



- ▶ Editorial Note.....1
- ▶ The Architecture of an Information Revolution.....1
- ▶ Teleological Approaches to Entrepreneurship.....6
- ▶ Teaming Up for Innovation.....9
- ▶ Strategic Entrepreneurship: An Insight into the Primary Determinants11
- ▶ Contact info.....13

InnKnow FORUM



The 21st Century is already proving to be the real dawn of the Information Revolution. The Internet is now officially coming of age and highly functional mobile devices are everywhere. The youth of today are now permanently connected and the media world is shifting to a "born digital", "on line first" mentality. Every part of our society is feeling the effects of this revolution and are reaping the benefits of "real time information everywhere" . . . or are they?

The Architecture of an Information Revolution

by Adrian Dale, Creatifica Associates, Visiting Professor of Knowledge Management at AUEB.

Many 21st Century business have a serious problem - most of them were not designed for this connected revolution. Their processes and systems were conceived as stand-alone entities not connected within the firm, and certainly not to the wider world. Business models have assumed that the firm is a discrete entity with hard physical and electronic boundaries around it and with staff tied to it for long periods. However, the world has shifted. Most business transactions are now between multiple parties and can be of any size from the 79p of iTunes to multi-billion pound deals. All are mediated by the exchange of complex information in

near time and there is little distinction between staff and contractors in any deal.

This brave and exciting new world needs a revolution in the information professions currently working within the firm. The separate churches of IT, Library, Knowledge Management, Web Services, Records Management, eBusiness need to be forged together into a new strategic presence in the firm. And the question for the Law Librarians of the 21st Century is . . . do you want to lead this revolution, or be lead?



Editorial Note

How should a business organization respond to the information revolution that affects every part of our society? Are firms ready to reap the benefits of "real time information everywhere"? The lead article in this issue, authored by Adrian Dale of Creatifica Associates and a Visiting Professor of Knowledge Management at AUEB, analyses a number of examples on how firms should react to the internet revolution.

The reminder of this year's issue presents the InnKnow articles published on the website of MSL (www.msl.aueb.gr) as "stories of the month" during 2008). Today, several concepts of teleological forms of entrepreneurship have been developed, beyond the traditional, neoclassical or Schumpeterian notion of entrepreneurship. In their article "Teleological Approaches to Entrepreneurship", L. Kyrgidou and I. Katsikis, both Doctoral Researchers at MSL present and comment on those various forms of entrepreneurship. In the article entitled "Teaming Up for Innovation" Dr K. Kostopoulos, a Research Fellow of MSL questions how firms actually innovate? In the article "Strategic Entrepreneurship: An Insight into the Primary Determinants", L. Kyrgidou analyses the results of her study on strategic entrepreneurship.

Klas Eric Soderquist





The Architecture of an Information Revolution

The divided organisation - internecine struggles within the profession

The business challenges of information overload are being recognized across the firm at many levels in the hierarchy. But most firms have not yet evolved the skills to manage the challenges effectively at an individual, team or corporate level. The situation is coming to a head in many different guises and multiple initiatives have been started to solve it.

However, the nature of the solutions devised depends very much on the professional background of the individuals involved in the diagnosis. Polarised positions and solutions frequently emerge as different breeds of information professional get involved.

A new holistic approach is needed in which the balance is redressed and the four key communities of our professional domain come together.

These four communities have historically used very different and conflicting terminology to classify business activity. The standards in these areas are now beginning to converge but many organisations have projects that are still on a divergent path.

Knowledge Managers have focused principally on know-how and the organisation of documents/facts/relationships in KM systems.

IT Architects have focused on the information systems and supporting technology required to support businesses. Data modelling, object modelling and database design have featured strongly in their work with a focus on very structured information.

Librarians have focused on the unstructured information held in document systems or in physical collections using library style classification terminology

Records Managers have focused on the records series produced by business processes and have classified information in file plans supported by additional key words.

As information systems become more sophisticated, there are no longer clear dividing lines between these requirements and an integrated architecture is required to support them with a language that brings the fields together.

The UK Government has made things more complex by putting in a series of recommendations in each of these areas that until recently were conflicting or inconsistent in some respect.

Enter the Enterprise Information Manager...

A new breed of information professional is now needed, someone who can bridge each of these camps and harmonise the language and concepts involved. The Enterprise Information Manager is emerging with a clear understanding of how these concepts all fit together and a good model showing how they can make a powerful and unique contribution.

These managers have a special set of skills. They need to be able to see the organisation differently - viewing it through an information/knowledge "lens" revealing the challenges, problems and opportunities that are presented.

These problems have always been there but now they are of strategic importance and the Enterprise Information Manager needs to step up to the mark and make their voice heard. The organisation must be made to listen before the problems grow too large to solve.

... Following a well establish organisational development pattern

Some clear development patterns have emerged in the design of organisations during the 20th and 21st centuries. They have evolved through clear phases each with a significant change characterised by the maturing of a "back room" administrative function into a board level professional discipline. These changes have been driven by increasing sophistication, volume and complexity - all requiring more coordinated and skilful management beyond the capability of generalists.

- In the 1950s - Accounts & Finance Departments matured to become the Finance Directorate (run by the Director of Finance or the Chief Finance Officer)
- In the 1970s - The Personnel and Training Departments matured to become the Directorate of Human Resources (run by the Director of HR or the Chief People Officer)
- In the 1980's - Transport, Procurement, Manufacturing and sometimes Customer Service Departments matured to become part of an Operations Directorate (run by the Director of Operations or the Chief Operating Officer)

Information management is the latest of these but it suffers from the disadvantage that it is the amalgamation of a range of sometime collaborating but more often competing disciplines:

by

Adrian Dale

The Architecture of an Information Revolution

- ICT
- Records Management
- Knowledge Management
- Librarianship

The biggest battles have recently been fought between information and knowledge management when a wide range of professional disciplines entered the fray and moved into the territory traditionally occupied by the librarian. This has been exacerbated by the maturing of the internet and intranets allowing a new range of communications and media professionals to join the mix. We need a model that accommodates and underpins both all of these areas.

We now need the Information Management Directorate run by the Chief Information Officer (CIO) or Director of Information. The CIO is a well recognised position in many larger organisations but is still very technology focused - one of the reasons that the title of Director of Information (which still runs the ICT resources) is to be preferred. The CIO needs to be supported by a new breed of Enterprise Information Managers, multi-skilled information professionals who can speak many information dialects.

Quantifying the global problem

The sheer scale of the challenges we face defies comprehension but let's try to put it into figures using headlines emerging monthly in the press:

- "Morgan Stanley fined \$15million for being unable to hand over e-mails demanded by the SEC." - Computing May 2006
- "54% of businesses cite compliance needs as being the major driver of storage growth" - "Hot on the Audit Trail" - Computing August 2006
- "Employees spend 35% of productive time searching for information online." - Working Council for Chief Information Officers
- "The Fortune 1000 stands to waste at least \$2.5 billion per year due to an inability to locate and retrieve information." - IDC, (The High Cost of Not Finding Information)
- "We are now creating more digital information than we can store, " - EMC Executive VP Mark Lewis.
- "This year, for the first time, there won't be enough storage capacity in the world to hold all the stuff being created" - John Gantz IDC
- "161 billion gigabytes of digital content created in 2006, 231 gigabytes for every person in the USA today" - USA Today - March 2007

This last headline in particular warrants further analysis. In a study in 2003 the University of Berkeley estimated that the corresponding 2002 figure was 5 billion gigabytes, represent-

ing a compound growth rate of 138% per annum since 2002. Or to put it another way - more information was created in 2006 than was created in the whole of the 20th Century!

But what about the situation within the firm?

My own studies show that even the best managed firms have a growth rate of between 50-70% per annum in their internal information volumes. The explosion in unstructured information has been well documented in the IT press and the response to date has been to increase the volume of disk space to cope. However a disk space management crisis is now emerging, with daily backup times frequently exceeding backup windows. New IT strategies are being devised to address this and new systems are being installed to bring order to the chaos - with the Electronic Document and Records Management System (EDRMS) taking pride of place in many firms.

However, unless they are well managed, EDRMS systems are actually likely to exacerbate the problem by encouraging the retention of older versions and of project ephemera. EDRMS systems need to be supported by equivalent and integrated systems to handle e-mail, web and intranet content management. Unless this is done, some of the content in the EDRMS will be duplicated elsewhere as e-mail attachments and reformatted web content.

Recent studies by StorageTek have shown that 80% of information in organisations is replicate material and that less than 10% of information needs to be readily to hand when undertaking retrieval - provided that it is the right 10%. The rest of the material is only necessary for archive reasons but must be linked back into the main visible collection. Solving these problems requires all of the information management disciplines to see the problem in the same way and to come together to provide an integrated solution.

Storage is not the goal - retrieval and reuse is

More importantly, finding relevant material in this emerging mess will become akin to the challenge on the World Wide Web - with one notable difference - the absence of a Google equivalent.

Google has tamed the web by relying on millions of people cross linking pages manually in a way that drives its accurate document ranking mechanism. The pages that have been cross linked the most are usually the most important. Duplicates or older versions are usually ignored in the linking process and drop out of sight on search engines.

Within organisations, there is almost no cross linking process. Most office documents or e-mails exist as little islands of information divorced from all context. A search engine is as likely to find outdated or inaccurate documents as the most recent version. This is especially true in a world of low information literacy where most staff have received no training in the art of structured search. Information seeking behaviours and strategies are primitive and often focus on finding any relevant information, not necessarily the right information.



The Architecture of an Information Revolution

Editorial Skills, Librarianship and Information Science are key parts of the mix

With growing information volumes we need to bring increased order to our information collections allowing audiences to filter the overload down to manageable levels. There are four levels at which this can be done:

1. Editorial Approach

Information organised by focused "collection" is always the best option if it is well managed and curated. In this arrangement, audiences are presented with documents in context - perhaps the most recent or relevant first - with links to supporting material. This is the driver behind the success of the web as an information tool. A web site which documents the "latest" or "hottest" links is always better than a random hit from a search engine.

2. Classification Approach

Yahoo's early success resulted from armies of students who grouped web information into a series of classes organised in hierarchies. Audiences could find what they needed by navigating through the hierarchies until they found the class of information they needed - very much analogous to using a library catalogue with class marks.

3. Categorisation Approach

More recently with management information systems and some web based e-commerce systems we have become used to "filtering" where we make selections of keywords from multiple (faceted) picklists and then the system looks for the documents that are classified with all of those concepts combined often restricted to searching in pre-defined fields. Thesauri can be added to this approach to allow for language variety.

4. Full Text Search

The Google approach (and other engines) is a free text search where hits are determined by the frequency of occurrence of words in the document - even if they aren't core to the content. Increasingly sophisticated algorithms are being devised which improve this approach day using a variety of mathematic techniques to deal with "concepts" and "fuzziness".

We describe here a sophisticated and managed information landscape, an architectural approach that has been carefully designed to meet business goals. Most organisations have evolved an accidental landscape and architecture partitioned across multiple incompatible IT systems. The modern Enterprise Information Manager needs to create the roadmap that will bring order to this chaos.

The five components of the effective information architectures

Most organisations have done a good job in bringing their IT infrastructure under control. However, most ignore (or do not understand) the importance of the infostructure, the publication and curation processes and are not aware of the organisational and governance structures necessary to sustain the whole architecture.

Whilst these are specialised functions, there is a need to get them understood more widely across the organisation and to build them into the normal performance management processes.

1. IT Infrastructure

Many organisations have an excellent IT Infrastructure under development often providing for integrated file store, database engines and a security management infrastructure. This has been driven by the need for systems interoperability and cost control.

2. Infostructure

However, there is often a relatively weak infostructure (the semantic infrastructure) Information can often be stored anywhere on the IT systems without regard for classification and metadata and there isn't a high level plan for collection design and delivery channel design.

3. Publication and Curation Processes

To make infostructures come to life - more robust Publication and Curation processes are needed to assure the quality and accessibility of information stored on the systems and to ensure that the material is delivered to the right audiences in a timely way.

4. Information Roles and Competencies

This approach requires new organisational roles focusing on enterprise information management to be implemented and new information competencies amongst staff.

5. Governance Framework

To make the whole architecture hang together, the organisation needs to adopt stronger information governance policies which curb the current free for all. Information is a critical organisational asset and needs to be managed as such with the necessary embedded values and behaviours which reflect the organisational importance of these assets.



The Architecture of an Information Revolution

The New Enterprise Information Manager's Toolkit

To force (and hopefully lead) the organisation towards a more integrated future, the Enterprise Information Manager needs a clear framework that can be easily explained to business colleagues.

The questions and answer sets below have served the test of time by working successfully at all levels of the firm allowing a meaningful dialogue to take place on a subject that is often ignored.

1. For what Purpose? - Information gives our organisation an edge by ... and we measure it by ...
2. For whom? - The Audiences that we need to engage and satisfy are ... and they need ... in order to do ...
3. What content specifically? - The Collections we need to assemble and manage proactively are ...and their organisational value is ...
4. Through what channels? - Our Audiences access these Collections to achieve their goals through the following channels ...
5. By what processes? - We will Publish key information to our Audiences, Curate our Collections and Govern the Enterprise Information Management framework using the following enterprise wide processes ...

The key question

There has never been a more interesting and challenging time to be working in this field. New information challenges are emerging by the day. New information management techniques and tools are appearing even as I write this paper. And all of this change is taking place in the context of an unprecedented and increasing growth in information volumes and complexity.

The business world risks being overwhelmed by this tidal wave of information. And this is just at the point when the law is demanding better record keeping, better governance and better discoverability.

It is the Enterprise Information Manager's job to do something about this. They must lead from the front, marshalling and directing their fellow professionals on many information fronts. They must channel and redirect this tidal wave (we will never turn it back) solving today's information problems and creating tomorrow's business opportunity.

Biographical Details

Adrian Dale is renowned as a radical thinker in the information and knowledge management fields - on a mission to integrate the divided camps of the information management world.

He has managed the information, records and knowledge functions of several UK organisations in the public and private sector - handling the shift from the paper to electronic worlds. He coaches the information management teams of a number of public and private sector organisations, helping them creating the radical change that is necessary today.

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Teleological Approaches to Entrepreneurship

Entrepreneurship, in its traditional notion of business or economic entrepreneurship has been the object of a large variety of research work (Cunningham and Lischeron, 1991). Today, several concepts of teleological forms of entrepreneurship have been developed, beyond the traditional, neoclassical or Schumpeterian notion of business/economic entrepreneurship, such as strategic entrepreneurship (Ireland et al., 2003; Hitt et al., 2001), social entrepreneurship (Peredo and McLean, 2006; Weerawardena and Mort, 2006), sustainable entrepreneurship (Dean and McMullen, 2007; Cohen and Winn, 2007), intrapreneurship and public entrepreneurship. In this paper, we aim at mapping teleological approaches to the entrepreneurial phenomenon by defining entrepreneurial notions and providing a critical review. Based on our definition of teleology as the process of heading towards an end, teleological approaches are then perceived as the ultimate objective of each form of entrepreneurship. Below we discuss and analyze the aforementioned teleological approaches, while providing a comprehensive overview in terms of definitions, objectives and contributors of the respective fields.

Teleological Approaches to Entrepreneurship Strategic Entrepreneurship

Strategic Entrepreneurship has emerged as a core concept of the new entrepreneurial paradigm, developed as a response to the inefficiencies of the traditional paradigm in the field of strategy in explaining and predicting the proper firm behavior in volatile, and turbulent environments, where increasing stakeholder expectations demand innovation more than optimization. Within this entrepreneurial paradigm, firms develop and implement new business models within which entrepreneurial opportunities are identified and exploited through the application of a strategic discipline to create wealth (Hitt et al., 2001). A company's competitive cost position is determined less by structural factors like scale, than by its business model, while competition is determined more by the company's knowledge and capabilities derived from firm resources. Further, coordination across the firm is provided less by formal strategic plans than by sharing the vision, priorities and assumptions about the competitive landscape, environment and information. Adaptation and innovation are stimulated by an organization's culture. The result is a true learning organization involving scanning, adapting, learning, and launching new businesses.

The construct of SE details the strategic discipline through which exploration is used to identify the entrepreneurial opportunities and exploit them to create firm wealth. Thus, SE facilitates firm efforts to identify the best opportunities (matched to their resources and with the highest potential returns) and to exploit them with the discipline of a strategic business plan. The goal of SE is to continuously create competitive advantages that lead to maximum wealth creation. Opportunity recognition is prompted from existing information that influences and individual's framework for interpreting new information. To recognize an opportunity, an individual has to have prior information that is complementary to the new information which triggers an entrepreneurial conjecture (Kaish & Gilad, 1991).

Opportunity recognition lies at the heart of all entrepreneurial endeavors, as an opportunity can only be realized once recognized.

Social Entrepreneurship

In the past, several, varying in nature definitions of social entrepreneurship and as to what a social entrepreneur is, have been provided (Henton et al., 1997; Boschee, 1998; Thompson et al., 2000). In addition, several other terms are used to describe similar activities and initiatives, including social purpose venture, community wealth venture, non-profit enterprise, venture philanthropy, social enterprise (Cannon, 2000). However, one commonality emerges in almost all descriptions: the problem solving nature of social entrepreneurship and the corresponding emphasis on developing and implementing initiatives that produce measurable results in the form of changed social outcomes and/or impacts.

A number of researchers emphasize the role of innovation in a social entrepreneurial organization (Borins, 2000). Prabhu (1998) and Sullivan Mort et al. (2003) identify the three factors of innovativeness, proactiveness and risk taking (from Covin and Slevin, 1986) as central to social entrepreneurship. Some researchers have advocated social entrepreneurship as partial solution to the need for radical welfare reform, as a way to meet social and other demands through social innovations led by enterprising people (Thompson, 2002). While this approach has attracted considerable interest, it has also received criticism as undermining a rights-based approach to social services, which represent conceptualizations of social entrepreneurship within a welfare economics domain. In addition, the literature in the field fails to refer to the competitive environment within which social enterprises operate. For instance, approaches that view social entrepreneurship as that views social entrepreneurs as one special breed of leader (Dees, 1998b) hinders capturing the way in which social entrepreneurs achieve their objectives by enacting the social mission and striving for operational efficiency, while responding to environmental dynamics.

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Teleological Approaches to Entrepreneurship

Intrapreneurship

Intrapreneurship is defined as the entrepreneurial way of action in an existing organization and it can be perceived as innovations in large, established organizations (Hitt et al., 2002). Intrapreneurship as a process is directly affected by its outer environment (Van de Ven, 1993). On the basis of this work, central factors related to the concept include management's interpretation of environmental changes, threats or opportunities, and the resources available to the organization, so that the latter reacts to changes in its environment (Stevenson and Jarillo, 1990). Important dimensions of intrapreneurship pertain to opportunity identification, opportunity exploitation and trust that organizational success can be achieved (Guth and Ginsberg, 1990; Miller, 1983). Intrapreneurship emphasizes the creation of new action patterns and strategic renewal in already existing firms through transforming present organizational resources into new resource combinations (Venkataraman et al, 1992) and it has been defined as innovations in large, established organizations (Hitt et al., 2002). It is a concept linked to the entrepreneurial orientation of an organization and finds its roots within the entrepreneurship literature, even though it has lately been positioned as a concept also within the management literature (Antoncic & Hisrich, 2003). Intrapreneurship is important for organizational survival, growth, profitability and renewal (Zahra, 1995; 1996), especially in larger organizations. Innovation, broadly defined, is the common theme underlying all forms of intrapreneurship. The use of innovation as a mechanism to redefine the organization, its position within markets and industries or the competitive arena in which the organization competes, seems to form the core of intrapreneurship (Covin & Miles, 1999).

Intrapreneurship is also referred to as corporate entrepreneurship. This concept refers to the entrepreneurial orientation of existing firms. Dess et. al (1999) distinguish two types of corporate entrepreneurship: one is linked to the birth of new business within an existing organization; while the other refers to the transformation of organizations through strategic renewal. The basis of intrapreneurship is recognizing an opportunity, exploiting it and trusting that exploiting an opportunity in a new way that deviates from previous practice, will succeed and support the realization of the organization's objectives. The use of innovation as a mechanism to redefine or rejuvenate the organization, its position within markets and industries, or the competitive arena, in which the organization competes, seems to form the core of intrapreneurship (Covin and Miles, 1999).

Public Entrepreneurship

It is commonly recognized by literature that the research exploring the role of public entrepreneurship in the public sector is still in its infancy. The notion of 'public entrepreneurship' has only recently appeared in the ordinary entrepreneurship literature, and it is defined by Morris and Jones, (1999), as 'the process of generating value for citizens by bringing together unique combinations of public and/or private resources to exploit social opportunities', while Bygrave (1989) claims that entrepreneurship is the process of identifying opportunities and preparing for their exploitation, taking and managing risk, organizing and co-coordinating resources, in

order to create competitive advantages to foster the opportunity exploitation process (Kelman, 2005; Roberts 1992).

Scholars have recently focused their interest on entrepreneurship models as the means of achieving more efficient and innovative public organisations (Moon, 1999; Feldman, 2001; Kelman, 2005). However, from an extensive literature review, it appears that approaches regarding the applicability of an entrepreneurial approach to the public context have been conflicting over time. For instance, Terry (1993) argues that the differences between the private and the public sector do not allow the adoption of the entrepreneurship model into public organisations (Zerbinati and Souitaris, 2005). The public context sets up/creates limitations to what managers can and should do and also among other things, it is claimed that the sector is constituted by the inherent political and regulated character of both goal-setting and performance (Denhardt, 1984). Moreover, there are many political actors who set the overall goals. These goals are subject to change whenever shifting political coalitions find it appropriate and they are typically broad and ambiguous. Most of the times the problems that are being dealt with, are complex with no-way solutions, which makes evaluation and comparison more difficult in the public, rather than in the private sector context. In addition, the public sector context is characterized by strict rules and regulations as to how various tasks and jobs are to be accomplished, what is to be done and what is not to be done e.g. there is no much space for strategic maneuvering (Kelman, 2005). For instance, a public institution can neither change its line nor harvest and invest any profits it may gain from reducing the spending of resources or from performance pay (Klausen, 2001).

Discussion and Conclusions of the Theoretical findings

In this article, we aimed at defining entrepreneurial notions and at providing a critical review of their context, in order to map teleological approaches of the entrepreneurial phenomenon. Based on our definition of teleology as the process of heading towards an end, teleological approaches were conceptualized as the end result of each form of entrepreneurship. The latter, served as a platform for our analysis of strategic entrepreneurship, social entrepreneurship, environmental entrepreneurship, sustainable entrepreneurship, intrapreneurship and public entrepreneurship.

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Teleological Approaches to Entrepreneurship

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Teaming Up for Innovation

Innovation activities have flourished over the last decades as organizations have moved inevitably from previously dominant bureaucratic forms of structure toward more flexible, lean, and flat structures. Increasing competition, resulting from the global and technological nature of markets, has amplified the need for organizations to develop new products, deliver diversified services, and learn to execute their tasks in more novel and efficient ways. In industries such as IT, telecommunications, electronics, tourism or bank services, more than 50% of the annual sales comes from products and services that have been introduced to the market during the last five years.

But how firms actually innovate? Recent studies (Nonaka & Takeuchi, 1995; Van den Ven et al., 1999; Edmondson, 2002) focus on the role of project teams as the “field” of innovation development, which, in most cases, comprise of people from diversified educational and professional backgrounds. In this context, a field research of MSL in a large sample of European enterprises examines and analyzes the learning and knowledge creation processes of organizational teams responsible for the completion of an innovation project.

These project teams are time-limited, non-repetitive in nature, involve considerable application of knowledge, judgment, and expertise, and aim at the development of a new product, technology or service, the introduction or improvement of a production process, or the adoption of a new management system.

The Research Model

The MSL study proposes that team learning consists of three separate but interrelated processes (Crossan et al., 1999): intuition (i.e., the preconscious recognition of a pattern and/or possibilities inherent in a personal stream of experience), interpretation (i.e., the explaining through words of an insight, or idea to one's self and to others), and integration (i.e., developing shared understanding amongst team members and the taking of coordinated action through mutual adjustment).

Furthermore, and through building on more thorough classifications of teamwork processes (Marks et al., 2001), three categories of factors were posited to influence learning within teams: social conditions (i.e., ties' strength, conflict, participative decision-making, and boundary-spanning activities), psychological conditions (i.e., cohesion, psychological safety, and efficacy), and enabling factors (i.e., members' prior experience, clear group goals, team leadership, support of the organizational environment, and organizational climate).

Subsequently, learning process is hypothesized to affect both the efficiency of team operations as well as the effectiveness of group learning in leading to organizational outcomes.

Findings and Managerial Guidelines

The present study offers useful implications for practitioners trying to manage teams engaged in innovation-focused projects. First, the results strongly indicate that managers should recognize the key role that learning processes hold in creating valuable team results. Increasing the members' opportunities to generate new ideas, exchange experiences, participate in productive discussions, and experiment with different implementation scenarios and project deliverables, may prove critical managerial interventions for enhancing team efficiency and the possibility of institutionalizing group outcomes in the respective organization.

Subsequently, the findings suggest that is critical for managers to create a proper mix of social, psychological, and enabling conditions in assembling and running teams. A group context that fosters participative decision-making, motivates inter-group communication activities, and discourages relationship and task disagreements is more likely to stimulate learning behavior within the team, and, in turn, contribute to higher performance outcomes. Also, managers should take measures to increase members' beliefs about how cohesive and safe is team environment for taking risks, expressing doubts, and supporting each others views and actions.

Furthermore, companies can trigger group learning through establishing a clear direction about what the team is expected to accomplish, by ensuring that the team leader will exhibit a strong task orientation and motivate members to actively participative in team activities, and by collecting team members with project-related experience.

by

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Teaming Up for Innovation

Setting clear performance standards and objectives is perhaps of greater importance for group managers. The discrepancies observed in team members and supervisors' assessments of performance outcomes point to the need to attain a common ground among the parties involved regarding targeted and actual performance results. If group learning is to lead to concrete benefits (at the team and the organizational level), then members should be aware of the exact performance evaluation criteria occupied, the role of the specific project for the general organizational strategy and portfolio of products,

and the impact of the project success for the own career development.

The need for "teaming up" is likely to become increasingly critical as organizational change, innovation, and complexity intensify. Fast-paced environments require team-based behavior to make sense of what is happening, of what is necessitated to counter competition, as well as to take effective action. Teams in organizations, therefore, should be considered not only as a mechanism for implementing planned change, but mostly as a strategy for designing and tolerating innovation forays into

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Strategic Entrepreneurship: An Insight into the Primary Determinants

Introduction

Recent developments in the scholarship of entrepreneurship emphasize the importance of integrating strategic and entrepreneurial thinking to achieve a better balance between opportunity-seeking and advantage-seeking behaviours to create wealth (Ireland et al., 2003; Hitt et al., 2002; Ireland et al., 2001). The concept of Strategic Entrepreneurship has emerged as a novel stance for studying and operationalizing this integration.

However, doubts have been raised over the pedigree and exact content of Strategic Entrepreneurship, how it might be organized and implemented in firms, and how it might create wealth and add value to firms that choose to pursue it. In response, a recently completed PhD research performs a thorough review of the construct's origins and current conceptualisations in order to map its core elements and chart critical research directions. It advances a model of Strategic Entrepreneurship with different antecedent conditions and related consequences, which consists of the first empirical test of this novel concept in entrepreneurship research.

The literature reveals a first group of scholars, who argue that strategic efforts are oriented towards a more entrepreneurial perspective, thus being transformed into entrepreneurial, through the employment of certain mechanisms (Lumpkin & Dess, 1996). They, therefore, introduced and elaborated on the construct of entrepreneurial orientation as the means towards enhancing more entrepreneurial actions. A second group of scholars view SE as the intersection of the two dominant fields of strategic management and entrepreneurship and investigate different phenomena of interest occurring at this intersection (Ireland et al., 2001; Hitt et al., 2002; Eisenhardt et al., 2000). In addition, the only frameworks developed around the construct so far refer to these authors' attempts to investigate the field (Eisenhardt et al. referring to competing on the edge of chaos developed six elements that occur at this point of intersection, Ireland et al. and Hitt et al. reinforcing these elements and developing new ones).

Thus, a question that arises is whether the examination of this multidimensional phenomenon should approach SE as a construct that needs to be examined within a particular context, culture etc or whether it should be studied as a point of intersection? In addition, the development of the aforementioned relevant frameworks to date is purely theoretical in nature and lacks any empirical orientation, so that measurable outcomes can be achieved.

The importance of this study lies in the effort to define and investigate Strategic Entrepreneurship

both as a field of study and as an independent construct. A quantitative research methodology was employed, using Structural Equation Modeling, with a sample of 144 Greek companies from three different sectors (IT and Telecommunications, Food Industry and Pharmaceuticals/Chemicals) as the empirical platform. The results demonstrate that:

1. Strategic entrepreneurship consists of four separate, but interrelated components. The first two are entrepreneurial -entrepreneurial mindset and innovativeness- while the other two are of strategic nature -managing resources strategically and competitive advantage creation-This framework constitutes the most integrated effort to empirically map the terrain of SE so far, and supports Ireland's et al. (2003) conceptual SE framework;
2. Specific firm resources affect the construct of Strategic Entrepreneurship along with specific firm capabilities (entrepreneurial and managerial capabilities exert positive influences, while technical capabilities exert negative influences, consistent with core rigidity theory). In addition, brand name and knowledge resources significantly impact the development of SE;
3. Competence exploration and competence exploitation exert a positive influence on all four components of SE. This goes against expectations from the theory of exploration that competence exploration ought to positively affect SE's entrepreneurial components and negatively affect its strategic components owing to issues of creation vs adaptive refinement (the same is the case for competence exploitation). As the logic does not hold, it shows the importance for firms to approach SE using an ambidextrous approach, combining explorative and exploitative practices simultaneously;
4. Specific internal firm conditions aiding change foster SE (internal social capital and structural ambidexterity) are positively related to SE;
5. Strategic Entrepreneurship is positively related to performance, rendering it a worthwhile activity for firms to indeed pursue.

by

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Strategic Entrepreneurship

Besides its theoretical contribution, the present study offers several implications for practitioners to create a proper mix of conditions for enhancing strategically entrepreneurial approaches and also to disseminate SE's beneficial outcomes firm-widely. Perhaps one of the most challenging implications for business at the broadest conceptual level is acknowledging and understanding the importance of the core elements to establish Strategic Entrepreneurship. As such, opportunity identification, innovativeness, an entrepreneurial mindset, competitive advantage creation, the strategic management of resources as well as flexibility, vision and a growth focus, are all essential for the creation of SE. Within this finding, firms should acknowledge the importance of ensuring that these elements do not exist in isolation, but directly intersect with strategic elements in some form.

Another set of implications is associated with the interplay between competence exploration and competence exploitation. Although consensus exists with respect to the need for balancing explorative and exploitative practices, there is lack of clarity as to the way in which this balance can be achieved within firms. Competence exploitation protects the firm from the risk of investing an excessive amount of resources and efforts in activities with uncertain return, thus losing profits from more certain fields. Yet, past examples have demonstrated that exploitation can be self-reinforcing, leading to over-reliance, decreased variation in knowledge across and within firms, and impaired capacity for exploration (Hughes et al., 2007). Top management usually tends to favour exploitation that includes already tried practices over exploration, since activities associated with exploitation are essentially well articulated and considered logical (Crossan & Bedrow, 2003). This, however, generates the risk of creating inertia within firms. Therefore, achieving the proper balance between these two forces within the firm,

and creating the proper organizational design features in order to implement both simultaneously when deemed appropriate, presents a challenge for top management.

Third, the study provides answers to managers by aiding them to develop and to maintain the proper resource/capability portfolio at the firm level, neither developing an excessive pool of slack resources nor lacking substantial resources that would potentially serve as assets. An additional implication is provided by the fact that firm capabilities indeed were found to play a far more prevalent role in fostering SE, than was assumed in the Ireland et al model. The study's findings, thus, pinpoint which firm resources and capabilities are more important towards the enhancement of SE and why, providing guidance to decision-making. Especially given the scarcity of resources that the majority of firms are faced with, and which frequently functions as an inhibiting factor towards entrepreneurial opportunity discovery, recognizing towards which resources to shift and direct their efforts becomes particularly critical, saving the firm from excessive cost, unsuccessful resource and time investments.

Overall, this research reveals the complex and deep nature of Strategic Entrepreneurship as a process. Management needs to be cognizant that Strategic Entrepreneurship encompasses a multilevel process that spans from individual intuitive insights through to major resource allocation decisions that institutionalize it. The above findings offer important contributions to the recent research stream of the burgeoning field of Strategic Entrepreneurship, by supporting an integrative perspective in which internal firm conditions and external factors shape and encourage strategically entrepreneurial processes in order to produce organizational-level beneficial outcomes.

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The focus of previous newsletters, available on our website, was:

Customer Involvement in Innovation and Marketing – lead article (no 10, spring 2007)

Strategic Entrepreneurship – lead article (no 9, spring 2006)

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