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ROLE OF HUMAN RESOURCE IN INFORMATION TECHNOLOGY ALIGNMENT IN ORGANIZATIONS: A METRIC BASED STRATEGIC ASSESSMENT FRAMEWORK

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ABSTRACT

Information technology (IT) is increasingly becoming an important factor and fundamental to support business processes in organizations. IT acquisitions are quite productive in supporting transactions and in aiding coordination mechanism provided the organizational resources and business processes are properly aligned with the IT. However, many IT acquisition projects fail due to improper alignment of the business process with IT. Role of human resource (HR) is quite critical to such alignment process. It is important that acquiring organizations display HR capability to support alignment process especially in the pre-acquisition stage to minimize the post acquisition shocks. In this paper role of HR in IT alignment process is discussed through some metrics during pre-acquisition stage. A framework is developed and causal relationships among metrics are discussed. This framework is then tested for its fitness and applied to a case for appreciation.

Keywords: IT alignment process, Role of human resource in IT acquisition, Stages of IT acquisition, Organization Preparedness, Structural equation modeling, Metrics, Framework.

INTRODUCTION

Information technology (IT) is recognized as a critical infrastructure in many organizations. IT is also emerging as an effective contributor to organizational performance. It is often argued that success of the IT induction is attributed to strategy, consistent delivery, systems usability. This finding suggests that human resources (HR) in the organization play a vital role. Information systems (IS) research has recognized the importance of HR in the IT acquisition process. In this paper, the IT acquisition process is considered as a staged process, and the stress is on HR contributions. Further a framework is discussed and structural equation modeling (SEM) is used

to understand the organizational readiness. Organization of the paper is as follows. In section 2, stages of IT acquisition process and stratification of HR are discussed along with an examination on the role of appropriate layer of HR involved in these stages. In section 3, scope of alignment process is discussed with specific reference to the organization, IS and IT. In section 4, a framework is developed which relates the pre-acquisition stage of the acquisition process to assess the organizational capability to acquire IT. A model is developed based on the framework through SEM. In the following section, research design and survey, sampling plan for the model are discussed. The model is validated and analyzed based on the findings obtained through LISREL 8.7. Dependency among variables, goodness-of-fit of the model and structural equa-

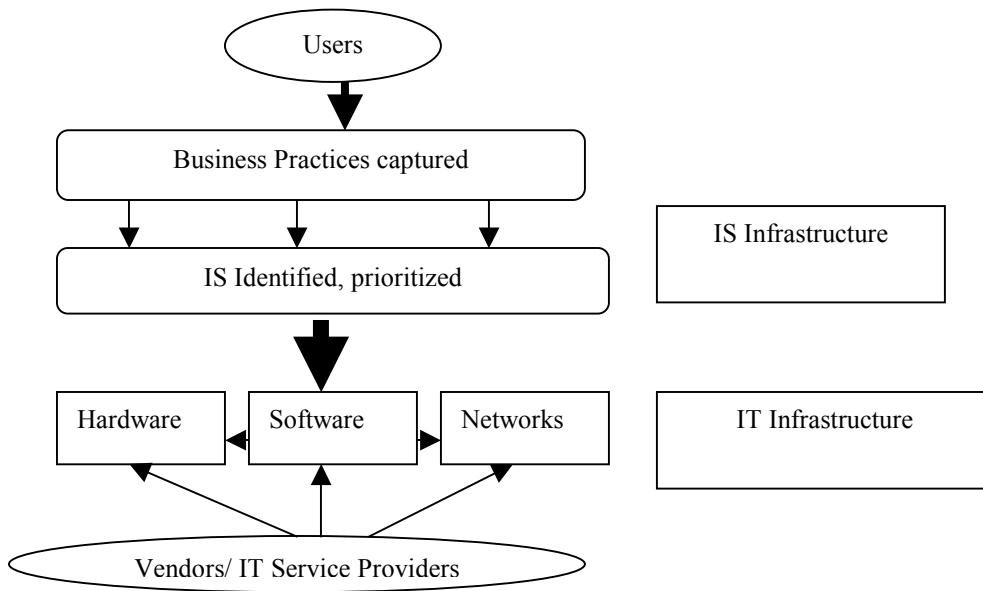
tions generated are also discussed in this section. In section 5, one case is discussed through application of the model. While concluding in section 6, limitations of the research are discussed.

IT ACQUISITION PROCESS

In this paper, the IT acquisition process is defined to be an organizational activity and the IT acquisition process is based on three dimensions. First, the whole acquisition process is conducted in stages. Second, the

acquisition process requires IS infrastructure which needs to be developed through analyses of business practices, processes. IT infrastructure planned is expected to support IS through various components. Third, various users, stakeholders participate and contribute to the process. In this process two types of infrastructures are created i.e. IS infrastructure and IT infrastructure as shown in figure 1 Drucker [7]; Herron [11]).

Figure 1: IT Acquisition Process



Stages in the IT Acquisition Process

The IT acquiring organization needs to manage its capabilities in its various stages (pre-acquisition, acquisition and post-acquisition) of the process and evolve a strategy Eskelin [8]. Success in one stage might lead to success of the other and the paper centers around proposition that pre-acquisition readiness leads to a better IT acquisition capability in the organization and HR readiness supports the proposition.

In the pre-acquisition stage, the organization initiates the acquisition process. This demands a strategy if the organization is serious of embracing the technology Segars and Grover [29]. In course of the strategy determination, the tasks are expected to be defined by involving stakeholders to make an informed decision Marple et al. [20]. During this exercise, it is essential to assess resources including HR, business process and functions in

order to build IS Broadbent et al. [5] and assess the likely acceptance of the technology Alter [1]. Involvement of human resource in the acquisition process is essential as shown in figure 1. HR identification in the organization is based on their role in the organization and management information systems (MIS) principles layers them as “Strategic”, “Tactical” and “Operational” Kohli and Sherer [16]; Davis and Olson [6]. During acquisition and post-acquisition stages, the infrastructure is created and used by these set of HR.

HR Stratification and Role

It is emphasized in this paper that human resource plays an important role in the acquisition process and performs different roles in all the defined stages. The role of the human resource, their capability and their possible contribution as envisaged in this paper are discussed in table 1 below.

Table 1: Specifications for Headings and Text

HR Classification and the Role		
Class of HR	Description	Domain knowledge
Operational non-IT Resource	Access IS services through user interfaces	Transaction Specialists
Operational IT Resource	Mostly programmers, Logistics Management	Tool specific skill
Functional non-IT Resource	Business process owners. A critical layer to support IT use	High on Business process knowledge; less exposure to IT use
Functional IT Resource	System developers/ analysts/ architects with high exposure to IT tool planning, but a potential layer to appreciate business process	Moderate exposure to business process. Good knowledge in IT management
Strategic non-IT Resource	Involved in strategy formulation, needs decision support, dynamic requirements	A critical layer to introduce IT
Strategic IT Resource	High exposure to IT planning, understands the business practices	Strategic Focus on the IT. A critical layer to establish IT road map.

As stated in table 1 above, stratified human resource assumes different view points, role and look at IT with different perspective. It is therefore, essential that human resource across the organization contribute to the process early in tandem. These stratified users are mostly in three layers in the organization, may be IT service providers, IT end-users Davis and Olson [6].

THE ALIGNMENT EXERCISE

Linking IT infrastructure to leverage benefits of IS infrastructure is a challenging task for the acquiring organization. However, its importance is well recognized and use of IT has gone beyond mere supporting the process to strategically integrate to the organization's long term aspirations Luftman [19]. The issue of alignment is

well defined through strategic alignment model (SAM).

SAM talks about link among business strategy IT strategy, organizational infrastructure and processes and IT infrastructure and processes Henderson and Venkatraman [10]. It is also said that alignment is result of a balanced interface among business processes and information requirement, information requirement and applications developed, applications developed and IT infrastructure Pereira and Sousa [27]. In this paper, alignment is defined to be a process that ensures a strategic relationship among IS infrastructure, IT infrastructure, business processes and organizational climate with Layered HR (strategic, tactical and operational) who approves the usability.

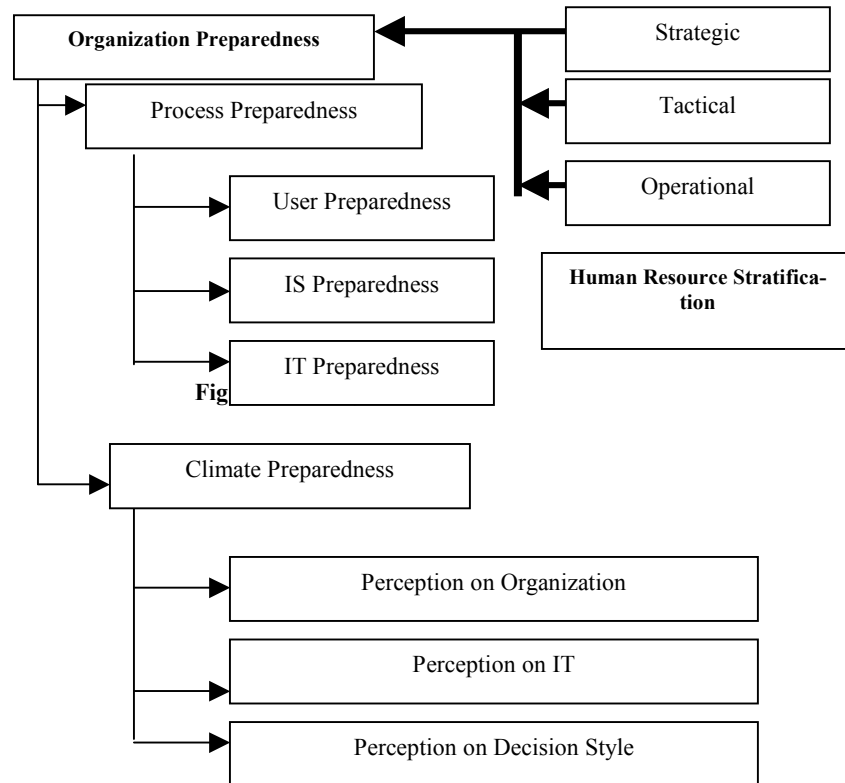
READINESS EXERCISE

In this paper, pre-acquisition stage is considered to be an important stage in the acquisition process and HR capability is considered to be an important indicator for successful alignment. In figure 2 the central issue of relating the HR capability to the organization preparedness is explained. The pre-acquisition preparedness is described as a process and the process preparedness in association with the climate in the organization contribute to the organizational preparedness through the systemic link with the HR. HR is a critical contributor to all the processes and the stratified layers contribute specifically to the process Davis and Olson [6]. While the process preparedness in the pre-acquisition stage constitutes the HR preparedness, IS preparedness, IT preparedness; the climate assessment captures the organizational influences on the HR to participate in the acquisition process and use the infrastructure in a changed environment Paton and McCalman [25].

The Systemic Link

IT is intrinsically aimed to change the way processes are handled in order to optimize utilization of resources Broadbent et al. [5]. The change in process may affect the process owners and related HR in the process and other processes interfaced. Therefore, the organization is influenced by this change and HR is affected the most. IS research principles rely abundantly on the understanding that the organization portrays certain systemic behavior which is predictable, investigative, and these are collated with some quantitative metrics. In this paper organization behavior is mapped to the IS in a planned manner in the pre-acquisition stage through goal question metric model (GQM) Basili and Rombach [2].

Figure2. The Systemic Link



THE PROPOSED MODEL

Table 2 illustrates the theoretical framework with an aim to organize the involvement of stratified HR and solicit their contributions to prepare IS and IT road maps Luftman [19], Rai et al. [28]. In this framework, the organization preparedness exercise includes HR preparedness, IS preparedness and IT preparedness components. Similarly, climate preparedness assessment exercise includes HR perceptions on organization, IT and decision style. All these components are assessed with the stratified HR involvement. Each layer has a specific metric to testify and all these are collated to determine the status of the stated goal in the end. The subsequent stage in developing the model is to establish the dependency among the constructs across all the stratified layers. The constructs used in this exercise are adapted from various researches conducted especially for IS preparedness, IT preparedness,

user preparedness and their references are provided in this paper while discussing them. However, stratification of users and their roles in contributing to the model is introduced in this model.

HR Preparedness (U)

In order to appreciate the user preparedness therefore, a look at “strategic”, “tactical” and “operational” layers is absolutely necessary Ward and Peppard [31]. Resource based view of the organization’s preparedness attributes to HR capability Bharadwaj [3], Boselie et al. [4]. Tactical users manage important functions in an organization. These users mediate between among IS strategy, IT strategy and the organization’s strategy Alter [1]. Domain specific skills, attitude to maintain a harmonious and matured workflow across domains are determinants for the preparedness of this layer Broadbent et al. [5].

Table 2. Role of HR in the Preparedness Exercise

Organization Preparedness Components	HR Stratification	Constructs	Goals at Conceptual Level	Metrics of the HR Readiness
HR Preparedness (User) (U)	Strategic	Strategic User Preparedness (U1)	Strategy for system automation	(U) {Awareness on IT acquisition strategy, Documenting planning process}
	Functional	Functional User Preparedness (U2)	Functional manager's preparedness for automation	
	Operational	Operational User Preparedness (U3)	Operational Users' Preparedness for automated transactions	
IS Preparedness (I)	Strategic	IS strategy Preparedness (I1)	Existence of IS planning/Inclination to formulate a plan	(I) {Ability to Prepare IS Plan }
	Integrative	Interface Preparedness (I2)	Existence of interface and integration plan/ Process Standardization	
	Transactional	Transaction Preparedness (I3)	Existence of effective transactions	
Technology Preparedness (T)	Strategic	IT strategy Preparedness (T1)	Existence of IT road map.	(T) {Ability to identify technology, Components; Ability to manage Users and IS-IT alignment}
	Systemic	Technology Component Preparedness (T2)	Existence of knowledge base on identifying tools, IT components.	
	Transactional	Interface Preparedness (T3)	Existence of communicative links for transactions	
Organization Climate Preparedness (CI)	Perception on Organization (C1)		Understand User perception on Culture of the organization	(C) {HR attitude to technology; Decision making style}
	Perception on IT (C2)		Understand attitude of HR on IT	
	Organization Decision Style (C3)		Effect of Decision Style on IT	

Operational users manage transactions and role of IT in managing transaction is significant Bharadwaj [3]. Attitude, skill and accepting change are few determinants of their preparedness. An organization is said to have user preparedness when it ensures that (i) strategic users formally display leadership maturity, (ii) tactical users display competence to manage work flow and (iii) operational users display capability to manage transaction

IS Preparedness (I)

IS infrastructure largely depends on transaction maturity and workflow. Therefore, there lies a need for IS readiness in the organization to pursue an IS strategy. IS strategy needs to be done in the pre-acquisition stage. An organization is said to have IS preparedness when it ensures the existence of (i) an IS strategy, (ii) a formal plan to develop business applications, (iii) a document displaying interfaces across functions and (iv) a plan to integrate all the applications Lamb and Kling [17]; Lee et al. [18].

Technology Preparedness (T)

IS research often establishes that IT itself does not have an inherent value and it largely depends on aligned IS infrastructure. Thus there is a need for formulation of IT strategy Ward and Peppard [31]. IT strategy assesses organization’s view point on organizing IT. Resource based theory Peppard [26] recognizes the fact that

IT comes with relevant components and a strategy should be formulated for better alignment. In summary, an organization is said to have technology preparedness when it ensures the presence of (i) an IT strategy, (ii) formal technology and component plan to acquire IT, (iii) competency in the IT cell to command and monitor projects, and (iv) competence to successfully manage the technology (ISO [12],[13].

Climate Preparedness (CI)

A conducive climate in the organization is needed for the HR to adapt to change, display an attitude to use IT. Besides, the strategic users need to display a pattern on the decision making style to direct IS behavior and delivery. An organization is said to be have a good climate if (i) it has a policy to encourage its employees, (ii) it has clear and transparent decision making style and (iii) it has shown resilience in managing change Evans [9], Karahanna et al. [15]. The important indicators of Climate Preparedness are: (a) User’ involvement in understanding culture of the organization that displays resilience in adopting any technology and adapting to change (C1), (b) perception of users across the organization on adopting IT (C2) and (c) perception of users on the strategic users’ consistency in decision making process (C3). It is often found that managers and professional workers are averse to IT because of fear and anxiety.

Table 3. Dependency Table for the Model

Dependency Relationship	Explanation
$U = d^*(U1, U2, U3)$	User preparedness “U” <i>depends</i> on strategic, tactical and operational users
$I = d^*(I1, I2, I3)$	IS preparedness “I” <i>depends</i> on IS strategy, interfaces and transactions
$T = d^*(T1, T2, T3)$	Technology preparedness “T” <i>depends</i> on IT strategy, component strategy and interface strategy
$C1 = d^*(C1_s, C1_T, C1_o)$	Understanding of User perception on organization “C1” <i>depends</i> on perception of strategic (C1 _s), tactical (C1 _T) and operational users (C1 _o)
$C2 = d^*(C2_s, C2_T, C2_o)$	Understanding of User perception on IT “C2” <i>depends</i> on perception of strategic (C2 _s), tactical (C2 _T) and operational users (C2 _o)
$C3 = d^*(C3_s, C3_T, C3_o)$	Understanding of decision making style in the organization “C3” <i>depends</i> on clarity of strategic (C3 _s), tactical (C3 _T) and operational users (C3 _o)
$CI = d^*(C3_s, C3_T, C3_o)$	Climate in the organization <i>depends</i> on organization culture (C1), HR perception on IT (C2) and decision style in the organization (C3)
$PAI = d^*(U, I, T)$	Pre-acquisition preparedness <i>depends</i> on User preparedness (U), IS preparedness (I) and IT preparedness (T)
$OI = d^*(PAI, CI)$	Organizational preparedness depends on process preparedness (PAI) and climate preparedness (CI)

- “d” denotes “Predictive Dependency”

Organization Preparedness Indicators (OI)

Organizing this preparedness in the pre-acquisition stage is an important issue and this preparedness is an aggregation of user preparedness (U), IS preparedness (I), technology preparedness (T) of an organization. Measurement of HR involvement in an acquisition process is abstracted in this model through “process preparedness” and “climate preparedness”. While process preparedness is well supported by quality models, climate preparedness is well understood through strategic planning process based on social theory Lamb and Kling [17]; Lee et al. [18]; Ward and Peppard [31]. The dependency among the constructs is explained in table 3.

RESEARCH DESIGN AND SURVEY

The research is intended to understand involvement of HR in having IS plan, IT plan as well as to accept IT for assessing organizational preparedness. As examined in previous sections understanding organizational issues are quite complex and modeling an organization for the purpose is also equally complex. However, the suggested model dwells upon a framework to organize the relationship among components Basili and Rombach [2]. The components provide certain metrics to measure and relationship among metrics. In this research the model discussed in table 2 has been hypothesized with aggregation of components. This aggregating relationship is stated to be linear based on the IS research methodology adopted

in the context of assessing organizational performance Venkatesh et al. [30]. Therefore, SEM is used for verifying the relationships discussed. In this section SEM is applied through quantitative methods and causal analyses for its verification. SEM establishes and verifies relationships among independent items (predictors) and dependent items (Latent or predicted variables). Predictors are observed through respondents and these predict the latent variables which are difficult to measure directly. The relationship is defined through dependency. Dependency of the items in the model is the centre of the study.

Survey

A Likert scale is used in this research to capture responses to understand the predictors through scoring in a scale adopted for the purpose Nunnally [23]. The scale of responses has a range over 1 through 7. Items are developed based on the Goal-Metric Questions Model (GQM) Basili and Rombach[2]. Table 2 describes the metrics used for the model. Development of metrics and measurement through GQM principles. Questions were used for capturing the response and reflecting it to understand a predictor. A predictor is a measurement criteria observed through responses using Likert scaling. The survey is based on 604 responses received. The sampling process is based on “stratification” since users are considered to be in a layering architecture. In table 4 below demography of samples is explained.

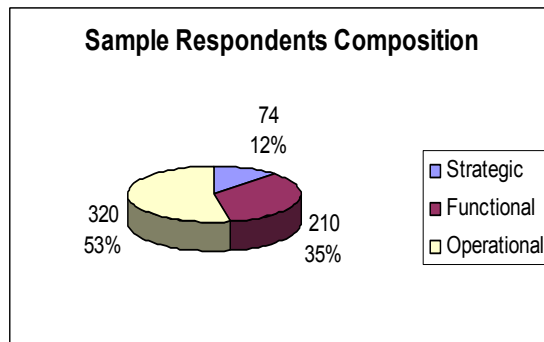
Table 4. Sample Demography

Organization	Sample Size Targeted				Subjects Responded			
	Strategic	Functional	Operational	Total	Strategic	Functional	Operational	Total
1	10	36	130	176	4	19	39	62
2	18	50	180	248	7	24	45	76
3	18	50	180	248	5	18	25	48
4	18	50	180	248	4	20	30	54
5	18	50	180	248	6	23	21	50
6	18	50	180	248	5	12	20	37
7	18	50	180	248	5	18	19	42
8	18	50	180	248	6	16	21	43
9	18	50	180	248	7	11	17	35
10	18	50	180	248	6	8	15	29
11	18	50	180	248	5	14	18	37
12	18	50	180	248	6	15	19	40
13	18	50	180	248	8	12	31	51
Total	226	636	2290	3152	74	210	320	604

As indicated in table 3 sample respondents were stratified in order to assess their contribution to the process preparedness based on their role in the organization. Figure 4 below shows the percentage of respondents in each layer who participated. The criteria for participating choosing the organizations are maintaining heterogeneity (different sectors), small and medium organizations to

administer the instruments and have a better assessment of their profiles and strategy. These organizations are in co-operative, energy, manufacturing, non-governmental organization (NGO) and therefore, provide an ambience to understand the potential for generalization. Average number of questions used for assessing the constructs is six.

Figure 4. Stratified Sample Respondents

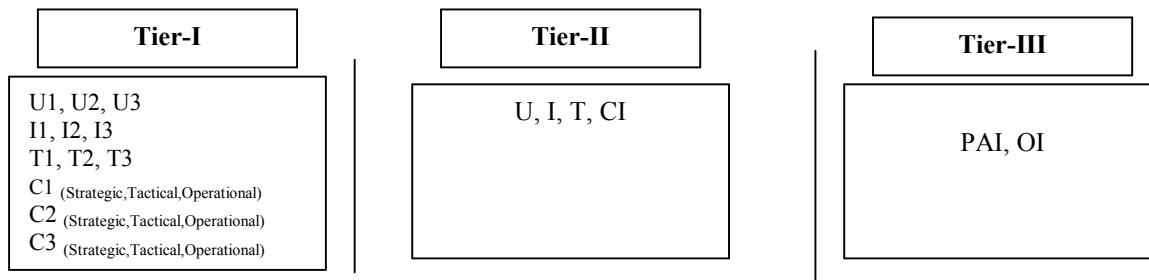


The number of participating organizations is 13 as against 20 organizations who were requested to participate. Figure 4 describes stratified samples.

Formulation of Hypotheses and Validation of the Model

The hypotheses are generated from the dependency described in the table 3 and these are in two categories. The first category of hypotheses is generated to support the relationship among tier-I and tier-II attributes of the model. The second category of hypotheses is aimed to test the dependency among the constructs to each the final predictable behavior as shown in figure 5.

Figure-5: Variable and Relationships



First category of Hypotheses

In this category HR stratification and their collective involvement leading to a process preparedness and climate preparedness are assessed. Since the samples are stratified due to the very nature of the study,

stratified due to the very nature of the study, multivariate analyses for un-equal sample size are adopted with the help of Dunnet table Pedhazur [24].

Table 5. Hypotheses for Constructs

Sl. No.	Construct Identification	Construct Description	Construct	F _c - Statistics	Null Hypothesis (H ₀)
1	U1	Strategic User Preparedness	U	2.405	H1 _{U0} : Rejected in favor of H1 _{UA}
	U2	Tactical User Preparedness			
	U3	Operational User Preparedness			
2	I1	IS Strategy	I	4.912	H1 _{I0} : Rejected in favor of H1 _{IA}
	I2	Interface Strategy			
	I3	Transaction Strategy			
3	T1	IT Strategy	T	1.119	H1 _{T0} : Fails to reject
	T2	Component Strategy			
	T3	Interface Strategy			
4	C1 (Strategic)	User perception on Organization	C1	3.718	H1 _{C10} : Rejected in favor of H1 _{C1A}
	C1 (Tactical)				
	C1 (Operational)				
5	C2 (Strategic)	User Perception on IT	C2	2.836	H1 _{C20} : Rejected in favor of H1 _{C2A}
	C2 (Tactical)				
	C2 (Operational)				
6	C3 (Strategic)	Decision Making Style	C3	2.472	H1 _{C30} : Rejected in favor of H1 _{C3A}
	C3 (Tactical)				
	C3 (Operational)				
	PP (Tactical)				
	PP (Operational)				

Table 5 provides the result of the hypotheses discussed through the dependency table. It is noted that the stratified HR collectively predict all the relationships except for the technology preparedness. This result reflects the common understanding that technology preparedness does play a composite role involving the vendors and internal IT developers. IT vendors are excluded from the study at this stage.

Second Category of Hypotheses

The second category of hypotheses are examined through SEM technique using “path analysis” to validate these latent variables Joreskog and Sorbom [14]. “Path diagram” is used to explain hypothesized pattern of causal relations as explained in figure 5. Success of an acquisition process depends on collaborative contributions of users and these contributions have a causal effect on each

other’s efforts. SEM methodology appropriately establishes this through confirmatory factor analysis Pedhazur [24]. This analysis has been done through LISREL-SEM (ver-8.7). In figure 4, the relationship between latent variables and predictors are explained through their weighted effects. The direct effects of “PAI” and “CI” on “OI” are

0.56 and 0.42 respectively and respective t-values (for “PAI” it is 3.22 and for “CI” it is 2.56) are significant [29]. Path coefficients for the hypotheses *H1, H2, H3, H4* are shown in Table 3 along with respective t-statistics and standard errors and it could be noted that all the hypotheses are supported Misra et al. [21], [22].

Structural Equation

$$OI = 0.36 * PAI + 0.63 * CI + 0.035$$

Errorvar.= 0.20 , R² = 0.80 ; (0.12)/ 1.98** (0.14)/ 3.55**

(Note: N=604; OI-> Organization Preparedness; PAI-> Process Preparedness; CI-> Climate Preparedness; ** indicates t-values)

Figure 5. Path Analysis for the Model

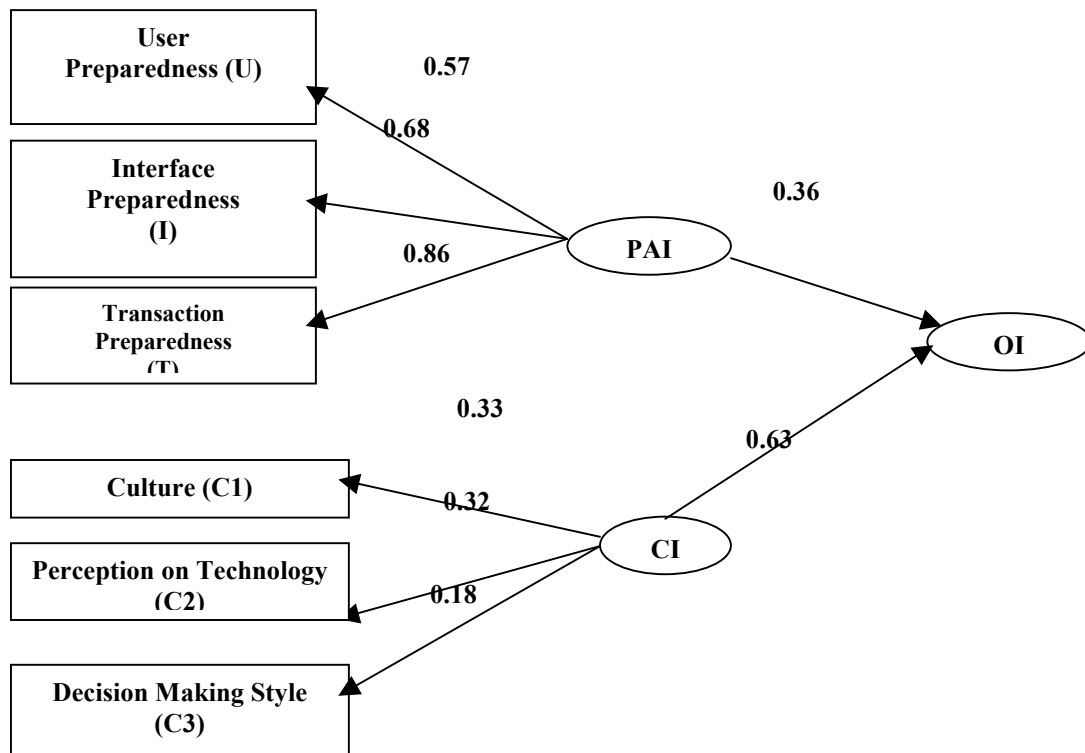


Table 6. Testing of Hypotheses

Hypothesis	Proposition	Path Coefficient	t-statistics	Standard Error	Remarks
H1	User's Role in "U,I,T" positively predicts Component Preparedness (PAI)	*0.20, 0.14, 0.27	*16.21, 17.03, 10.47	*0.025, 0.028, 0.020	Supported
H2	User's Role in "C1, C2, C3" positively predict Climate Preparedness (CI)	*0.35, 0.26, 0.23	*12.39, 14.70, 15.61	*0.018, 0.014, 0.015	Supported
H3	"PAI" positively contributes to Organizational Preparedness (OI)	0.56	3.10	0.18	Supported
H4	"CI" positively contributes to Organizational Preparedness (OI)	0.42	2.46	0.17	Supported

APPLICATION OF THE MODEL ON A CASE

An organization (a cement company) was considered for appreciating the applicability of the model and testing its relevance. The cement company was installed with a licensed capacity 0.4 million metric tones of Portland cement per annum in the year 1962 in a state in India and went in to production in 1968. In 1985 it expanded its production capacity to 0.56 million MT per annum. The market network depends on dealers. Branch offices man-

age these dealers. The company showed decline in net profit despite capacity utilization mainly due to high cost of capital acquisition during modernization and sluggish market conditions. In order to improve performance, the company took some strategic steps in marketing area including business process automation through IT.

Analysis of the Case

Table 7. Application of Model on Case

Preparedness of Organization	Attributes of Organization	Components of Organization Preparedness	Constructs
Organizational Pre-IT Acquisition Process Preparedness (3.37)	Pre-Acquisition Process Preparedness (3.05)	User Preparedness (3.20)	Strategic User preparedness (3.88)
			Functional User preparedness (3.28)
			Operational User preparedness (3.39)
		IS Preparedness (3.18)	IS strategy Availability (4.71)
			Interface strategy Availability (2.99)
			Transaction strategy Availability (2.97)
	Technology Preparedness (2.77)	IT Strategy Availability (2.89)	
		Component Strategy Availability (3.22)	
		Interface Strategy Availability (2.65)	
		Climate Preparedness (3.66)	User Perception on Organization (3.61)
User Perception on IT (3.35)			
Decision Style of organization (4.01)			

Analysis of the described cases is based on Luftman model Luftman [19] which measures how well

the IT is aligned with business processes. A score below 20 percent of the highest scale (in this case 7) corresponds

to an uncomfortable position for the organization. Score between 20 and 40 percent displays a “low level of fit”; 40-60 percent displays “moderate fit”; 60 to 80 percent displays “mostly fit” and above 80 percent shows a “strong level of fit” between the strategy and implemented status. In table 7, the strength of the organization is described in the form of strategic users’ preparedness (score 3.88), presence of IS strategy (score 4.71), and decision style of the organization (score 4.01). This preparedness has played a supportive role in bringing the technologies into its present form. User perception on IT (score of 3.35), and user perception on organization (score of 3.61) also display a supportive role in accepting the technology. However, the disturbing factors in the organization are strategy for interface and integration among IS (score 2.99) and technology (score 2.65). Deficiency in executing the plan formulated has led to a disjoint mode of implementation of technology. Therefore, despite having a moderate climate preparedness (score of 3.66) and process preparedness (score 3.03), the overall fit of the organization in its pre-acquisition stage is moderate (score of 3.37). This finding shows a poor IT strategy in executing projects leading to disjoint application software. Thus it is affecting the overall MIS plan as well as the decision making process.

CONCLUSION

HR involvement is an important aspect in all the stages of IT acquisition process. In order to ensure a better and effective use of the IT acquired, HR involvement is required the most in the pre-acquisition stage in order to effectively manage subsequent stages. Policy, attitude of strategic decision makers, decision making style in the organization; perception of users on IT (fear of losing importance and/ or anxiety to use technology) also influence end-users in accepting IT. In this paper we discussed a model that an organization can apply to assess its internal preparedness to manage the IT acquisition process. Application of the model in the cement company revealed many important reasons behind the current status of IT. The model stressed the importance of strategic and tactical level managers to understand the processes in the pre-acquisition stage and then organize a measuring tool to monitor the acquisition process. Studying only the pre-acquisition stage is the limitation of the study and therefore, in the next stage of the research it is intended to expand the horizon of this model and apply it for the IT acquisition stage and Post acquisition stage.

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