Achieving business and IT alignment from organisational learning perspectives

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Achieving Business and IT Alignment from Organisational Learning Perspectives

Hamad Hussain Balhareth, Kecheng Liu and Sharm Manwani

Abstract—Business and IT alignment has continued as a top concern for business and IT executives for almost three decades. Many researchers have conducted empirical studies on the relationship between business-IT alignment and performance. Yet, these approaches, lacking a social perspective, have had little impact on sustaining performance and competitive advantage. In addition to the limited alignment literature that explores organisational learning that is represented in shared understanding, communication, cognitive maps and experiences.

Hence, this paper proposes an integrated process that enables social and intellectual dimensions through the concept of organisational learning. In particular, the feedback and feed-forward process which provide a value creation across dynamic multilevel of learning. This mechanism enables on-going effectiveness through development of individuals, groups and organisations, which improves the quality of business and IT strategies and drives to performance.

Keywords—business-IT alignment, social dimension, intellectual dimension, organisational learning

I. INTRODUCTION

FOR many years, strategic alignment continues to remain as a top concern for executives. This has encouraged CEOs to involve CIOs not only in IT strategies but also in business strategies. The competitive context of business has raised the importance of using strategic business and IT alignment as an effective weapon to dynamically transform the organisation. However, this issue is not straightforward since elements that support achieving and sustaining strategic choices are often vague and not considered in the process of creating strategic alignment [1]. Horovits [2] categorised strategy creation into social dimension and intellectual dimension. The intellectual alignment research demonstrates the benefits of alignment on business performance [3], [4]. However, Tan & Gallupe [5] argue that studying alignment relationship with performance is not enough since less attention is paid to attaining alignment. They refer to the fewer studies in social dimension of alignment. The role of interaction of people in business-IT alignment is not adequately recognised [6]. Less attention is given of social dimension and this hinders common understanding and interpretation of alignment, which affects the strategic fit and functional integration in organisation levels [7].

Hamad Balhareth, Henley Business School, University of Reading, Reading RG6 6WB, UK (e-mail:H.H.Balhareth@pgr.reading.ac.uk)

Kecheng Liu, Henley Business School, University of Reading, Reading RG6 6WB, UK (e-mail:k.liu@reading.ac.uk)

Sharm Manwani, Henley Business School, University of Reading, Reading RG6 6WB, UK (e-mail: sharm.manwani@henley.reading.ac.uk)

Research in social science mostly focuses on ways organisations think and behave [8]. As such understanding of organisations from cognitive and behavioural perspectives will provide a higher level of business-IT alignment [9], [5]. Having a better business-IT alignment will not only rely on behavioural perspective but also include the cognitive perspective. The complexity of understanding human interaction in business-IT alignment lacks mechanisms such as organisational learning [10]. A number of researches in MIS has also emphasised on importance of organisational learning process in successful business strategy and IT strategy [4], [11]. Organisational learning considers strategies, routines and procedures as intellectual phenomena based on interaction between individuals, groups and organisational levels [12]. It integrates the cognition and behaviour of members and forms processes, which are stable [13]. Moreover, it extends concepts to integrate behaviours and knowledge and enable understanding on how the social alignment impact intellectual alignment over time and vice versa. In this paper, we introduce organisational learning perspective as enabler for social and intellectual dimension of alignment. This perspective is being explored further through field research.

II. BACKGROUND

A. Major Dimensions of Business-IT Alignment

There is enough evidence that the relationship between social dimension and intellectual dimension has an impact on business and IT relationship [14]. Chan & Reich [15] suggest that social and intellectual dimensions of business-IT alignment should be studied together in order to reduce the complexity in alignment. Social dimension is defined as the state in which business and IT executives within an organisational unit understand and are committed to the business and IT mission, objectives and plans [16]. Whereas intellectual dimension is defined as the state in which a high quality set of interrelated IT and business plans exist. Social dimension focuses on people who create alignment while the intellectual dimension focus on planning content. These emphasised at the top level of research so as to facilitate the formulation of strategies and selection of planning methods (see Table 1). However, the strategy formulation of business-IT alignment is implemented at the tactical level and executed via the operational level of organisation. Hence, during implementation and execution, the developed strategies at top business and IT

TABLE 1
SAMPLE OF RESEARCH ON SOCIAL AND INTELLECTUAL DIMENSION AT DIFFERENT ALIGNMENT LEVELS

Business IT alignment	Henderson and Venkatraman (1993)	Reich and Benbasat (2000)	Sabherwal and Chan (2001)	Kearns and Lederer (2003)	Kashanchi (2008)	Tarafdar and Qrunfleh (2009)
Social dimension		√			√	
Intellectual dimension	√	√	√	√		√
Strategic level	√		√	√	√	√
Tactical level		√				√
Operational level	√					

level are often adjusted or even misunderstood at tactical or operational levels of the organisation [17]. This is the result of the absence of lower level participation which tend to create creates unclear strategies and vague objectives [14].
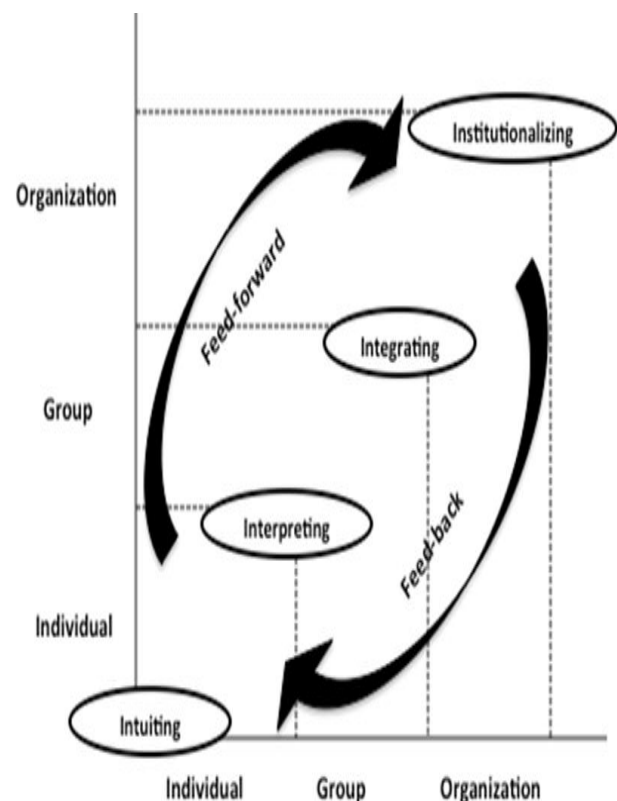
A. Organisational Learning

Organisational learning attempts to increase the knowledge of an organisation through interpretation, understanding and integration of implicit and explicit information. Learning plays a central role in enabling organisations to cope with dynamic business nature to facilitate performance and positive change. The vital role that it plays in organisations effectiveness has influence on other disciplines such as psychology, sociology, economics and cybernetics [22]. Crossan et al. [12] categorise organisational learning process into intuiting, interpreting, integrating, and institutionalizing. They were influenced by March [25] research in exploration and exploitation perspectives. Exploration refers to the process that enables for value creation (Feed-forward) from individual and group to the organisational level and exploitation refers to the use of existing capabilities (feedback) and it impact on individual and group (see Figure 1).

The second level is group learning. It considers shared interpretations, common language and mutual understanding as vital basics for learning [12]. Mostly authors present this learning process as group learning rather than team learning. Group learning represents the interpretation and integration process, which require commitment to work in groups, fruitful meetings, the right people to the right positions, willingness for success and sharing risk.

The organisation level learning has been supported by a number of researchers such as Levitt, March [26] and Huber [27]. It embeds individual and group learning into the infrastructure, process and strategy. Moving learning from the individual to the organisational level involves on-going processes. Once individuals learn new things, it needs to be consolidated through direct use. Similarly, organisations have to build, capture, and transfer knowledge to enable strategic change. Individual learning is concerned with the process of developing intuitions,

leading to identification of the use of tacit knowledge and experience. This means that continuous organisational changes are conditioned on individuals' change in understanding and awareness of the organisation via learning processes. Hence, individuals and organisation learning must be considered as integrated components. Nonaka & Krogh [23] described the transformation of implicit to explicit knowledge that embodies a significant input by defining how perception converts to explicit meaning, and become shareable with different individuals.

Bontis et al. [24] refer to the importance of understanding how individuals interpret new insights and form them through the process of learning. The individual learning concerns the creation of novel insights, building actions based on experience, developing mentality in business situations, examining the business environment,

and sharpening the skills to promote organisational change.

III. BUSINESS IT ALIGNMENT FROM ORGANISATIONAL LEARNING PERSPECTIVE

There is increasing interest to develop alignment concept in social psychological processes that goes beyond the concept of planning content [28], [29]. Maes [30] refers to the needs of notions that enable for a strategic alignment and develop organisational identity which are mainly the focus of organisational learning. The traditional way of thinking has often limited alignment concept on the relationship between business-IT strategy and performance. This concept for instance relies on strategic fit and functional integration between business domain and IT domain. The view still belongs to planning content and methodologies. Therefore, it does not include processes that consider communication, interpretation and integration, on how individual, group and organisation create mutual understanding in social processes.

We have to recognise completely that plans can be created; yet these plans could be misunderstood in implementation due to limited understanding on how plans is developed and used by people in a social interaction. Reich & Benbasat [16] suggested that shared understanding in business and IT objectives is the major component of social alignment, which is a precondition for intellectual alignment to achieve performance [15]. This means that higher intellectual alignment rely on higher harmony between people who create business-IT alignment. Tan & Gallupe [5] extended research into Personal Construct Theory [31] and found that higher shared cognition is related to higher level of business IT alignment. Other researches have also found that personal experience plays a key role in social alignment (See Table 2) [32].

TABLE 2

BUSINESS-IT ALIGNMENT AND ORGANISATIONAL LEARNING PERSPECTIVE

Learning Levels	Learning Process	Business-IT Alignment	References
Organisation	Institutionalizing	Large scale understanding of strategy, process and structures	Scott Morton [3]; Henderson & Venkantraman [18]; Maes et al. [6]
Group	Integrating	Shared understanding of business and IT objectives	Reich &Benbasat [16] Kashanchi [20]
	Interpreting	Shared cognition between business and IT, common language	Tan and Gallupe [5] Preston & Karahanna [34]
Individual	Intuiting	Personal experience	Bassellier et al. [32]

Hussain et al. [33] reviewed a number of articles relating to alignment and found a little agreement regarding the elements involved and processes linked with alignment. These components have been studied independently, without considering the effects of individual on groups and organisation, which restricts capturing social interaction. The individual and group interaction process that assumed to be translated into strategy, structure and process are not recognised and thus impacts the intellectual dimension, which emphasises on the planning content and organisational performance. Therefore, understanding social and intellectual dimensions of alignment from organisational learning perspective will provide a comprehensive image of the relationship between people who create alignment and their plans (See Table 2).

IV. DISCUSSION

As business-IT alignment changes over time, organisation must be able to scan its environment and integrate its understanding into new strategy and process. We use the dynamic strategic renewal of organisational learning as an approach that attempts to understand how strategic alignment occurs. It recognises that business and IT planning is dynamic, and consists of a complex configuration between social and intellectual dimensions.

According to Bontis et al. [24], considering individuals, groups and the organisation in dynamic processes of strategic alignment are critical for performance. In other words, high related planning between business and IT depends on feedforward (See Figure 1), which requires individuals and group to explore and search for new ways. Feed-forward develops forms of learning that becomes transferred at organisation level into strategy, structures and process across alignment levels. This refers to the process creation of intellectual dimension. However, what has been embedded at organisation level might impact group and individual as a feedback. This imposes some effects on how people way of thinking and acting. Hence, handling

the tension between feedback and feed-forward is a key element for strategic alignment of business and IT.

V. CONCLUSION

Reviewing a number of articles relating to achieving alignment, we found that components of alignment lack to organisational learning perspective, which for instance hinders understanding how organisation thinks and behaves. Therefore, we integrate alignment components as a dynamic process through organisational learning perspective that potentially has a great influence on performance. Organisational learning theory allows us to elaborate the relationship between people, business-IT alignment and performance. It enables social and intellectual dimensions to achieve and sustain alignment through individual, group and organisation levels of learning. Organisational learning views organisations as a coupled process of multiple populations. It provides a dynamic perspective of the processes and recognizes the constant changing of environment. The central characteristics of dynamic process are exploration, exploitation that shapes a view of strategic alignment.

We acknowledge that this research approach needs to be validated empirically. Current research includes the development of a case study to examine the process of achieving strategic business-IT alignment from organisational learning in order to evaluate the impact on organisational performance.

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