management and Practices of Authority" and "Scope and Architecture" factors is lesser than 0.05. In this case we can say that the difference of circumstances between the "Management and Practices of Authority" and "Scope and Architecture" factors is significant. Therefore, this Hypothesis is confirmed.
H_0: Factors of "Management and Practices of Authority"have not higher priority than "Skills" factors in alignment.
H_1: Factors of "Management and Practices of Authority"have higher priority than "Skills" factors in alignment.
As we can see sig (2-tailed) of "Management and Practices of Authority" and "Skills" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Management and Practices of Authority" and "Skills" factors is not significant. Therefore, this Hypothesis is not confirmed.
H_0: Factors of "Management and Practices of Authority"have not higher priority than "Communications" factors in alignment.
H_1: Factors of "Management and Practices of Authority"have higher priority than "Communications" factors in alignment.
As we can see sig (2-tailed) of "Management and Practices of Authority" and "Communications" factors is lesser than 0.05. In this case we can say that the difference of circumstances between the "Management and Practices of Authority" and "Communications" factors is significant. Therefore, this Hypothesis is confirmed.
H_0: Factors of "Management and Practices of Authority"have not higher priority than "Competency/Value" factors in alignment.
H_1: Factors of "Management and Practices of Authority"have higher priority than "Competency/Value" factors in alignment.
As we can see sig (2-tailed) of "Management and Practices of Authority" and "Competency/Value" factors is lesser than 0.05. In this case we can say that the difference of circumstances between the "Management and Practices of Authority" and "Competency/Value" factors is significant. Therefore, this Hypothesis is confirmed.
In conclusion we can say that the Management and Practices of Authority factors are not absolutely higher than other factors, and this priority is Management and Practices of Authority observed in some factors, so the first hypothesis is not confirmed one hundred percent.

Partnership Hypothesis

H_0: Factors of "Partnership" do not encompass higher priority than other factors in an alignment.

H_1: Factors of "Partnership" encompass higher priority than other factors in an alignment.

For the assessment of this Hypothesis, we should examine the following sub-hypotheses:

H_0: Factors of "Partnership" have not higher priority than "Competency/Value" factors in alignment.

H_1: Factors of "Partnership" have higher priority than "Competency/Value" factors in alignment

As we can see sig (2-tailed) of "Partnership" and "Competency/Value" factors is lesser than 0.05. In this case we can say that the difference of circumstances between the "Partnership" and "Competency/Value" factors is significant. Therefore, this Hypothesis is confirmed.

H_0: Factors of "Partnership" have not higher priority than "Scope and Architecture" factors in alignment.

H_1: Factors of "Partnership" have higher priority than "Scope and Architecture" factors in alignment.

As we can see sig (2-tailed) of "Partnership" and "Scope and Architecture" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Partnership" and "Scope and Architecture" factors is not significant. Therefore, this Hypothesis is not confirmed.

H_0: Factors of "Partnership" have not higher priority than "Communications" factors in alignment.

H_1: Factors of "Partnership" have higher priority than "Communications" factors in alignment.

As we can see sig (2-tailed) of "Partnership" and "Communications" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Partnership" and "Communications" factors is not significant. Therefore, this Hypothesis is not confirmed.

H_0: Factors of "Partnership" have not higher priority than "Skills" factors in alignment.

H_1: Factors of "Partnership" have higher priority than "Skills" factors in alignment.

As we can see sig (2-tailed) of "Partnership" and "Skills" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Partnership" and "Skills" factors is no significant. Therefore, this Hypothesis is not confirmed.

In conclusion we can say that the Partnership factors are not absolutely higher than other factors, and this priority is observed in some factors, so the second hypothesis is not confirmed one hundred percent.

Skills Hypothesis

H_0: Factors of "Skills" do not encompass higher priority than other factors in an alignment.

H_1: Factors of "Skills" encompass higher priority than other factors in an alignment.

For the assessment of this Hypothesis, we should examine the following sub-hypotheses:

H_0: Factors of "Skills" have not higher priority than "Competency/Value" factors in alignment.

H_1: Factors of "Skills" have higher priority than "Competency/Value" factors in alignment.

As we can see sig (2-tailed) of "Skills" and "Competency/Value" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Skills" and "Competency/Value" factors is not significant. Therefore, this Hypothesis is not confirmed.

H_0: Factors of "Skills" have not higher priority than "Communications" factors in alignment.

H_1: Factors of "Skills" have higher priority than "Communications" factors in alignment.

As we can see sig (2-tailed) of "Skills" and "Communications" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Skills" and "Communications" factors is not significant. Therefore, this Hypothesis is not confirmed.

H_0: Factors of "Skills" have not higher priority than "Scope and Architecture" factors in alignment.

H_1: Factors of "Skills" have higher priority than "Scope and Architecture" factors in alignment.

As we can see sig (2-tailed) of "Skills" and "Scope and Architecture" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Skills" and "Scope and Architecture" factors is not significant. Therefore, this Hypothesis is not confirmed.

In conclusion we can say that the Skills factors are not absolutely higher than other factors, and this priority is observed in some factors, so the third hypothesis is not confirmed one hundred percent.

Communications Hypothesis

H_0: Factors of "Communications" do not encompass higher priority than other factors in an alignment.

H_1: Factors of "Communications" encompass higher priority than other factors in an alignment.

For the assessment of this Hypothesis, we should examine the following sub-hypotheses:

H_0: Factors of "Communications" have not higher priority than "Competency/Value" factors in alignment.
H_1: Factors of "Communications" have higher priority than "Competency/Value" factors in alignment.
As we can see sig (2-tailed) of "Communications" and "Competency/Value" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Communications" and "Competency/Value" factors is not significant. Therefore, this Hypothesis is not confirmed.
H_0: Factors of "Communications" have not higher priority than "Scope and Architecture" factors in alignment.
H_1: Factors of "Communications" have higher priority than "Scope and Architecture" factors in alignment.
As we can see sig (2-tailed) of "Communications" and "Scope and Architecture" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Communications" and "Scope and Architecture" factors is not significant. Therefore, this Hypothesis is not confirmed.
In conclusion we can say that the Communications factors are not absolutely higher than other factors, and this priority is observed in some factors, so the fourth hypothesis is not confirmed one hundred percent.

Competency/Value Hypothesis

H_0: Factors of "Competency/Value" do not encompass higher priority than other factors in an alignment.
H_1: Factors of "Competency/Value" encompass higher priority than other factors in an alignment.
For the assessment of this Hypothesis, we should examine the following sub-hypothesis:
H_0: Factors of "Competency/Value" have not higher priority than "Scope and Architecture" factors in alignment.
H_1: Factors of "Competency/Value" have higher priority than "Scope and Architecture" factors in alignment.
As we can see sig (2-tailed) of "Competency/Value" and "Scope and Architecture" factors is greater than 0.05. In this case we can say that the difference of circumstances between the "Competency/Value" and "Scope and Architecture" factors is not significant. Therefore, this Hypothesis is not confirmed.
In conclusion we can say that the Partnership factors are not higher than Scope and Architecture factors, so the fifth hypothesis is not confirmed.

Conclusion

After determining the factors of business and IT strategy alignment, a questionnaire was designed based on the Luftman improved alignment maturity model to determine the most important alignment factors in the studied organizations. The subjects were asked to rate the importance of each of these factors in studied organization's IT and business alignment using the Likert scale. The importance of each factor was determined using the obtained Responses and calculating means for each question's response. The coefficient of each alignment factor was determined by calculating the ratio of each factor to the total score.
In order to assess the IT and business alignment in studied organizations, same questionnaire was again given to the subjects, to determine the level of alignment factors, by respondents. Respondents' answers on the Likert scale based on very low to very high (1 to 5) indicates the level of alignment in the studied organization. Determination of alignment maturity level is based on the Luftman's five-level alignment maturity model. The alignment maturity level of each factor in studied organization was determined by the Scores assigned to that factor by respondents, which are ranged between very low to very high (1 to 5). The Weighted alignment score for each factor obtained by applying the significance coefficient obtained for each of the alignment factors in the alignment score assigned to each factor by respondents. Finally Weighted mean score of all alignment factors in studied organization, the final alignment score was determined. The final IT and business alignment score of studied organizations is 2.92. This means that the IT and business alignment of this organizations is between the second and third level.

As the results of the study Results indicate studied organization is in second level of IT and business maturity alignment. Therefore, the overall strategy and vision to improve the alignment of IT and business in the studied organization is the move toward the third level of alignment maturity.

in order to develop appropriate strategies to improve the alignment in the components level and move in the that direction, Based on what has been determined in the research, we decided to carry out the necessary analysis to offer appropriate strategies for improving the studied organization's alignment. In order to prioritize strategies we decided to use the data collected from respondents in organizations about the importance of alignment as Well as alignment score assigned by them to the factors. The difference in factors importance and the alignment score assigned Can determine the main challenges and gaps facing the IT and business alignment. Based on this difference, most important of the deficiencies in the studied organization's IT and business alignment can be identified, and on this basis the strategies needed to improve alignment can be prioritized.

Factor of information resources management have the highest difference (2.4) among the alignment factors. Although this factor is considered less important in comparison with some of the major factors affecting the degree of alignment, but what cause this factor to have the highest difference is its low alignment Score. This is because of organization's negligence toward this factor despite its importance. On this basis it seems that this factor should be taken more into the consideration of organization's agenda.

Due to the importance and necessity of doing more and more accurate management of information resources in the studied organization, It is recommended to form a Group in organization's IT sector entitled as management of information resources With specific plans and codified tasks for the organization's information resources management.

Organization's Knowledge of the IT (1.9) is the second priority factor. Perhaps, one of the major issues facing the studied organization to effectively use IT and implement it into business alignment, is insufficient knowledge of principles, concepts and benefits of IT on the part of Business managers and organization's staff. IT as a phenomenon that can evolve the various aspects of organizational structure is not accepted within the organization. IT still has not found its crucial position in the organization, and Still there is no suitable attitude toward is the implementation and application of IT in the studied organization.

Effective change management (1.3) is the third priority factor. One of the basic requirements for business and IT alignment is Intelligent and effective management of changes needed to align IT and business. Since the alignment is a permanent process and in this respect needs continuous changes in various aspects of organization, it must therefore be regarded as one of the priorities of the alignment.

Alignment integration into organization culture (0.3) is the fourth priority factor. One of the challenges we are facing in the process of alignment is the lack of acceptance on the part of the staff. In the absence of cooperation and in case of employee resistance, the proper implementation of alignment process is not possible. Therefore, efforts to institutionalize a culture of alignment are necessary.

Other strategies (in order of priority) are as follows:

- Creating a group or department for knowledge management in the studied organization.
- Developing software, hardware, network and database standards integrated throughout the studied organization.
- Planning and effort to increase IT manager's knowledge of the business principles, concepts and processes in the studied organization.
- Creating Flexibility in IT infrastructure and architecture.
- Creating Interactive communication and interaction between IT standards and business standards in the studied organization.
- Efforts to institutionalize IT as an essential value in the studied organization.
- Creating Shared resources and databases that allow all department in the studied organization to use their data and information

- The effort to create a constructive and effective codified interaction for the departments within the organization In order to increase the collective knowledge of managers and staff.
- Developing an integrated and effective IT architecture in studied organization.
- Presence of studied organization's Different sectors in IT strategic planning and its implementation.
- Active involvement of IT managers in strategic business planning in studied organization.
- Shared acceptance of risks and achievements of IT implementation by IT managers and senior managers in studied organization in order to create effective motivation.
- Holding integrated educational and practical IT courses in the studied organization.
- Developing standard business processes and principles, integrated across studied organization.
- Careful Monitoring and management of IT programs and projects in studied organization.
- Reviewing the strategic with an attitude toward IT as a fundamental and effective factor in of the studied organization's overall strategy planning.
- Creating Purposeful and effective human relations between studied organization's sectors in order to fulfill organization overall mission.
- Offering of IT department services in form of specific, documented and planned agreements to other sectors within the studied organization.
- Expanding the reach of organization IT managers in terms of planning, funding and taking actions, and well as permanent and close interaction with the head of the studied organization.
- Motivating and creating favorable conditions for innovation and creativity in the studied organization
- Structured and planned activities of IT Steering Committee in a collaborative and effective manner
- Creating a relationship-oriented management style in the studied organization.
- Use of public comments and holding group discussions to improve the effectiveness of decisions and contracts.
- Taking effort to eliminate the time-consuming administrative formalities in all of the studied organization operations.
- Taking Efforts to improve and enhance the operations and services of IT department.
- Increasing senior management proper support for IT operations and IT presence in macro levels of studied organization.

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