

# **Business Development Capabilities in Information Technology SMEs in a Regional Economy**

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**abstract**

“Business development” is a corporate entrepreneurial capability (or competence) that has emerged in the Information Technology industry to support that industry’s practice of co-creation of value with customers and complementors. As a set of practices that link the firm’s value creating processes with its external environment, business development capabilities are a key factor in the success of IT SMEs. This article examines business development functions and business developer attributes in SMEs in the Information Technology Industry in Eastern Canada. The principal business development functions are: finding profitable opportunities in business networks, developing and maintaining partnerships, providing support for new product development, and recognizing and responding to customer needs. The regional market and export markets require different business development capabilities.

JEL L86, L21, M13, O32

## Introduction

Creation of growth through development of new business is a vitally important capability of the firm, but top-line growth is difficult to sustain.<sup>1</sup> Practices that contribute to new business formation<sup>2</sup> are called a variety of names - corporate venturing, corporate entrepreneurship, intrapreneurship, new product development, commercialization, or business development - depending when they take place in the life cycle of the firm or the product, the actors that carry them out, the extent of risk or novelty that they entail, and whether they involve the creation of new internal or external business units. New business formation activities vary in complexity and formality from day-to-day entrepreneurial or customer prospecting activities to highly structured approaches to new product development, alliancing, and venturing.

Business development [BD] practices are a subset of new business formation practices, a variety of corporate entrepreneurial behavior. Business development aims to create growth through expansion or extension of existing product-markets or through development of product-markets that are new to the firm. BD practices are part of the innovation process but are not subsumed by technology development, product development, or marketing and sales functions. As part of the family of corporate entrepreneurial practices, they may lead to the establishment of new business organizations or units within or outside the firm, but this is not a necessary or even typical feature of business development practices.

Business development capabilities are especially important in the Information Technology industry, where successful firms typically generate half or more of their revenue from products introduced within the past few years. The BD capabilities of such firms are critical growth enablers. Despite the importance of business development capabilities in firm growth processes, these capabilities have not been well described in the management literature. Technological, financial, entrepreneurial, and marketing capabilities in IT firms have received attention from researchers. The business development activities that have received most attention are those that involve relatively larger degrees of organizational change that entail initiatives with relatively greater degrees of risk - venturing, strategic alliancing, and acquisition activities. Normal business development activities in most IT firms involve lesser degrees of risk and organizational change (but enough risk that deliberate risk management is part of the firm's set of capabilities).

The paucity of management literature on BD capabilities involving intermediate forms of risk inhibits understanding of firm growth processes in the IT industry. In small firms, business development capability accumulates in developers through a combination of industry experience, learning-by-doing, and mentoring. Little formal training is involved. When explicit, highly structured BD routines exist, they are generally found in medium and larger firms. Even in these firms, much of business developers' knowledge is tacit. Because business development capabilities are highly tacit and often relatively unstructured, they are difficult for competitors to observe and copy. Additionally, since business development capability aims at relationship development and care, business development capability is embedded in business re-

relationships. These features of BD capability have important implications for managers and executives, innovation support agencies, and business educators.

Research reported here was motivated by the desire to understand the origins and nature of firm-level business development capabilities in IT SMEs in a regional innovation cluster. In many regional economies, the home market is too small to offer significant growth opportunities to indigenous IT firms. Growth-oriented IT SMEs therefore need to develop business linkages with markets outside the home region. In this paper we describe business development capabilities in IT SMEs in a regional economy, providing a perspective on BD practices in this industry. We draw primarily from the literatures on corporate entrepreneurship, strategic management, and innovation in the Information Technology industry. Our discussion is based on an analysis of business developer job descriptions and an analysis of BD functions and attributes derived from in-depth qualitative interviews with 26 business developers from IT SMEs in a regional industry cluster in Eastern Canada.

### **Business development as entrepreneurial capability**

In this section we situate business development capabilities within the conceptual frameworks provided by the organizational capabilities and corporate entrepreneurship literatures.

The concept of capability (or competence) refers to the firm's ability to deploy resources and perform coordinated tasks in pursuit of particular objectives (Amit and Shoemaker, 1993). Capability connotes intentionality: managers use means to ac-

comply with ends. Capability also connotes reliability: a capability that has been developed can be performed more than once.

Resources are stocks of production factors or assets controlled by the firm. Resources may be tangible, such as technology or finance, or intangible, such as reputation, skills, relationships, or routines. Markets for intangible resources are less effective than markets for tangible resources, and therefore intangible resources are not easily tradeable. Routines are recurrent patterns of behavior or repetitive activities within the firm. They are considered the building blocks of firm capability (Becker, 2003; Sallinen, 2002).

Strategically important capabilities are those that permit the production of rents. Competitive advantage flows from the firm's unique ability to shape and coordinate its capabilities to meet changing customer needs. Firm capabilities may be acquired, inherited, developed, or modified (Drejer, 2001; Helfat and Lieberman, 2002). Capabilities that engender first-order change in a transformation process are dynamic capabilities (Winter, 2003; Eisenhardt and Martin, 2000). Although a large theoretical literature exists on firm capabilities, conventions for operationalization and measurement of capability and dynamic capability have yet to emerge (for example Walsh and Linton, 2001, 2002).

We define business development as a capability comprised of routines and skills that serves to enable growth by identifying opportunities and guiding the deployment of resources to extend the firm's value-creation activities into technological or market areas that are relatively new to the firm. The portfolio of business development routines typically includes processes for recognition of opportunities, gen-

eration and qualification of ideas, articulation of business concepts, product/service development, commercialization, licensing, internal or external venturing, or acquisition (Buckman et al. 1998).

BD practices are part of the family of corporate entrepreneurial practices. Corporate entrepreneurship is “the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization” (Sharma and Chrisman, 1999: 15-16). Key questions in the corporate entrepreneurship and innovation literature have to do with the relationships among different kinds of institutional arrangements and processes to produce innovation, the degree of market and technological risk that the firm chooses to take in connection with anticipated business payoffs, and the performance outcomes. The market and technology dimensions can be represented within the Roberts and Berry (1985) “familiarity matrix” for new business formation. Moving outward from the origin, the vertical axis represents decreasing market familiarity and the horizontal axis represents decreasing technological familiarity. The area of greatest market and technological familiarity is occupied by the firm’s set of routines and capabilities for dealing with known product-markets. This is the search space in which knowledge of customers, competitors, and technologies is most easily obtained and processed. Changes in the technological and business environment cause this space to shrink. Firms seeking growth must stretch to develop new technological or market competencies. Business development practices represent greater or lesser increments of organizational change along these dimensions.

Intentionality or orientation is a central attribute of entrepreneurial behavior. Covin (1999) argues that veritable corporate entrepreneurship involves innovation aiming at organizational rejuvenation, strategic renewal, or domain redefinition - objectives that imply relatively larger and riskier increments of innovation. Sharma and Chrisman (1999), on the other hand, do not exclude lower-risk entrepreneurial practices from the domain of corporate entrepreneurship. They identify four organizational dimensions that discriminate among different forms of corporate entrepreneurship: structural autonomy, degree of relatedness to existing business, extent of innovation, and nature of sponsorship (*ibid.*, 1999). These dimensions yield a range entrepreneurial practices implying minor, intermediate, and major increments of innovation and risk.

In the Roberts and Berry framework, business development practices can be regarded as capabilities that enable organizational stretching to extend the frontier of familiarity toward new combinations of markets and technologies. The increments of innovation and degree of organizational stretching involved in business development depend on the firm's approach to product market extension, diversification, and learning. Well-established BD routines possibly inhibit riskier initiatives that might provide more substantial competitive payoffs (Kumar et al., 2000). However, highly structured approaches to new business development, such as Dupont's Business Initiative process, can also target opportunities in areas of relatively low market and technological familiarity to the company, i.e. in the upper right-hand quadrant of the Roberts and Berry matrix (Karol, Loeser, and Tait 2002a,b). Furthermore, many firms

learn to extend value-creation capabilities by following partners or customers into areas of greater market or technological unfamiliarity.

### **Organization of the business development function**

How is the business development function organized? Structured BD routines of accompany highly structured product innovation processes. New product development processes and sales processes are often organized as a stage-gating funnel (Crawford and De Benedetto, 2000; Rosenau, 1996). The sales funnel is for following up deals while the BD funnel is for following up opportunities. Unlike the sales funnel, which usually covers one to three months, the BD funnel is much longer - in one of the firms in our sample possessing a highly structured BD process, it is an 18-month process that links ideation to commercialization. The BD funnel determines which ideas will be pursued, when the firm will pursue them, and what resources will be required. Consequently, the BD funnel helps the firm to operationalize its business plan, bring focus to its efforts, and achieve the desired benefits from its ideas. The steps in the business development funnel are Priorities, Blueprint, Build, Take to Market, and Customer Care. The business developer's work occurs during the pre-contract and contract stages, with little involvement in the post-contract stage of new business implementation and day-to-day business delivery. Business developers are responsible for finding opportunities and preparing new business. Business developers provide input into requirements elicitation, help prepare business cases and project plans, contribute to the operational readiness and implementation checklists, and

complete project closure and benefits review audits to get approvals of decision teams at different stages of the funnel.

In smaller IT firms, BD capabilities are expressed through relatively unstructured routines. Smaller firms have fewer layers of management and fewer specialized units, and so business development is often the responsibility of multifunctional individuals, including owners. Managers' involvement in new business development requires leveraging firm competences to create new value propositions. Therefore, for example, to engage in business development, managers must be familiar with the range of firm competences (Gosselin and Heene, 2000).

Since BD projects are mechanisms of organizational learning, the greater the degree of variety (innovation) that the firm seeks to produce in order to respond to uncertainty in the environment, the greater the need for supervisory autonomy in the direction of exploratory ventures (McGrath, 2000). In larger firms business development responsibilities are often given to new venture teams. Executive business developers at cash-rich IT firms undergoing rapid growth often direct processes of venturing or acquisition, as described by Carpenter and Lazonick (2002) or Dalziel (2001) in the case of the networking equipment industry, or Teubal, Avnimelech and Gayego (2002) in the case of the Israeli security software industry. Moreover, alliance management is frequently tasked to the business development function (Kale, Dyer, and Singh, 2001).

Business development practices vary with institutional arrangements for commercialization of innovation. This variety of practices is reflected in the various perspectives on business development found in the literature. For example, in cases of

firms spinning out of university settings, business development is considered to be the final stage in a four stage process: disclosure, evaluation, product development, and business development, at which time venture funding is sought (Nicolaou and Birley, 2003). Business development practices must interface with other development-oriented innovation practices, notably those of technology developers (Balthasar et al., 2000) on the one hand and marketing, sales, and strategy, on the other. Business developers need different affective and cognitive skills than researchers or technology developers: entrepreneurs in early and later stages of business development have characteristic skills profiles for ideation and implementation, respectively (Janovics and Christensen, 2003).

### **Business development in the IT industry**

The ICT sector, also referred to as the Telecom, Media, and Technology (TMT) sector, is considered the core of the New Economy (Cooke, 2002). The information and communications technology (ICT) industry can be grouped into software, telecommunications, other services, and hardware segments. The North American Industry Classification System includes equipment and component manufacturing, goods related services (wholesalers, distributors, and leasers), and intangible services (software publishers, cable program distributors, telecommunication carriers and resellers, information and data processing services, equipment repair, and computer systems design) in the ICT sector. Information technology training is also sometimes included in the ICT sector. In this article we focus on the software, new media, information and

data processing services, consulting, and training (e-learning) segments of the ICT industry, leaving aside the telecommunications and hardware segments.

In many IT firms, even normal business development involves organizational stretching and lumpy increments of change because of the characteristics of markets, products, and customers for IT products and services. This is because value creation in the IT industry is usually undertaken jointly with complementors, customers, or both. A major difference in the IT industry exists between firms supplying highly standardized plug-and-play software and hardware, and those supplying complex or customized software and services. Firms in the IT industry typically either provide elements of a complete solution, or customized products or services. In the former case, close relationships with business partners and complementors are critically important. In the latter case, the critically important relationships are with customers. In each case, effective joint value production is required for successful commercialization.

The division of the IT industry into segments that supply standardized products and segments that supply customized products and services has geographical significance. The hardware and packaged software segments of the IT industry are globally competitive. In contrast, custom or 'tailored' software and IT services are usually provided by local or regional suppliers (Bresnahan and Richards, 1999). The geographic expansion of suppliers of tailored software and services takes place through establishment of physical presence in local markets, rather than through arm's length exporting through distribution channels. Success in this business requires the ability to control project costs (which are mostly related to deployment of expensive talent)

and deliver superior service. The business development function in such cases emphasizes opportunity recognition and ability to communicate with the customer and determine customer requirements accurately.

In the IT industry, the value chain is horizontally layered and vertical “co-opetitive” relationships exist among firms that sell complementary products while also competing with one another (Bresnahan and Richards, 1999; Hart and Kim, 2002). This too has geographical significance. SMEs can combine customization and complementation strategies by offering customized solutions that are developed around products that are provided by complementors and partners. Firms competing as providers of complementary products must maintain involvement in an industry network to spot business opportunities and they require value adding partnerships with other firms to provide complementary skills and assets that permit the coordinated design and delivery of products. Kuivalainen, Saarenketo and Varis (2001) describe the configurations of value-added partnerships among Finnish IT SMEs. Partners include systems integrators, solution providers, value-added resellers, value distributors, volume distributors, retailers, sales agents, independent software vendors, influencers and consultants, and OEMs (own equipment manufacturers). Business development activities in such cases emphasize opportunity recognition, development and care of relationships with partners, and assistance in “solution selling” - marketing complete solutions provided by networks of value-added partners to customers, often in an industry vertical (Large and Conrod, 2003).

Growth-oriented IT SMEs need to learn how to leverage their customization or complementation capabilities. Regarding customization, when small software firms

produce tailored software primarily for local customers in the context of project based, long term trustful relationships, these small suppliers do not develop strong marketing capabilities (Alajoutsijärvi, Mannermaa, and Tikkanen, 2000). To grow, such firms need to either productize their software for the mass market, or extend their relationship-based approach to other principal customers. It is not a simple matter to make the transition from a project-based to a product-based strategy. More likely growth trajectories would be to multiply the number of clients for whom to produce tailored IT products and services, or to move up the value chain from contractual supplier to partner supplier with responsibility for entire subassemblies (Salinen, 2002). The challenge for firms following the complementation strategy is to avoid commodification, frontal attacks on incumbents, and technology-induced obsolescence of capabilities of suppliers or customers (Afuah, 2003) while seeking opportunities to grow and generate rents, perhaps by developing a position as a focal firm in a network (Cummings and Doh, 2000).

To summarize the discussion to this point, we conceptualize business developers as the firm's agents for product-market expansion or extension. They link the firm to its external environment in the early stages of product and service innovation, playing key roles in the acquisition and management of market and customer knowledge and guiding the firm in the generation of variety. The business developer identifies opportunities in the marketplace and assists the firm as it assesses and develops responses to these opportunities. Business developers are part of the product innovation and corporate entrepreneurial capabilities of the firm and their actions may aim at minor, intermediate, or major increments of innovation. In IT SMEs, mar-

keting and sales capabilities must be complemented with business development capability because the products and services of these firms are usually non standardized or part of a larger system solution. In each case, co-creation of value via relationships with customers and complementors is paramount.

### IT firms in regional economies

The IT sector is subject to conflicting centripetal and centrifugal forces that affect location of IT economic activity (Quah, 2001). Local pooling of specialized labor, knowledge spillovers, and local availability of specialized intermediate inputs are centripetal forces that favor geographic concentration and increasing returns to scale (ibid.). Uneven demand across space, transportation costs, and local congestion are centrifugal forces that favor geographic dispersion of activities (ibid.). By reducing communication, coordination, and transaction costs, ICTs encourage dispersion of economic activities (Traxler and Luger, 2000), especially in the vertical dimension (Hitt, 1999). The ability of firms to place a specific segment of a value chain in a particular geographic location is driving the explosion of outsourcing in IT-enabled services such as software programming, customer care, and business process outsourcing and is increasing the competition among places for these slivers of IT-based economic activity. At the same time, ICT employment grows quickest in larger urban centers with diversified economies (Beckstead et al., 2003).

Much of the literature on regional industrial clustering attributes the advantages of proximity to knowledge spillovers during the RD&E stages of innovation. In

some new IT sectors, most notably in Ireland, local demand from large foreign or domestic firms has created a local IT outsourcing industry. However, growth of most successful IT clusters is due to linkages with external demand (Bresnahan, Gambardella, and Saxenian, 2001). Extraverted demand drivers are at odds with prevailing theories of cluster development, in which co-location of customers with suppliers is considered to be the norm and mastery of the home market must precede exporting. However, early internationalization is a practical necessity for technology firms that are located in relatively small countries, in relatively small regional economies, or are in early-stage IT clusters at some distance from principal customers and partners. Geographic distance from customers and partners adds to the cost and complexity of business development and market learning and represents a competitive disadvantage that firms in such locations must overcome. In many cases co-location with customers or partners is not feasible. Performance in the higher value added segments of the IT industry requires co-production of value with customers or partners, and therefore the ability to interact closely with them wherever they are found, regardless of the home location of the firm.

Market learning also requires interaction. A growing literature on SME internationalization points to the importance of prior social relationships as conduits to international business relationships (for example, Keeble et al., 1998; Dribben and Harris, 2001), and research on internationalization processes of IT SME points to analogous network relationships as conduits to export markets via social contacts and value-added partners (Dowling and Lechner, 2003; Törmänen and Möller, 2003; Kuivalainen, Saarenketo and Varis, 2001; Coviello and Munro, 1997). Accumulation of

market intelligence does not require proximity to the market: rather “a strong relationship with a single leading-edge customer may be the critical factor that allows a new [software] product to go forward” (Cornish, 1997).

The advantages of geographic proximity may not manifest themselves primarily in terms of rate of innovation but instead in terms of inter-firm rivalry that forces firms to develop higher-order competitive advantage (Beal and Gimeno, 2001). Rates of product innovation of out-of-cluster packaged software firms are higher than rates of product innovation of in-cluster firms, but the in-cluster firms have higher rates of commercial success due to local spillovers of market knowledge (ibid.).

Canada has a longstanding concern that weakness in commercialization capability hampers the national innovation effort (Canada, 2002; Guthrie and Warda, 2002). Development of commercialization capabilities in technology-based firms in regional economies represents a special challenge because of the need to develop market linkages over long distances. In Canada, the financial, technological, scientific, and market centers of gravity are in Ontario and Quebec, and the most accessible large market is in the United States. Economic performance scorecards for Atlantic Canada show a region that is facing typical challenges of the latecomer (APEC, 2003; Ruggieri, 2003). The case of the New Brunswick IT sector illustrates how business development capabilities are closely related to successful performance in geographically distant markets. The New Brunswick IT sector encompasses around 240 product and service suppliers in seven segments: software development, systems integration, consulting, Internet solutions, e-learning, and multimedia (Davis and Schaefer, 2003). The sector experienced very rapid revenue growth in the late 1990s,

followed by a slowdown due to the post-2001 decline in IT spending. Nearly two-thirds of the revenue in the New Brunswick IT industry is derived from exports over relatively great geographical distances to Central Canada, the United States, or other international markets. Product innovation and commercialization capability to markets outside the region are closely related to the superior growth rates of IT firms in the New Brunswick cluster (Davis and Schaefer, 2003.). For many firms, the constraint to growth in the New Brunswick IT sector is not primarily technological but rather ability to develop business outside the regional market. Export activities are highly concentrated among a small number of firms. For example, about two-thirds of all revenues from the United States are earned by five firms, and about 70 percent of revenues from non-U.S. international markets are earned by five firms (ibid.).

### **Business developers in the IT industry: positions, functions, and attributes**

We collected and analyzed about eighty business developer job descriptions from the IT industry in North America in online job boards in early 2003, restricting our analysis to job descriptions containing the term “business development” or “business developer” that pertained to any segment of the information technology industry.

Business development positions exist at senior, mid-level, and junior levels. Although most firms have someone who is responsible for business development, many firms do not have a specific business development department or unit. Business development responsibilities might be included in groups responsible for marketing, sales, customer solutions, or sales support. Business developers hold different

titles including salesperson, strategist, director of business unit or client service, vice president of business development or customer solutions, or director of global service. In small firms, owners are usually responsible for business development. In medium firms, persons with business development responsibilities include vice president of business development, director of sales or client service, or general manager. In larger firms, business developers might be a district manager, director of business, vice president of business development or customer solutions, or national delivery managers. Many business development positions are at a senior level within the firm, reporting directly to the CEO or president. In smaller IT firms, business developers do not have a dedicated team reporting to them to support their activities. However, they have many dotted line reporting relationships. Business developers need to effectively communicate with persons throughout the firm involved in strategy, marketing, product innovation, operations, finance, and management.

Business development functions can be classified into two major groups: external opportunity recognition and relationship development, and internal management. The mix of internal and external responsibilities varies by level of seniority within the firm. Table 1 summarizes the analysis of the eighty business developer job descriptions and shows BD responsibilities along two axes: the horizontal axis represents internal or external functions and the vertical axis represents levels of seniority of business developers, with the most senior at the top of the table. In practice, junior business developers spend about 20% of their time on external matters, senior business developers about 60%, and executive business developers about 40%. At the junior level, external responsibilities involve prospecting, channel man-

agement, and selling. At more senior levels, business developers have greater responsibilities regarding external as well as internal relationships. They are responsible for establishing and maintaining high level relationships with customers, partners, and vendors, and for providing guidance in strategic resource allocation. Only a few senior business developers spend 50% of their time on internal functions while remaining involved with major customers, and partnership or vendor relationship-building.

----- Table 1 here -----

On the basis of our analysis of BD job descriptions, we developed a questionnaire with nine open-ended questions about the background, experience, activities, and responsibilities of the business developer. Interviews were requested with business developers in sixty IT firms in southern New Brunswick. When the firm had no individual with formal responsibility for business development, we asked to interview the individual most responsible for business development. Thirty firms were interviewed, and twenty-six firms met our criteria as SMEs: 300 or fewer employees in New Brunswick. Twenty-three were independent and locally owned and three were subsidiaries with product development and export mandates. Interviews lasted between thirty and ninety minutes. Interviews were recorded and summarized, coded for business development functions and business developer attributes, and then checked by a second coder for consistency. BD functions or attributes mentioned less than three times were not included in the analysis. Complementary data on involve-

ment in regional and export markets and recent revenue performance were available for most firms as an outcome of a related research project (Schaefer, Katz, and Neily, 2002).

Basic descriptive data about the population of respondent firms are provided in Table 2. Respondents included firms from the systems integration, internet solutions, advanced training (e-learning), software development, and IT consulting segments of the IT industry. Average size of the firms was about forty IT employees and average gross revenue about six million Canadian dollars. On average, nearly two-thirds of revenues were earned from products or services introduced within the past three years, and 56% of revenues were earned from products or services commercialized outside of Atlantic Canada. Business developers in respondent firms collectively represent more than four hundred years of experience in the IT industry.

-- Table 2 here --

Business developers' capabilities combine industry know-how, strategic planning, understanding customer technical and business needs, business operations, and familiarity with product markets. Business developers therefore must have a combination of technical background, industry experience, and inter-personal skills, and qualities. In contrast to individuals in technical positions in IT, business developers must interact with a range of people and they must be capable of multi-tasking. Therefore business developers need to have strong interpersonal skills, ability to learn quickly, and ability to handle ambiguity. Business developers need to be able

to listen and respond to customers, articulate a value proposition to customers, and communicate their ideas internally for purposes of resource allocation and follow-up. In addition, the ability to build personal relationships and to think creatively, independently, analytically, and strategically is highly valued skills among business developers. Among personal qualities, honesty, persistence, and flexibility seem to be important for business developers.

Business development job descriptions usually emphasize formal educational requirements. Job descriptions for entry-level business development positions in the IT industry usually require a bachelor's degree in business or Computer Science. An MBA degree is preferred for mid-level positions, and a Ph.D. is preferred for the high level positions. However, the educational backgrounds of practicing business developers usually do not reflect these requirements. Some business developers we interviewed have little post-secondary education, and many others have degrees in fields apparently unrelated to information technology such as political science. A few in high positions have graduate degrees.

Senior business developers bring a great deal of experience to their job. The average length of industry experience among business developers we interviewed was 16.5 years. Almost all of them have changed career roles, having worked previously as engineering designer or programmer, technical manager, financial planner, operations manager, account or sales manager, service manager, product developer, VP sales or start-up owner. Executive business development positions require more than ten years of industry experience, while mid-level positions require five to ten years experience and a good understanding of the full sales cycle. The entry-level requires

strong front line experience with 2-5 years in sales and marketing.

In the course of the interviews, the twenty-six SME business developer respondents identified twelve principal functions that they fulfill; the most frequently mentioned function was “identify or create opportunity,” which was mentioned by 81% of the respondents. More than half the respondents mentioned “identify or create opportunity,” “increase or maintain partnership,” “follow up with current customers,” or “new product/process/solution development” as business development functions (see Table 3).

-- Table 3 here --

The twenty six respondents identified thirty-one skills and attributes of business developers (Table 4). Half or more mentioned “communication” and “creative thinker, dreamer” as business developer skills or attributes.

-- Table 4 here --

### **Dimensions of business development**

The literature contains no validated constructs of business development functions or attributes. To reduce the dimensionality in the data and in view of the analytical constraints imposed by our nominal dichotomous data, we used categorical principal components analysis (CatPCA in SPSS Categories) as a data reduction method. CatPCA permits data reduction with categorical as well as ordinal and interval data (Meulman

and Heiser, 2003). In this case, two dimensional solutions were sought. Although solutions with more than two dimensions can be produced, visual interpretation of them is problematic. Figure 1 shows the two dimensional solution for business development functions and Figure 2 shows the two dimensional solution for business development attributes and skills. Correlation of ordinal items with principal components is represented by vectors. Length of vectors indicates the amount of variance accounted for by the vector.

--- Figure 1 here ---

--- Figure 2 here ---

Business development has a range of meanings among practitioners, and business development activities are not highly standardized within or among IT SMEs firms (as mentioned previously, only one firm in our sample had adopted a highly structured business development process). In other words, business development routines and practices vary greatly among firms. This is to be expected if business development is an entrepreneurial higher-order capability to link the firm's internal value creation activities with external growth opportunities. Figure 1 suggests that the two primary business development dimensions concern extension of value creation to customers and business network members (Dimension 1) and prospecting and development of offerings (Dimension 2). The four functional areas of business development have to do with following up with customers, developing and maintaining partnerships, and developing proposals and finalizing deals (Quadrant 1 in Figure 1),

maintaining knowledge of the industry and of the market (Quadrant 2), providing direction and strategy and identifying opportunities through responsibility for profits and costs, activities in business networks, and involvement in day-to-day operations (Quadrant 3), and participation in product development by traveling to customers and providing internal support (Quadrant 4).

As shown in Figure 2, the two principal dimensions of business developers' attributes and skills are resourcefulness and likeability (Dimension 1) and engagement and knowledge (Dimension 2). Three main groups of business developer attributes and skills are apparent in Figure 2. One has to do with focus, commitment, questioning and challenging, aggressiveness, energy, and adaptability. The second represents ability to motivate people, likeableness, and knowledge. The third concerns communication, respect for others, research, hard work, and resourcefulness.

We are able to relate business development functions and business developers' attributes and skills to some indicators of firm performance, using data about the firms we interviewed that was gathered in a baseline survey of the New Brunswick IT industry conducted in early 2002 (Schaefer, Katz and Neily, 2002) and complemented by data gathered in our interviews. We regressed variables for business development functions and attributes/skills on data for three-year revenue growth, innovativeness (percent revenue generated from IT products or services commercialized in the past three years), and market linkages (percent revenue earned from IT products or services commercialized outside of Atlantic Canada, percent revenue earned in the United States, and percent revenue earned in non-U.S. international markets). The results of regression models are shown in Table 5.

Business developer attributes and skills that predict recent revenue growth are A6 (the ability to bring technical and analytical knowledge to bear on business development), A13 (quickness, decisiveness, productivity), A18 (honesty), A22 (trustworthiness and commitment), and A29 (passion). A31 (focus) and F5 (partnership development) are also predictors of revenue growth but have negative coefficients. This finding may be indicative of differences in IT SMEs' business development strategies before and after 2002.

Innovativeness (percent revenue earned from products introduced within three years) is predicted by F4 (following up with customers) and -A8 (ability to build relationships). This finding suggests that rapid commercialization of IT products and services is driven by developing repeat business from customers, and that relationship building is a prior activity.

Percent revenue earned outside the home region (Atlantic Canada) is predicted by A4 (creative thinker, dreamer), A16 (humorous, fun), F5 (partnership development), and -A1 (communication). A1's negative coefficient reflects differences in the ways that business developers from firms that export more and firms that export less talk about communication. Business developers from export-intensive IT SMEs emphasize creative and enjoyable interaction, not just exchange of information.

Percent revenue earned in the United States is predicted by A2 (listening) and A30 (risk taking). The cultural gradient between Atlantic Canada and the United States is subtle but real. Business developers from Atlantic Canadian IT SMEs need to

keep their ears open and be prepared to take unaccustomed risks if they wish to be successful in the U.S. market.

Percent revenue earned in international markets other than the United States is predicted by A4 (creative thinker, dreamer), A6 (ability to bring technical and analytical skills to bear on business development), and A13 (quick, decisive, and productive). These BD attributes suggest that international expansion of Atlantic Canadian IT SMEs is led by highly competent and knowledgeable technical people who can efficiently help customers find novel solutions.

## **Conclusion**

Business development is a form of corporate entrepreneurship that has received little attention. It is a growing area of competence in a knowledge-based industry in which co-creation of value with customers and partners is a critical success factor.

Although BD practices vary widely among firms, ranging from highly structured processes to relatively unstructured search activities, the core activities consist of business network management, guiding product development, matching customer needs with an offer, strategic management of day to day operations, and value-added partnership development. Business developers in the IT industry are responsible for exploring opportunities, extending business from existing customers, developing relationship with potential customers, increasing and keeping partnerships, helping to set up deals, and driving ongoing new business development. They are externally-oriented corporate entrepreneurial agents who motivate, question, sense, and

listen as they build relationships with customers and partners. They pass day-to-day customer management to sales and service managers and are likely to be responsible for proposals and handling complex situations.

IT business developers arrive at business development careers through different pathways. A technical background is important but strong interpersonal skills and ability to tolerate risk and ambiguity are characteristics that distinguish IT business developers from many technical workers. The competences that make business developers valuable to the firm are acquired through experience and learning-by-doing. Business development skills seem to take a long time to develop. That is why business developers usually have higher positions within firms, and firms report difficulties finding good business developers. Respondents agreed that a university degree or formal training can help business developers to improve their performance, but they considered that key business development skills and qualities such as business acumen, integrity, creativity, and handling ambiguity in complex situations, are not teachable. Business developers learn their craft by doing, by being mentored, by self directed learning, and by observing, changing roles, and making mistakes. The varied background of business developers we interviewed suggests that in practice, competences in thinking and learning are more important than formal education.

Effective business development requires accumulation of much tacit knowledge regarding internal product development and external market networks. For this reason business development services cannot easily be outsourced. Since business development capability is not purchasable, it is a key capability that differentiates successful firms from less successful ones. Firms must either learn by doing or must

hire experienced business developers and invest in them to build their stock of firm-specific and product-market specific knowledge. Product-market knowledge is mainly specific to the firm, so the stock of business development knowledge that a developer acquires in one firm is not easily transferable to another.

Strengths in business development are undoubtedly an important factor in a firm's superior success rate in commercialization of new products under strong competition. Business developers in IT firms contribute to create and sustain firms' competitive advantages through their personal and technical relationships with customers by means of extensive networking, industry experience and knowledge, friendliness, and management of tacit market and customer knowledge. Our research sheds light on ways that business development capability contributes to international expansion of IT SMEs from a regional economy. Creativity, listening, technical expertise, business partnerships, and ability to work quickly facilitate international expansion.

How might the development of deeper and stronger commercialization capabilities among IT firms be fostered? Three possible areas of improvement come to mind.

First, business development is a form of expert labor that has developed new work practices which can be called Business Development Practices. These are observable actions that can be described, assessed, and improved within the context of a firm's innovation and growth-supporting processes.

Second, a range of internal or external support mechanisms might be brought to bear on the business development process. These supports might include IT tools for knowledge management or group coordination, tax incentives for R&D related to

business development, assistance in recruiting experienced business developers, and activities to reduce the costs and risks of mentoring and market learning.

Third, executive and management education focusing specifically on the tasks and functions of business development might be of value. A format that allows sharing of practices and experiences seems most suitable.

This paper is intended as a starting point for developing actionable knowledge about business development capability as a key enabler of successful commercialization of information technology products and services. It is also intended as a contribution to the emerging empirical literature on capabilities. Further research is required to describe specific business development practices, assess learning processes in these areas, provide insight into the ways that business development is coordinated with other corporate entrepreneurial processes, develop frameworks for measuring BD effectiveness, and compare business development capabilities across sectors and regions.

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**Table 1: Business Developer responsibilities and attributes by seniority and internal-external orientation**

	<b>Internal responsibilities and attributes</b>	<b>External responsibilities and attributes</b>
<b>Executive BD level</b>	<p>Effective interaction with all levels            Demonstrating C-level marketing ability            Strong leadership and management skills; share practice            Excellent oral/written communication            Developing strategic and long term plan            Strategic resources allocation            Supporting and participating in corporate financial initiatives            Successfully profit and loss management; profit enhancement plan            Manage budget process; forecasting            Risk analysis for new opportunities            Structuring innovative and integrated solution            Ongoing tracking and evaluation            Developing internal culture success</p>	<p>Large-scale national and international accounts            Establishing executive customers, partnership, vendor relationships            Consultative selling; consulting            Project management role            Recruiting and managing customers            Trusted partnership building            New Business development            Successful grown the business in volume and profitability            Significant individual thinking            Entrepreneurial spirit; business maturity            Assertive; ability to deal with ambiguity</p>
<b>Senior BD level</b>	<p>Leadership in people and change management            Working with team closely            Developing relatively short-term plan            Sale pipeline budget            Funnel Report            Driving revenue growth            Regional overall profit and loss</p>	<p>Strategic moving forward            Negotiating complex agreements at executive-level            Solution selling            Integrity            Aggressive but tactful</p>
<b>Junior BD level</b>	<p>Sales presentation and proposal writing            Gaining trust advisor status at executive level            Strong personality and likeable leadership,            High energy and passion; manage high energy activity and schedule            Strategic thinking,            Flexible and well organized            Persistent / creative / intelligent in approach</p>	<p>Telephone and face-to-face communication with customers            Working individually            Distribution or channel relationship building            Deal-close oriented            Product selling            Business acumen            Entrepreneurial spirit            Closing large and complex opportunities</p>

Table 2: characteristics of respondent SMEs

		Year NB Business Established		number of IT employees	Gross Revenues from IT (estimated)	Percentage of Gross Revenues Generated by Products and/or Services Commercialized in the Past Three Years	% of revenues in NB/AC
		Count	Mean	Mean	Mean	Mean	Mean
		industry subsector					
	Systems Integrators	2	2000	24.00	missing	30.00	10.00
	Internet Solutions	3	2000	25.00	missing	66.67	65.00
	Advanced Training	3	1996	107.93	12700.00	73.33	8.33
	Software Development	11	1988	40.15	6293.64	72.73	36.00
	Consulting	7	1993	14.95	2029.17	45.75	74.00
	total	26	1993	40.83	5979.87	65.14	43.30

Gross revenues are reported in thousands of Canadian dollars.

Table 3: business development functions

	mentions	% of mentions	% of firms mentioning
F2. identify or create opportunity	21	18.9%	80.8%
F5. develop or maintain partnership	16	14.4%	61.5%
F4. follow up with customers	15	13.5%	57.7%
F6. new product / process / solution development	14	12.6%	53.8%
F1. know industry and market	9	8.1%	34.6%
F8. direction / vision / strategy / planning	8	7.2%	30.8%
F10. provide internal support	7	6.3%	26.9%
F3. proposal - bid-no bid, deal closing	6	5.4%	23.1%
F9. represent in networks	6	5.4%	23.1%
F7. travel/globalization	3	2.7%	11.5%
F11. profit and cost responsibility	3	2.7%	11.5%
F12. tracking day-to-day operations	3	2.7%	11.5%
N	111		26

Table 4: business developer skills and attributes

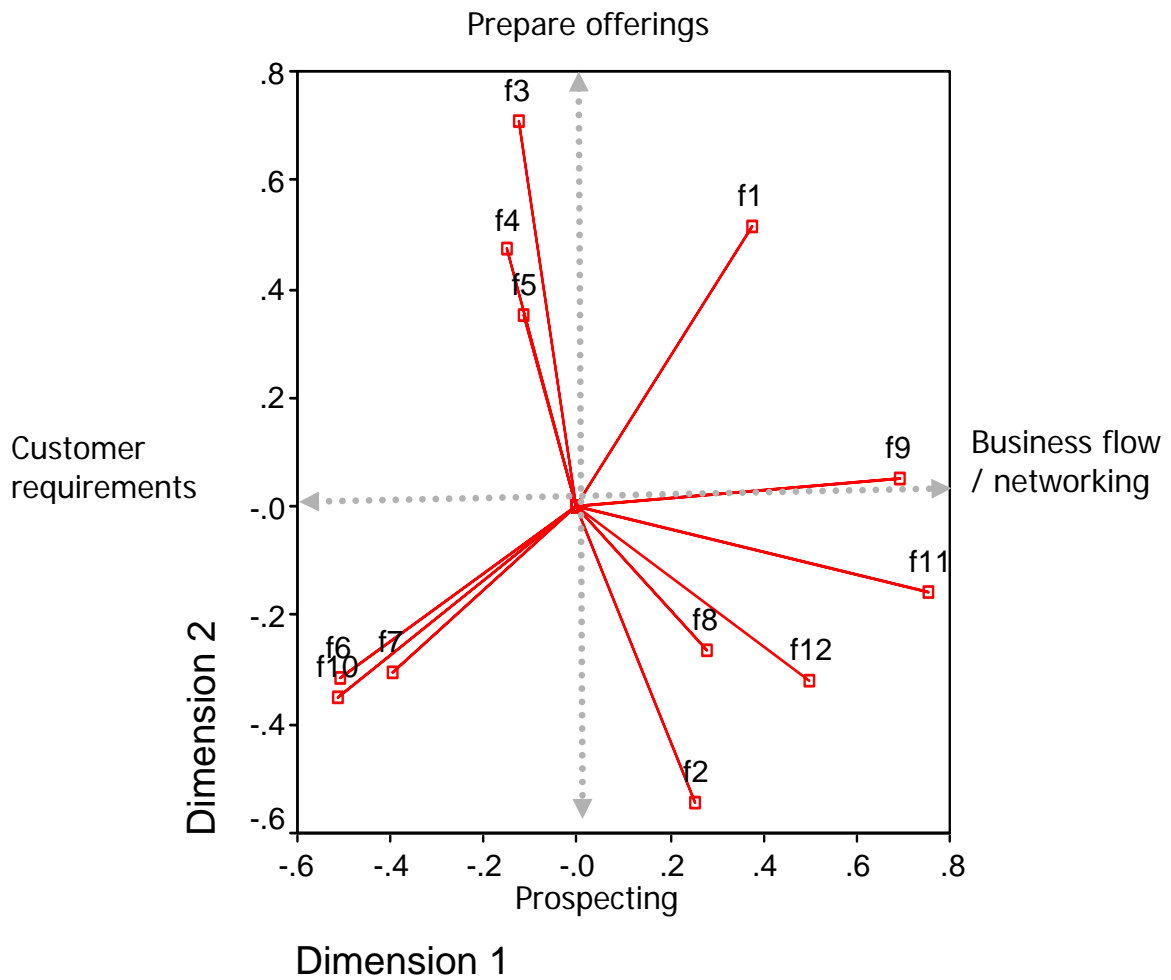
	men- tions	% of all mentions	% of firms
A1. communication	18	8.3%	69.2%
A4. creative thinker, dreamer	13	6.0%	50.0%
A2. listening	12	5.5%	46.2%
A6. technical / analytical	11	5.0%	42.3%
A7. understand client needs	11	5.0%	42.3%
A18. honest	11	5.0%	42.3%
A5. work strategy / forward thinking	9	4.1%	34.6%
A9. knowledgeable	9	4.1%	34.6%
A19. aggressive	9	4.1%	34.6%
A3. ask questions and challenge people	8	3.7%	30.8%
A8. ability to build relationship	8	3.7%	30.8%
A10. personal market intelligence / intuitive	8	3.7%	30.8%
A12. quick learner	8	3.7%	30.8%
A21. flexible and adaptive	7	3.2%	26.9%
A13. quick and decisive / productive	6	2.8%	23.1%
A20. persistent	6	2.8%	23.1%
A22. trustworthy, committed	6	2.8%	23.1%
A27. pride, confident	6	2.8%	23.1%
A28. able to motivate people	6	2.8%	23.1%
A11. research skills	5	2.3%	19.2%
A24. integrity	5	2.3%	19.2%
A25. hard work	5	2.3%	19.2%
A29. passionate	5	2.3%	19.2%
A15. nice; likeable	4	1.8%	15.4%
A31. focus	4	1.8%	15.4%
A14. organizational, resource combination skills	3	1.4%	11.5%
A16. humorous, fun	3	1.4%	11.5%
A17. patient	3	1.4%	11.5%
A23. respectful and sensitive to other cultures	3	1.4%	11.5%
A26. energetic	3	1.4%	11.5%
A30. risk-taker	3	1.4%	11.5%
	N	218	26

Table 5 - regression on business performance dependent variables

Dependent variable	Variables in model	R <sup>2</sup>	F	p
Percent revenue change in past 3 years	A6 (.001), A13 (.002), A18 (.046), A22 (.000), A29 (.002), -A31 (.000), -F5 (.029)	.934	26.108	.000
Percent revenue from products introduced in past 3 years	-A8 (.042), F4 (.034)	.405	6.458	.007
Percent revenue earned from IT products or services commercialized outside Atlantic Canada	-A1 (.028), A4 (.003), A16 (.000), F5 (.000)	.752	16.138	.000
Percent revenue earned from IT products or services commercialized in the U.S.	A2 (.033), A30 (.021)	.453	8.271	.002
Percent revenue earned from IT products or services commercialized internationally, excluding the U.S.	A4 (.028), A6 (.009), A13 (.042)	.620	10.350	.000

F4. follow up with customers; F5. develop or maintain partnership; A1. communication; A2. listening; A4. creative thinker, dreamer; A6. technical / analytical; A8. ability to build relationship; A13. quick and decisive / productive;; A16. humorous, fun; A18. honest; A22. trustworthy, committed; A31. focus.

Figure 1: Two-dimensional CatPCA solution for business development functions



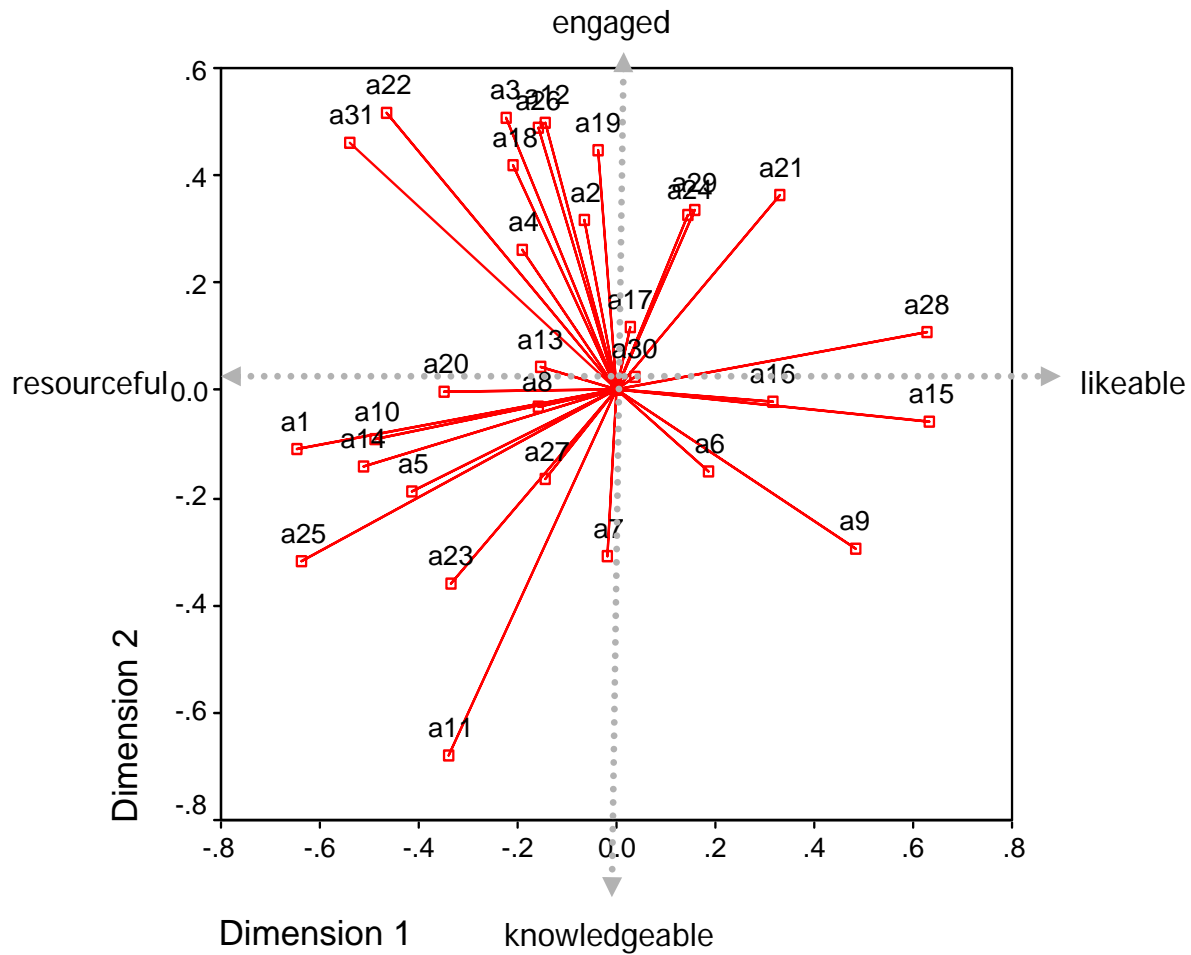
F1. know industry and market; F2. identify or create opportunity; F3. proposal - bid-no bid, deal closing; F4. follow up with customers; F5. develop or maintain partnership; F6. new product / process / solution development; F7. travel/globalization; F8. direction / vision / strategy / planning; F9. represent in networks; F10. provide internal support; F11. profit and cost responsibility; F12. tracking day-to-day operations.

**Model Summary**

Dimension	Cronbach's Alpha	Variance Accounted For	
		Total (Eigenvalue)	% of Variance
1	.620	2.316	19.296
2	.523	1.922	16.020
Total	.833 <sup>a</sup>	4.238	35.317

a. Total Cronbach's Alpha is based on the total Eigenvalue.

Figure 2: Two-dimensional CatPCA solution for business developer attributes and skills



A1. communication; A2. listening; A3. ask questions and challenge people; A4. creative thinker, dreamer; A5. work strategy / forward thinking; A6. technical / analytical; A7. understand client needs; A8. ability to build relationship; A9. knowledgeable; A10. personal market intelligence / intuitive; A11. research skills; A12. quick learner; A13. quick and decisive / productive; A14. organizational, resource combination skills; A15. nice; likeable; A16. humorous, fun; A17. patient; A18. honest; A19. aggressive; A20. persistent; A21. flexible and adaptive; A22. trustworthy, committed; A23. respectful and sensitive to other cultures; A24. integrity; A25. hard work; A26. energetic; A27. pride, confident; A28. able to motivate people; A29. passionate; A30. risk-taker; A31. focus.

**Model Summary**

Dimension	Cronbach's Alpha	Variance Accounted For	
		Total (Eigenvalue)	% of Variance
1	.770	3.920	12.646
2	.706	3.154	10.176
Total	.887 <sup>a</sup>	7.075	22.822

a. Total Cronbach's Alpha is based on the total Eigenvalue.

## endnotes

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<sup>1</sup> According to Slywotzky and Wise (2002), only ten percent of publicly traded companies enjoyed double-digit growth in eight or more years between 1990 and 2000.

<sup>2</sup> We distinguish between new *enterprise* formation and new *business* formation, defining the latter as creation of a new combination of products, markets and operations within an established firm. See below.