

External Environment Pressure on Organizational Innovation Adoption: from Literature to a Conceptual Model

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ABSTRACT

Two research gaps were identified in technology innovation adoption, namely the rarity of innovation adoption theory on organizational and environmental factors. To fill these gaps, we decided to focus our review on the external environmental factors of organizational innovation adoption from January 2000 to May 2014. Major theories are presented. An integrated conceptual model is proposed. This review and the proposed conceptual model offer researchers a starting point to examine the external environment effects on a firm's innovation adoption decision. In different stages, firms should use different strategy, focus on main issue of that stage, and use different resources to deal with the environmental pressures.

Keywords: Innovation Adoption, External Environment Pressure, the institutional theory, Product Life Cycle, Technology-Organization-Environment

INTRODUCTION

Many organizations rely on technology innovation to deal with pressures or reduce uncertainty caused by the turbulent business environment. Researchers and practitioners have been trying to find out factors that affect innovation adoption decision. After decades of research, there is still no one set of “universal” factors of adoption decision since innovation is relative (Rogers, 2003). However, there are similarities among different models (Makkonen, 2008). While there are different levels of adoption – individual, organizational, and inter-organizational – most adoption literature has focused on individual user’s intention, acceptance, and usage of innovations. There are a number of famous and well accepted models of individual adoption, for example, Technology Acceptance Model (TAM), TAM 2, and the theory of planned behavior, but there are few less integrated or comprehensive innovation adoption models at the organization level. There are not many literature reviews on innovation adoption and an even smaller number of reviews at the firm level. We only found one review focused on organizational level during our search period (January 2000 – May 2014). Most previous research examined the internal factors, such as organizational size, slack resources, top management, or technology fit while external environmental factors are not yet fully explored (Citurs and Konsynski, 2007). Agreeing with Joo and Kim (2004) who assert that a comprehensive research model which includes both internal and external factors is often not possible (p.91), we decided to focus our review on the external environmental factors of organizational innovation adoption from January 2000 to May 2014.

This article consists of five sections. The next section states the procedure of literature review. The findings are presented in Section 3. Section 4 discusses major theories. A conceptual model is proposed in Section 5.

PROCEDURE

Following Webster and Watson (2002), we did searches on Web of Science, ABI/INFORMS and Academic Search Premier databases using keywords "organizational adoption", "organizational innovation adoption" and "environmental pressures" specifying dates and scholarly articles. We got 14 hits from Web of Science, 6 from ABI/INFORMS and 102 from Academic Search Premier. We also did search on top three IS journals (Management Information Systems Quarterly, Information Systems Research and Journal of Management Information Systems) and 186 articles emerged from January 2000 to May 2014. Table 1 shows the skewed ratios between the number of studies done on innovation adoption in general and ones done on organizational level from these three IS journals. We also conducted a citation analysis on Web of Science to see who (influential authors) and what (studies) are cited most by researchers on adoption during January 2000 to May 2014. Most of the top twenty authors presented their model/theory at the individual level. The number one cited model is the Technology Acceptance Model 2 (TAM2). There is only one organizational level model that appeared among the top ten which is Fudenberg’s 1985 study. We then filtered out articles by reading titles, abstracts, and keywords to ensure the articles selected fit our research goal. Twenty two articles were considered suitable for this review: 5 are conceptual, 15 are empirical studies and 2 are literature review.

Table 1: Number of Articles from three IS Journals

Journal	Adoption	Adoption + Organization
Management Information Systems Quarterly	58	6
Information Systems Research	72	4
Journal of Management Information Systems	56	29

FINDINGS

The general conclusion from the literature indicated that, for small businesses, competitive pressure and imposition by trading partners are the two main sources of external pressure. However, Penttinen and Tuunainen (2009) find that perceived benefits, supplier pressure, the bandwagon effect, organizational readiness, external pressure from customers are the primary factors. Basaglia, Caporarello, Magni and Pennarola (2009) declare that the policy maker is responsible to make the environment fertile so as to balance supply and demand. Quoting Mohr (1982), Makkonen (2008) advocate distinguishing between adoption as a decision (variance theory) and process (process theory). His self-reported contributions put an emphasis on change and its acceptance and remind researchers not to ignore the post-adoption phase.

Table 2 shows empirical studies and Table 3 shows literature review and conceptual studies. The literature review done by Oliveira and Martins (2011) is the only review that we found focused on organizational level innovation adoption. The review done by Jeyaraj, Rottman and Lacity (2006) provides summarizes for both individual and organizational levels.

Table 2: Summary of Empirical Studies

Study	Technology Innovation	Significant Factors/Findings	Theory Used	Moderator
Hall (2000)	Supply chain dynamics	Pressure		Channel leader power
Kuan & Chau (2001)	EDI	<p>Adopters perceive lower financial costs and higher technical competence than non-adopters.</p> <p>Adopters perceive higher government pressure but lower industry pressure.</p> <p>Environment context:</p> <ul style="list-style-type: none"> • Perceived industry pressure <ul style="list-style-type: none"> • Partners • Competitors • Perceived government pressure 	TOE	

Carpenter & Feroz (2001)	Accounting principles	Resource dependence (coercive institutional pressure)	Institutional theory	
Chwelos, Benbasat, & Dexter (2001)	EDI (Electronic Data Interchange)	External pressure readiness		Bandwagon effect
Zhu, Kraemer & Xu, (2002)	EB (e-business)	<ul style="list-style-type: none"> • Technology competence • Firm scope and size • Consumer readiness • Competitive pressure 	TOE	EB intensity
Nelson, & Shaw (2003)	IOS	<p>Competitive pressure</p> <ul style="list-style-type: none"> • trading partners • the industry • the expectation of market trends <p>Firm's participation level in an industry</p>	TOE	
Teo, Wei & Benbasat, (2003)	FEDI (Financial Electronic Data Interchange)	<ul style="list-style-type: none"> • Mimetic pressure • Coercive pressure • Normative pressures • Perceived IT complexity • Government and sanction bodies • Parent organization 	Institutional theory	Turbulence
Joo & Kim (2004)	e-Marketplace	Relative advantage did not have a significant impact on the (contrary to prior innovation research)	Innovation theory	
Wu & Lee (2005)	e-communication	<ul style="list-style-type: none"> • Customer pressure and normative pressure have greater influences than the internal ones • Bandwagon pressure 		Environmental turbulence
Damanpour & Schneider (2006)	Phases of the Adoption	Organizational characteristics and top managers' attitudes toward innovation have a stronger influence than environmental and top managers' demographic characteristics.	Variance theory	

<p>Sharma, Citurs & Konsynski (2007)</p>	<p>RFID</p>	<p>Technological factors</p> <ul style="list-style-type: none"> • perceived benefit • perceived costs <p>Organizational readiness factors:</p> <ul style="list-style-type: none"> • top management support • financial readiness • IS infrastructure capabilities <p>External environmental factors:</p> <ul style="list-style-type: none"> • perceived standards convergence, • perceived consumer privacy • perceived stakeholder privacy <p>Inter-organizational pressure factors</p> <ul style="list-style-type: none"> • coercive • mimetic • normative pressures 	<p>DOI</p> <p>Organizational innovativeness</p> <p>Institutional theory</p>	
<p>Basaglia, Caporarello, Magni, & Pennarola (2009)</p>	<p>VoIP</p>	<ul style="list-style-type: none"> • Coercive • Fashion setter • Perceived internal benefits 	<p>Institutional Theory</p> <p>Management fashion</p> <p>Efficient-choice</p>	
<p>Penttinen & Tuunainen (2009)</p>	<p>Electronic invoicing</p>	<ul style="list-style-type: none"> • Bandwagon effect • Organizational readiness • Perceived benefits • Supplier pressure • External pressure from customers 	<p>Institutional Theory</p> <p>DOI</p>	
<p>Liu, Wei, Gu, & Chen (2010)</p>	<p>eSCM</p>	<ul style="list-style-type: none"> • Mimetic pressure not related to eSCM; • Coercive and normative are positively associated with eSCM. 		<p>Culture</p>
<p>Hossain, & Quaddus, M. (Eds.) (2010)</p>	<p>RFID</p>			

Table 3: Summary of Literature Review and Conceptual Studies

Article	Technology Innovation	Methods/Findings
Fichman (2004)	IT Platform	Conceptual model
Oliveira & Martins (2011)		Conceptual model
Frambach, R. T., & Schillewaert, N. (2002).	Integrated model Organizational and individual within organization 1973-1999	Conceptual model The objective of this paper is to discuss the main findings on organizational adoption and integrate them within a framework. The framework that we propose addresses the adoption decision at two levels, i.e. the organizational level and the individual adopter within an organization. We integrate research on innovation adoption and technology acceptance that have emerged in the marketing and management literature and identify several research issues that need further attention.
Hameed, Counsell, & Swift (2012)	Adoption process	Literature Review
Oishi Nemoto, Gondim de Vasconcellos, & Nelson(2010)	RFID	Conceptual model
Makkonen (2008)		Conceptual model Change and its acceptance are the main ideas beyond innovation adoption. His most significant finding is that adoption is a chain of conscious and unconscious favorable choices that are taken by multiple actors (2008, p.74). For the internal dimension: <ul style="list-style-type: none"> • size • the number of stakeholders Suggestion for future research: combine organizational adoption of innovations and organizational buying behavior

<p>Jeyaraj, Rottman, & Lacity (2006)</p>		<p>Literature Review Top predictors of IT innovation adoptions</p> <ul style="list-style-type: none"> • top management support, • external pressure, • professionalism of the IS unit • external information sources <p>At the level of independent variables, top management support stands as the main linkage between individual and organizational IT adoption, but at an aggregated level, innovation characteristics and organizational characteristics were good predictors of both individual and organizational IT adoption.</p>
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Constructs that Comprise External Environment Pressure

Tornatzky and Fleisscher (1990) defined environmental context as: “the arena in which a firm conducts its business – its industry, competitors, access to resources supplied by others, and dealings with government”. From this definition, external environment pressures are referred as the influences from the external business environment, which includes the competitors, supply-chain-counterparts (customers, suppliers and vendors), market, and government.

Nelson and Shaw (2003) stated that the external environment construct includes competitive pressure (from three respects – trading partners, the industry, and the expectation of market trends) and the firm’s participation level in an industry. Sharma and his colleagues (2007) characterized governmental influences, technology standards development, legal environment, consumer readiness, stakeholders’ privacy concerns, and technological breakthroughs as environmental factors. Hossain and Quaddus (2010) listed government support, external pressure, external information source, and environmental uncertainty as important environmental factors for a firm’s RFID adoption.

Innovation Adoption Motivation

An organization considers resources, costs and risks to form its innovation adoption decision. Oishi Nemoto, Gondim de Vasconcellos and Nelson (2010) concluded that the main drive for organizations to adopt certain innovations early is either to improve performance or to achieve a competitive position. For the organizational internal dimensions, most prior studies found that relative advantage and compatibility are the two most significant determinants of adoption (e.g. Rogers 1995). In our collection of literature, focusing on the external environment pressure, the primary reasons for an organization to adopt innovations are:

- to maintain or improve its level of performance and effectiveness (Damanpour and Schneider, 2006)

- for cost effectiveness; to introduce a new method; to increase packing volume; and because of feasibility (Nelson and Shaw, 2003; Makkonen, 2008; Oishi Nemoto et al., 2010)
- to increase efficiency and improve organizational performance (Nelson and Shaw, 2003)
- to react to customer demands (Wu and Lee, 2005)
- to comply with regulations (Autant-Bernard, Guironnet and Mussard, 2010; Oliveria and Martins, 2011; Penttinen and Tuunainen, 2009)
- to respond to supplier stress (Autant-Bernard, Guironnet and Mussard, 2010)
- to replace old technology that is not good enough anymore (Oishi Nemoto, et al., 2010)
- to obtain perceived potential benefits (Damanpour and Schneider, 2006; Makkonen, 2008; Penttinen and Tuunainen, 2009)
- to gain competitive positioning (Nelson and Shaw, 2003; Oishi Nemoto et al., 2010; Wu and Lee, 2005; Zhu, Kraemer and Xu, 2002)
- to bring changes to the organization, and to change the organization (Damanpour and Schneider, 2006; Makkonen, 2008)

Findings that Differ from Traditional Thinking

Contrary to the findings in studies on large business, Kuan and Chau (2001) found that for small businesses, while direct benefits are perceived to be higher by adopter firms than by non-adopter firms, indirect benefits are not perceived differently by either adopter firms or non-adopter firms. They argued that characteristics of the external environment are secondary.

Contradicted to prior findings, Nelson and Shaw (2003), and Joo and Kim (2004), did not find relative advantage as the most significant factor for organizational innovation adoption. In contrast to the literature, Hossain and Quaddus (2010) did not find any relationship between market uncertainty and RFID adoption.

Differing from traditional market orientation, Wu and Lee (2005) established that external factors have greater influences than the internal ones. They report that an organization's innovation adoption is reactive in nature and researchers should consider the moderating role of environmental turbulence, which consists of market and technology turbulence. Right after Wu and Lee (2006), Damanpour and Schneider (2006) studied innovation adoption using a community survey and reached different conclusions. Damanpour and Schneider's analysis showed that organizational factors have greater effects than environmental ones; however, factors within environment, organization and top manager's characteristics, all contribute to the explanation of innovation adoption. They also found that a leader's attitude is more important than the leader's demographic characteristics like education level or gender, and antecedents do not differ for different adoption phases.

Basagila et al. (2009) ascertained that mimetic pressure is not a significant factor of innovation adoption in their study. They concluded that perceived internal benefits is the main drive for the internal dimension, while coercive pressure and fashion setters' pressure are the two top factors for the external dimension. They proposed to add management fashion perspective to the institutional theory for completeness. Autant-Bernard, Guironnet, and Massard (2010) did a study on the determinants of innovation adoption of

innovative firms. They found that, contrary to traditional theoretical model as well as empirical studies, users' characteristics (i.e. membership of a group and absorptive capabilities) actually negatively impact the choice to adopt.

MAJOR THEORIES

Jeyaraj, Rottman and Laccity (2006) did a review of empirical studies on adoption and diffusion of IT innovation published from 1992 to 2003. In their review, they listed three theories that were used in organizational IT adoption research: the innovation diffusion theory, the diffusion/implementation model, and the Tri-core model. In our own literature search and inclusion of this review, we found two different theories that are applied most often for organizational innovation adoption: Tornatzky and Fleisscher's (1990) TOE (Technology-Organization-Environment) framework and the institutional theory. We present these two major theories that are dominant in our collection of literature and inspired our proposed research model in this section.

Technology-Organization-Environment (TOE)

In discussing how innovation is adopted both internally and externally, Tornatzky and Fleisscher (1990) used three elements: *organizational context*, *technological context*, and *environmental context*. These three elements are inter-correlated to influence the way a firm sees the need for, searches for, and adopts new technology, and brings changes to the firm. These three elements present "both constraints and opportunities for technological innovation" (p. 154).

Besides the typical characteristics such as firm size, managerial structure, and the amount of slack resources, Tornatzky and Fleisscher (1990) also included the "informal linkages between employers and the transactions carried out through them..." to define the organization context (p.153). Some researchers (e.g. Cyett and March, 1963; Hage, 1980; Rogers, 1983; Tornatzky et al., 1983) suggested that slack does not always lead to technological innovation. It might be a necessary, but not sufficient, condition for innovation. The using of slack resources is related to the characteristics of the external task environment and organization.

The technological context includes the internal and external technologies that are relevant to the firm. Technologies may include both equipment as well as processes. Two major determinants of innovation adoption from the technology context perspective are the availability of technology and the fit of the available technology with the firm's current technology.

Tornatzky and Fleisscher stated that two key determinants of innovative activity are from external environment aspects, i.e. "the competitive characteristics of its industry" and "the existence of a relevant technology support infrastructure" (p.167). In addition to these two facets, Tornatzky and Fleisscher added a third one, government regulation, to complete the environment context. The competitive characteristics of its industry (other researchers called it market pressure) consists of firm size, intensity of competition, customer-supplier relations, market uncertainty, dimensions of competitions and industry life cycle. Labor costs, skills of the available labor force and access to suppliers of technology-related services make up the technology support infrastructure. Government regulations either encourage or impede a firm's innovation adoption.

Teo, Wei and Benbasat (2003) were the first to link institutional theory to IT adoption. They controlled for organization size, IT department size and technology condition (existence of EDI applications implementation) to test the effects of mimetic pressure, coercive pressure, normative pressures and perceived IT complexity for inter-organizational systems. They claimed that government and sanction bodies influence decision makers and that effect, in turn, affects the actual innovation adoption. They also posited that the parent organization pressure has greater power than trading partner pressure because managers either want approval from parent company or are concerned about their career advancement. This study is the most cited article of inter-organizational innovation adoption. Adapting the TOE organization perspective, Nelson and Shaw (2003) found that top management support and feasibility are main determinants to distinguish between adopters versus non-adopters; from the technology perspective, technology conversion and architecture; and from the environment perspective, competitive pressure and participation level. They called the attention to the lack of any attributes associated with the innovation itself such as relative advantage and compatibility, which were the most significant factors found in prior research. Contradicted to prior findings, relative advantage is the third most significant variable in their study. They proposed that due to the nature of their study, some other factors would be considered as more important in inter-organizational system adoption decision such as willingness of other organizations to adopt. This demonstrated the “situationalness” of innovation adoption (TOE).

Institutional Theory

Institutional theory has been widely used for studying the adoption and diffusion of organizational practices (e.g. prior to 2000, DiMaggio & Powell, 1983; Meyer & Rowan, 1977; Scott, 1995; Tolbert & Zucker, 1983). The institutional approach argues that in modern societies where organizations are seen as systems of rationally ordered rules and activities (Weber 1946), organizational practices and policies become readily accepted as legitimate and rational means to attain organizational goals (Meyer and Rowan 1977).

Organizations are subject to pressures to be isomorphic with their environment (Burt 1987). Institutional theorists assert that the institutional environment can strongly influence the development of formal structures in an organization, often more profoundly than market pressures. DiMaggio and Power (1983) identified three general mechanisms of isomorphism: coercive, mimetic and normative isomorphisms.

Coercive pressure

Powell and DiMaggio (1991) defined coercive pressure as “...result[ing] from both formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society within which organizations function” (p.67). In other words, coercive pressure comes from authorities or other organizations that have power over the target organization. This pressure is applied when the organization is compelled to adopt structures or rules. In our collection of literature, researchers studied different sources describing coercive effect: from the government, parent company, standard governing agency, vendor, supplier, and customer.

Coercive pressure from authorities or other organizations are more powerful over the target organization. For example, an organization has to comply with government regulations. In the case when an innovation is needed to fulfill some “new” requirements,

organizations often have no other option but to adopt such technology. However, government regulation can either encourage or discourage the adoption of innovation (Scupola 2003; Hossain & Quaddus, 2010). The role of coercive forces in institutional theory highlights the impact of political rather than technical influences on organizational change. Coercive pressures may also stem from contractual obligations with other actors. Another authority coercive source is a parent company that imposes operating procedures and legitimates rules and structures. Sometimes, customers possess great powers that “force” a company to adopt new technology (c.f. Porter’s five-force model).

Mimetic pressure

Mimetic forces are pressures to copy or emulate other organizations’ activities, systems or structures. Not all institutional isomorphism comes from coercive authority. Powell and DiMaggio (1991) argued that “once a field becomes well established, however, there is an inexorable push toward homogenization.” (p.64) Organizations become more similar to one another. If “similar”, it is easier for organizations to transact with other organizations, to attract career-minded staff, to be acknowledged as legitimate and reputable, and to fit into administrative categories that define eligibility for public and private grants and contracts. Some organizations “copy” or imitate another organization’s model (structure, process or forms) if they are deemed “successful”. However, sometimes the mimetic behavior is unintentional; it simply happens during staff transfer or turnover, or from consultant inputs.

Most of the mimetic isomorphism is of ritual aspect. Innovations that are deemed to enhance legitimacy are seen as desirable, especially under conditions of uncertainty where actors cannot be sure of what the outcomes of the adoption of different processes or systems. Such copying may be undertaken without any clear evidence of performance improvements. On the other hand, an advantage of copying is that smaller firms need not spend money and resources they do not have to find out whether a new model would work. Mimetic forces explain the widespread adoption of, for example, management practices for which there is little empirical evidence of performance benefits, i.e. the following of fads and fashions (Abrahamson, 1996).

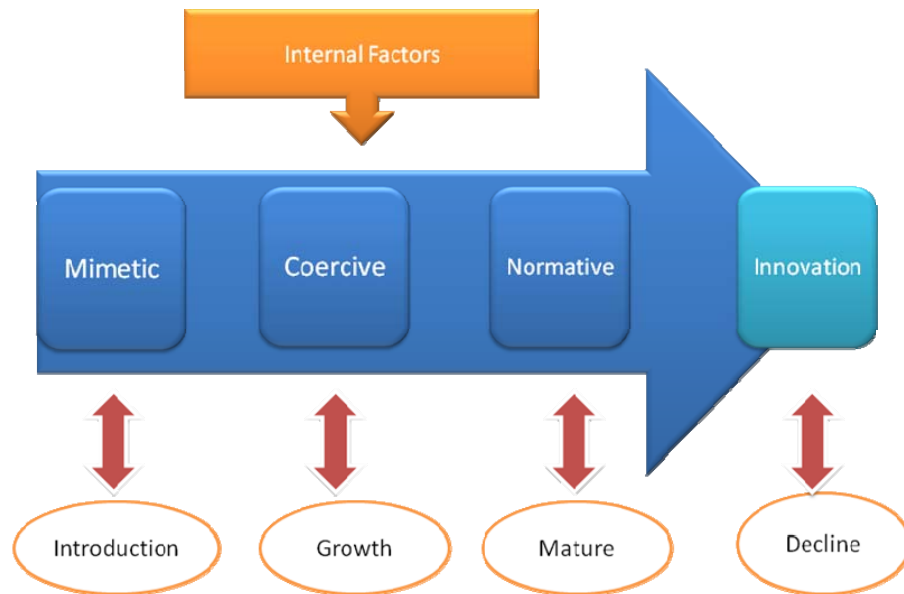
Normative pressure

Powell and DiMaggio (1991) described the third source of isomorphic organizational change as normative and stated that this source stems primarily from professionalization (p.70). Normative forces describe the effect of professional standards and the influence of professional communities on organization. They claimed that two aspects of professionalization are important sources of isomorphism: “the resting of formal education and of legitimation in a cognitive base produced by university specialists; the second is the growth and elaboration of professional networks that span organizations and cross which new models diffuse rapidly.” (p.71). Organizations are expected to conform to standards of professionalism and to adopt systems and techniques considered to be legitimate by relevant professional groups. These norms are conveyed through the education and training of professionals and certification processes accredited by professional bodies. One important mechanism for encouraging normative isomorphism is the filtering of personnel. Organizations copying “central” organizations policies and structures as models and thus promotes structure homogenization.

PROPOSED CONCEPTUAL MODEL

Oliveira and Martins' review (2011) of information technology adoption models at firm level is the only review that we found focused on organizational level; the drawback is that they only applied one theory, the TOE (Technology-Organization-Environment) model. Oliveira and Martins (2011) suggested for future research to combine more than one model to study innovation adoption because future technologies are foreseeably more complex. To answer their call, we review factors that influence organization's innovation adoption decision from different theories and models. Integrating findings from literature and theories, specifically, diffusion of innovation, product life cycle, TOE, and institutional theory, we propose a stage model (see Figure 1) to show the approximate correlation between environmental pressures and product life cycle. Future research can validate or expand this model and practitioners can use this as a guide to consider different factors in different stages.

Figure 1: The Proposed Conceptual Model



Components of the Proposed Conceptual Model

Top layer is the internal organization factors (see Figure 1). We assert that the internal factors such as slack, human resources, IT resources, have profound influence on a firm's technology adoption as there are abundant literature and empirical studies to support this view. **Middle layer** is the environmental pressures from Institutional theory. Although we put mimetic, coercive and normative pressures on a path-like model, the intent is to show the dominant pressure in each stage and does not mean that other pressures do not have any impact in other stages. **Bottom layer** shows the Product life cycle (PLC). The PLC

recognizes four separate developmental stages in the life span of a product, with each stage characterized by its own distinct marketing opportunities and restraints (Kotler and Keller, 2012). We chose PLC to be our stage base is because we consider technology as an artifact and an artifact can be treated as a product. A product has different stages of its life cycle. A technology also has stages of its life cycle. We are going to discuss the middle and bottom layers as a whole to illustrate concepts of our model in the following section.

Introduction-Mimetic

This is the stage in which the product/technology innovation is initially adopted by an organization. The introduction stage is probably the most important stage in the PLC for the promoter. For the promoter, the main goal for this stage is to increase awareness. When a new technology is introduced, competitors want to collect as much information as possible to formulate their response strategy. Some competitors copy/imitate the new technology to get at least the residuals effects of first mover advantage.

Powell and DiMaggio acknowledged three conditions that organization would produce mimetic isomorphism: (1) when organizational technologies are poorly understood, (2) when goals are ambiguous, or (3) when the environment creates symbolic uncertainty. As diffusion of innovation proposed, the behavioral process is to deal with uncertainty related to new ideas/products, i.e., an innovation. Imitation is the standard response to uncertainty. For example, in 2007, Apple Inc. successfully integrated mobile operating system (iPhone OS), mp3 player, camera, and cell phone technologies into a smart phone: the first generation iPhone. Due to its popularity, the other smart phone competitors tried to copy the success of iPhone by emulating the features of iPhone.

Growth-Coercive

In the growth stage of the PLC, competitors are attracted into the market with very similar offerings. Products become more profitable and companies form alliances, joint ventures and take each other over. Market share tends to increase steadily.

Coercive pressure comes from authorities or other organizations such as parent company, vendor, supplier, and customer that have power over the target organization. This pressure is applied when the organization is compelled to adopt structures or rules or innovations. When a certain product is in growth stage, customers possess great powers that “force” a company to provide some functionalities of the product, which then forces the company to adopt new technology. When customers want touch screen capability that iPhone first offered on the market, other companies have to design their smart phones with such feature. From 2008 to 2011, iPhone enjoyed the rapid growth and consumers asked other smart phone competitors (Motorola, BlackBerry, Nokia, AT&T, Samsung, etc.) to offer the similar features in their smart phones.

Maturity-Normative

When a product is in the maturity stage, price wars and intense competition occur. At this point the market reaches saturation. Normative pressure thus arises from the threat of lost legitimacy (Wu & Lee, 2005). When normative pressures are high, organizations adopt innovations not on account of their assessments of the innovation’s potential efficiency and

return, but on account of a bandwagon pressure caused by the sheer number of firms that have already adopt that innovation (Abrahamson & Rosenkopf, 1990; Tolbert & Zucker, 1983; Wu & Lee, 2005). For example, widespread of ATM in banking industry started out as a result of mimetic pressure, then became the “standard” service, i.e. a normative process. From 2012 to present, iPhone’s market share levels off as the smart phone reach the maturity stage. The features of iPhone become the standard for all the smart phones such as maps, interactive assistant (Siri), security feature (finger print recognition).

Decline-New Innovation Process Starts

At this point there is a downturn in the market share. More innovative products are introduced or consumer tastes have changed. There is intense price-cutting and many more products are withdrawn from the market. When a technology is in the decline stage, companies need to identify and develop a new technology to replace the old one proactively, i.e., start the innovation process all over again. In the future time, new innovations will replace smart phone technology. A plausible technology may be wearable devices: Google glass, smart watch. Organizations need to search and invest for new innovations.

In this paper, we review literature pertaining to organizational innovation adoption. Different theories are presented and integrated in constructing the proposed conceptual model. This review and the proposed model offer researchers a starting point to examine the external environment pressure on a firm’s innovation adoption decision. In different stages, firms should apply different strategies, focus on the main issues of the stage, and allocate different resources to deal with the environmental pressures.

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