

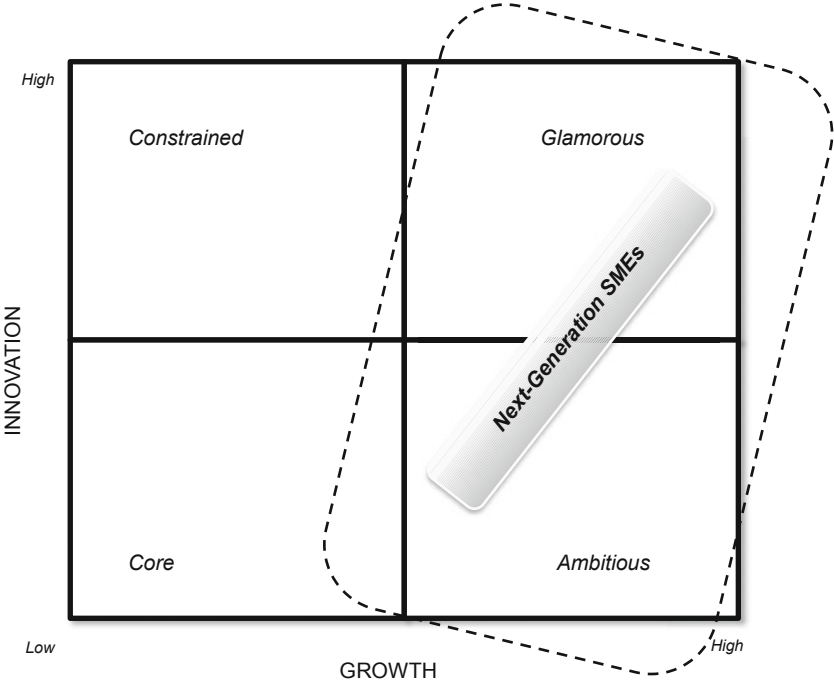
## Chapter 2

# SME Opportunities with Broadband-Driven Information Technologies: Supporting SME Business Needs

**Abstract** In the broadband economy, SMEs enjoy technology-supported opportunities to interact with customers in ways that were neither possible nor thinkable until recently. However, to effectively sustain SMEs' competitive position, technology must first meet the business needs of small enterprises. In this chapter, we discuss how broadband-driven mobile technologies can actually support SME business needs. In the first part of the chapter, we present examples from multi-year research focused on identifying SME business needs by mapping the technological evolution and investments of small enterprises that are at the forefront of IT adoption. In the second part of the chapter, we specifically introduce mobile applications and discuss how they can play a role in SMEs' competitive evolution. Finally, we cannot discuss an emerging topic such as broadband-driven mobile technologies without acknowledging issues related to security and privacy protection in the "anytime/anywhere" environment. Hence, the chapter concludes with a discussion of privacy principles that all professionals, and particularly the nomadic SME professionals, need to take into account when utilizing mobile apps.

## 2.1 Capturing SMEs Business Needs

SMEs are confronted with many challenges. Once they move past the start-up phase, they are faced with setting up daily operations that can support growing business demands. As discussed in Chap. 1, many SMEs are late technology adopters, or lag-gards. This is particularly common in the context of emerging technologies for which the value proposition is still unclear, because of high market volatility. However, by focusing on SMEs in the information technology (info tech) segment, it is possible to identify the issues faced by the innovators: those enterprises that are pioneers in technology adoption. Identifying the needs and experiences of these innovative firms can significantly lower the learning curve for other small enterprises and enable them to fearlessly move forward in technology exploitation. In this chapter, we present key characteristics and discuss the environment in which such enterprises operate.



**Fig. 2.1** Kirchhoff’s typology of small firms. (Source: Modified from [2], reprinted with author permission)

**2.1.1 Early Adopters in the Info Tech Industry  
(Next-Generation SMEs)**

Kirchhoff [1] differentiated the typology of small enterprises based on growth and innovation potential. He identified a set of small firm start-ups that are more prone to tech innovation. Spencer and Kirchhoff [2] regard these firms as “ideal types” of new technology-based enterprises that are important drivers of innovation and economic growth. These firms include characteristics that lead to fast adoption of new technologies. While the “glamorous” firms (Fig. 2.1) are likely to coincide with first adopters of many technologies because of their high growth and innovation rate; “ambitious” firms are likely to invest only in, for example, new technologies that can increase productivity and operational efficiency [3]. On the other hand, lower costs of IT deployment, mobility advantages supported by broadband, and an IT services support system (now directly available as-a-service) can help the more IT-conservative small firms (such as the “core” and “constrained” in the figure) to transition to the new mobile apps. Incidentally, many enterprises have already embraced this transition, as discussed later in the chapter.

Ambitious and glamorous SMEs are found, for example, within the dynamic info tech sector. They adopt (and take advantage of) new wireless services faster than

other less dynamic core and constrained small organizations. They may also adopt wireless technologies faster than larger organizations [2]. These “next-generation SMEs” have more occasions to experiment and gain time-to-market entry advantages through innovative uses of broadband applications. They also have the opportunity to define the key requirements for adoption in their sector.

### ***2.1.2 Key Issues to Follow According to Info Tech SMEs***

We have surveyed info tech SMEs annually since 2006 in a study jointly conducted by the New Jersey Institute of Technology, the New Jersey Technology Council (NJTC) and other local and international partners (i.e., the Quebec Technology Association (AQT); the University of Quebec en Outaouais; the South African Consulate, etc.) [4]. The main goal of this annual study is to understand both local and international technology and business challenges faced by small and medium enterprises, which are members of regional technology councils such as NJTC and AQT. Key goals of the study include understanding the:

- Economic climate with in the region in which the enterprises operate and the confidence level of conducting business in that region
- Key technologies essential for continued business growth
- Availability of financing
- Strategic focus of the firms
- Revenue and investment forecasts in 2–3 year timeframes.<sup>1</sup>

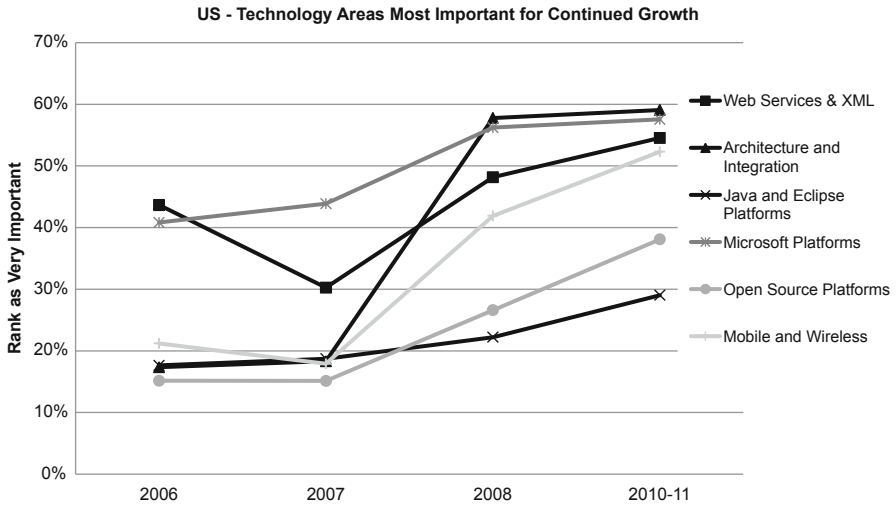
We discuss the results based on the most recent data collection period (2010–2011) noting the remarkable consistency in issues, opportunities, and trends across various years (despite covering different economic cycles, including a recessionary one) concerning technological evolution. Differences emerge mostly in perception of the local economy, financing and revenue models, and the role of government support.

Within the info tech segment, these next-generation SMEs are application software developers, IT consulting companies (over 50%), application services and managed services providers (about 30%). Approximately 20% of the respondents are also involved in IT infrastructure/network services provisioning and business continuity. These enterprises view Microsoft platforms as critical for their continued business growth, but the importance of both open source and mobile platforms increased significantly over the years (see Fig. 2.2) with the importance of mobile and wireless increasing thirty percent since 2006.

The growth of mobile and wireless importance is particularly evident from the same data collected in Canada and Europe. Important areas listed by the respondents include software-as-a-service (repeated several times), cloud technologies,

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<sup>1</sup> The mean response rate varies between 5–15% of council members within the IT industry segment. About 140 firms participate in each survey, with generally 70% of the respondents representing the tri-state area (New Jersey primarily, New York, and Pennsylvania). The sample broadly represents firms with less than 250 employees and primarily enterprises with less than 50 employees.



**Fig. 2.2** Critical technologies for high tech SMEs growth in the U.S.

open source applications, Citrix applications (for remote computing), security applications, and unstructured data mining technologies. Other broadband-driven apps and platforms in the lead are Web-portals and components, e-commerce solutions, and mobile consumer apps [5].

Several statements<sup>2</sup> from the respondents confirm the upward trend of mobile and wireless, as well as the jump in architecture integration responses (Fig. 2.2). They can be grouped under “integration/mobility” and “service computing” themes:

- **Consolidation and integration for “anytime/anywhere” access (mobile tools)**

The theme going forward for IT is consolidation and **integration**. Organizations that can provide their employees [with the right information at their fingertips the moment they need it] will have a distinct competitive advantage over those that cannot.

**Smartphones** will continue evolving into the preferred instrument for constant connectivity, with voice interaction, facial recognition, location awareness, constant video and sound input, and multi-touch screens.

- **Utility computing, SaaS, and commoditization**

Continuing Web application development will make the desktop thinner. You will have all you need on your remote device. Information flow will resemble **electricity**, a utility to tap into.

[...] IT is enabling the commoditization of previously high-end services and blending them seamlessly in our day-to-day life. Examples include taking garage sale to national scale (eBay), library on the go (Kindle), area-wide product price comparison (barcode reader on your cell phone), worldwide stock data on your palm, anytime anywhere TV shows and music, and the list goes on.

<sup>2</sup> All quotes in this chapter present open-ended responses to the 2010–2011 NJTC’s question on forecasting the direction of the IT industry within the next 5 years.

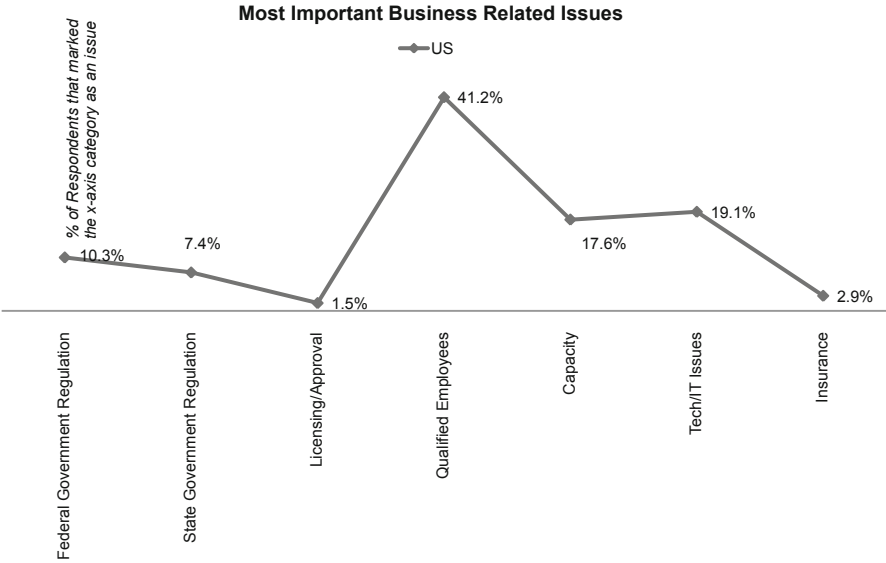


Fig. 2.3 Most important business issues for U.S. info tech SMEs

The picture emerging from these statements is one whereby IT systems become so embedded in the daily life of individuals that enterprises delaying adoption may quickly become obsolete. Smartphones have made the anytime/anywhere model successful, while utility computing has opened IT access to the masses (no matter how large or small the group) [5].

2.1.3 Business Issues and Priority Areas for Info Tech SMEs

While info tech SMEs aggressively test and push the adoption of emerging technologies, their business models are still constrained by environmental, regulatory, and economic factors that may impact their growth rate. No matter how innovative the product, access to financing, administrative barriers, and market conditions will cause significant differences in achieving success. While some federal and state regulatory requirements are an issue primarily in the U.S., our study shows that lack of access to qualified employees is the highest and most significant problem reported both in the U.S. and in the international data (see Fig. 2.3).

*Employment* With regard to lack of skilled resources, the following statement summarizes the respondents’ major concerns:

Bigger growth is happening in Asia, with the removal of more jobs from the American workforce; and our education system is not graduating enough engineers.

Local info tech start-ups face fierce competition globally because the same broadband technologies that are enabling the anytime/anywhere model are also abolishing trade barriers. In the “flat world” [6], IT services can be sourced from any location, as long as they are accessible at satisfactory data transfer rates. It is logical to expect that info tech SMEs will suffer when competing with software development giants located in India and China. The lack of access to skilled resources on-site is particularly taxing because these enterprises cannot fully exploit their “localization” advantage by offering customized and personalized services to customers. If these SMEs do not have the right personnel that will be able to sell as well as support the post-sales activities at the customer site and if clients can obtain similar services via a remote Cisco tele-presence connection, clients will usually pursue the lower cost solution. In some cases, SMEs themselves outsource their own services and work primarily as customer interfaces. This is one of the reasons why higher growth is happening elsewhere.

In addition, the declining interest in STEM (science, technology, engineering, and mathematics) in the U.S. leads to lower enrollments and, thus, lower graduation rates. While foreign international students continue to enter U.S. STEM programs, many of these students return to their home countries after graduation or, seek positions in other countries. In addition, foreign STEM graduates may not seek SME employment as they will obtain more support in processing work visas from larger organizations.

Finally, even if workers are available and employable, is the local human resources pool able to address the increasing complex need of the cloud computing model? We have mentioned several times that IT is becoming simpler to the end-user, but not necessarily to the providers of IT services who find themselves supporting larger and more distributed systems. During the dot.com boom, novices from any field were able to learn-on-the job. However, today’s IT skills requirements are highly specialized and the generalist professionals have ceased to be competitive.

*Regulation* With regard to the regulatory requirements highlighted in Fig. 2.3, high costs of fringe benefits, especially health insurance costs, are particularly taxing for SMEs. This is exacerbated by declining federal and local investments in research and development, particularly during recessionary cycles.

Federal and state governments need to create an environment where it’s strategic and healthy to invest in technology innovation and new product development.

Because info tech SME business models are grounded in innovation and product development, lower incentives may spiral towards lower innovation rates and conservative investments. Long-term innovation goals are traded-off for short-term survival needs.

*Customer Service Development* Info tech SMEs complain that even when new products are brought to the market, buyers are not ready for adoption. Therefore, they need to invest significant more resources in marketing and customer development. Based on the 2011 data collected from our study [5], resources are shifted from the research and development (R&D) budget to marketing and product improvement, which will eventually constrain the competitiveness of the enterprise [5]. Product

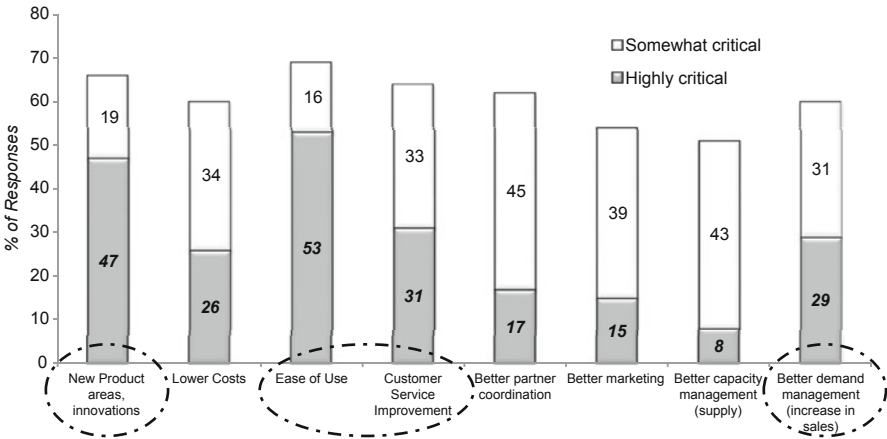


Fig. 2.4 Most critical areas for U.S. high tech SMEs (# of responses)

Table 2.1 Spending distribution of info tech SMEs (2010–2011)

Spending on existing products vs. research and development?	Less than 5%	6–15%	16–25%	26–35%	More than 36%
Existing products (%)	18	28	15	16	21
Research and development (%)	25	22	22	9	21
Sales and marketing (%)	15	24	24	24	10

improvement through incremental changes is a viable strategy mostly for the short term. It essentially helps retain the loyalty of existing customers. While this strategy does not help in acquiring new customers, it maintains customer satisfaction and enhances their experiences. As Fig. 2.4 shows, info tech SMEs perceive that customer service improvements, plus the simplification of technology interfaces, are critical business drivers in the current economy.

• **Simplification (ease-of-use)**

Front-End Simplification. While environments grow more complex on the back-end, clients will expect the user experience to become more streamlined and easy to use. The cloud is the natural progression of this desire, and as cloud provisioning becomes more prevalent other non-cloud based IT resources will be looked at to match that ease-of-use.

*Innovation* While Fig. 2.4 shows that info tech SMEs still report new product development (NPD) and innovation as being critical priority areas, the data presented in Table 2.1 about their IT investments shows that the highest number of responses (as a percent of total responses, in this case 25%) in R&D investment is associated with the lowest investment value (less than 5% of total expenses).

Possibly, the high investments in sales and marketing (24% of responding enterprises state that between 26 and 35% of their total expenses are in marketing)

**Table 2.2** Priority areas for SMEs

	Priority areas (in order of importance)	Highly critical responses (%)
1	<i>Ease-of-use</i>	77
2	<i>New product areas, innovations</i>	68
3	<i>Customer service improvement</i>	45
4	<i>Better demand management (increase in sales)</i>	42
5	Lower costs	38
6	Better partner coordination	25
7	Better marketing	22
8	Better capacity management (supply)	12

are driven by the notion that better demand management, another critical area for info tech SMEs, will lead to sales increases. The rise of new marketing models on the Internet (social media-driven) can support their need to achieve increase in sales (Fig. 2.4). For example, according to American Express Chief Marketing Officer, the promotion of the Small Business Saturday’s event in Facebook increased SMEs transactions by 28% [7].

• **Social Platforms**

The role of technology in our business and personal lives has changed dramatically [ . . . ]. Social platforms will evolve into new and timely sources of business intelligence. Company Web sites might no longer be the first stop for customers interested in your product or service. . .

Key priority areas for info tech SMEs are listed in Table 2.2. Over 40% of the respondents concurred that highly critical needs for their business success included customer/market-related issues such as ease-of-use, new product areas/innovation, and customer service improvement, Lower priorities include supply-related issues such as capacity management, better partner coordination, and lower costs. Info tech SMEs believe that they will be able to boost their firms by focusing on innovative, user-friendly, and customer-oriented products.

To the extent broadband technology can support these business priorities, it offers real opportunities for business improvements. However, as respondents highlighted:

I think successful IT companies will be those who are able to combine efficiently carrying out projects and implementations with a real understanding of how the solution will integrate into the way a company does business and makes its money. The technology is now at a level where one can pretty much do anything one wishes with it, the question is “Does the solution or product you are proposing really fit your client’s business and needs?”

We try to answer the question of how mobile technologies may indeed support SMEs business and needs in the next sections.



## 2.2 Mobile Technologies Landscape

Mobile technologies provide remote and transient **collaboration and communication** capabilities by enabling anytime anywhere voice, data, and services access. Mobile technologies encompass software applications, various types of supporting networks, and corresponding hardware (see Fig. 2.5). These components' seamless integration is essential to providing innovative services to the end users. Mobile technologies have invaded our personal and professional lives. Smartphones adoption rates have skyrocketed (pushed by killer devices such as Blackberrys, iPhones, Google-Android phones, Windows Mobile phones). Companies exploiting mobile applications are reporting operational growth, new business opportunities, and better customer outreach. Technological advances (from standards, to sensors, equipment, providers, frequencies, etc.) in mobile infrastructure occur daily, improving throughput and quality.

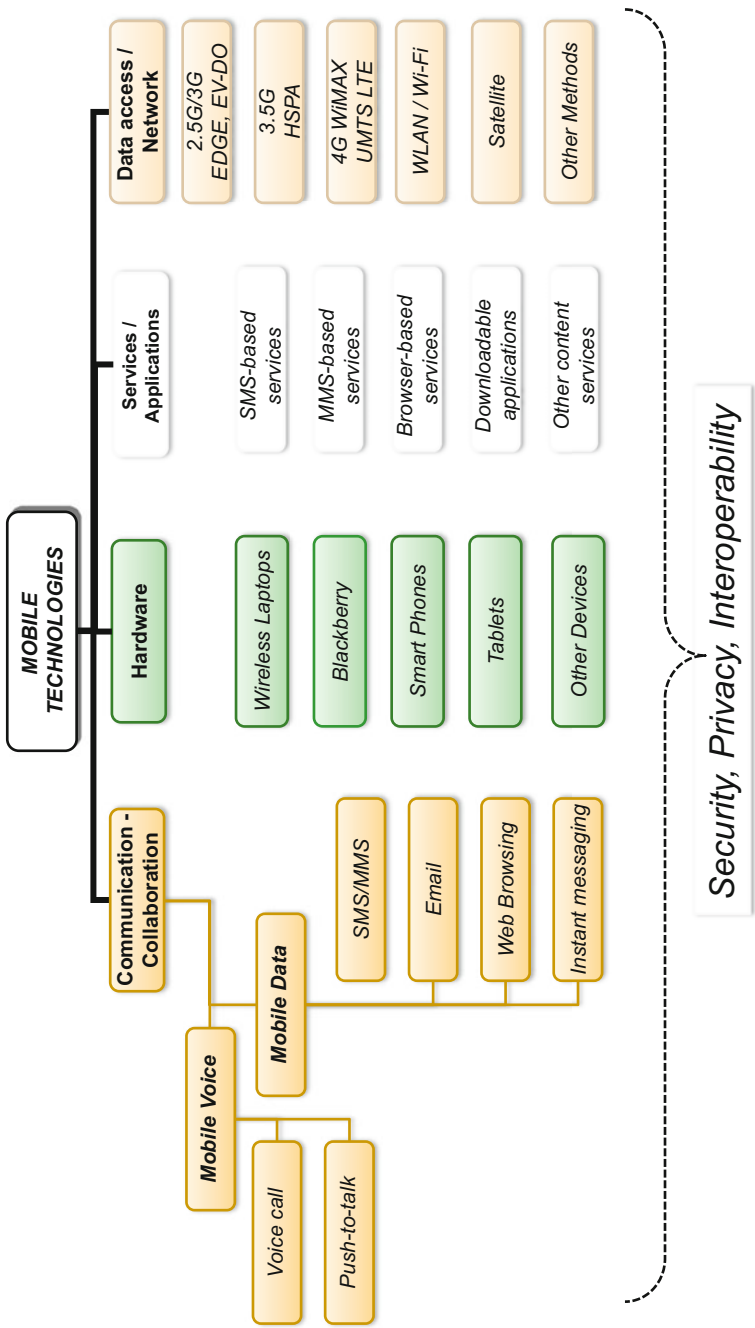
In terms of **hardware**, mobile devices are not tied to a specific location. They are portable and movable and are designed to enable data collection and transfer via various wireless channels. They include laptops, smartphones (of various brands), tablets, and other devices such as GPS receivers and electronic readers.

In terms of **applications**, the list is exponential. In general, applications may use more or less complex visual interfaces. They may range from simple and low bandwidth demanding SMSs to sophisticated applications downloaded on devices. Despite the high numbers, the most significant apps for business users are email and Internet browsing services. Games are the killer applications for the consumer market. Data access is achieved at various speed and quality level, depending on the type of *network* connection used (for a list, refer to Chap. 1).

Given the highly dynamic and complex nature of mobile technology, it is not surprising that some enterprises are still cautious, aiming for a laggard entry rather than an early adopter role [8]. Enterprises are struggling with the cannibalization of existing products, fear of security and privacy breaches, data interoperability problems, just to name a few challenges. In this section, we look at the opportunities as well as the difficulties of adopting mobile technologies.

### 2.2.1 Uniquely Mobile Opportunities

Opportunities to exploit the advantages of the mobile and wireless application explosion exist throughout the SME value chain. Realizing these opportunities requires identifying which technologies can support long-term business growth, especially for incumbent SMEs whose key core competencies are not within the IT industry sector. Such identification is based on the analysis of current and forward-looking business trends within the SMEs' specific industries and entails making decisions on priorities. While Chap. 5 describes a framework for making such decisions, this section provides some examples of mobile applications that easily map the identified



**Fig. 2.5** Mobile technologies landscape. (Source: Passerini, updated and reprinted with permission of Cutter Consortium, [www.cutter.com](http://www.cutter.com))

priority areas (see Table 2.3) and are affordable and quickly implementable by SMEs (assuming that employees have access to suitable mobile devices).

Other opportunities include:

*Opportunities for mobile workers* Wireless access enables mobile workers to remotely access resources to complete their work-tasks, extending their connectivity and reach. Business users are no longer limited by wired local area network connections to their workspaces, offices, and homes. They have the flexibility to stay connected anywhere the business operates without being physically wired to a place or device [9]. Individuals are now expected to work in virtual teams and be always available to interact at any point in time. Using mobile technologies has changed the traditional view of work taking place at the office. Work is now where and when it makes most sense, regardless of the context in which individuals are operating. Teams collaborate across countries and locations and hierarchies are flattened across teams. Such changes first impact individuals and then extend to organizations, changing entire organizational models.

*Opportunities for edgy enterprises* Bess [10] finds that the opportunities for mobile technologies reside specifically at the “edges” of companies. He introduces the notion of “rethinking the edge” by focusing on the exploitation of supplier/partner/customer relationships (those at the edge of the enterprise) that might have been overlooked by an inward focus on internal implementation and management. For example, organizations continue to be ambivalent towards expanding investments in mobile technologies. Greco and Nickolaisen [11] found that shifting IT investments away from traditional IT systems was rather difficult within traditional hierarchies. They describe a journey against the tides of a traditional and inflexible structure mostly held back by the inability to envision the benefits of quickly transitioning to mobile technologies.

*Opportunities across industries* Schuster and Lee [12] present examples of applications available in the agriculture industry, where Florida citrus growers are testing the use of mobile devices, such as 3G smart phones, to speed data collection efforts by human scouts who walk the fields in search of signs of spreading diseases. The added bonus of the 3G phone data collection is the ability to better pinpoint the exact location of the observations through the phone GPS capabilities. As long as the data is transferrable seamlessly across systems (that is the interoperability issues are lowered), the possibilities are limitless.

*Opportunities for communities* Chaka [13] describes social networking “gone mobile” (mobile-SN) with MXit, an instant messaging application that has enabled its developers (Mxit Lifestyle) to gain market shares in over 120 countries, claiming 19 million subscribers. Being able to follow Tweets and connect to Facebook anytime/anywhere has taken an entirely new dimension. It has enabled community self-organization that eventually led to the demise of entire political regimes.

Table 2.3 Mobile apps for SMEs


Priority area	Mobile apps	Sample interfaces
	Description	
New product areas, innovation	In addition to collaboration and communication tools for open innovation, applications in this area make searching information easy. For example, SocialCitNet can be used to quickly analyze patents during the innovation process. Other examples include IBM collaboration software such as Social Everywhere and Chat	
Lower costs	Smartphone applications integrating bar code scanning capabilities can increase inventory management accuracy and speed. The CS40 mobile phone is an example <a href="http://www.intermec.com/products/cmptcs40/index.aspx">http://www.intermec.com/products/cmptcs40/index.aspx</a>	 <p>Image: Salvatore Vuono / FreeDigitalPhotos.net</p>
Ease of use	Since the Apple iPhone revolution, the majority of smartphones applications have evolved into user-friendly interfaces	

Table 2.3 (Continued)


Priority area	Mobile apps	
	Description	Sample interfaces
Service improvement	Applications that support SMEs' mobile workforce enable better internal management (reporting and easing contact management and administrative paperwork) and external client management (lowering response time and follow up)	 Image from SHUTTERSTOCK IMAGES LLC, with permission
	<p>With reference to internal client management: mobile apps on smartphones and tablets can ease time reporting tasks by capturing length of time calls with clients (voice call) with automated emails sending at the end of the work day (enhanced data service).</p> <p>Location-based tracking can further automate tracking of time spent at client sites</p> <p>With reference to external client management, applications for customer-relationship management (CRM) span from extensions of current proprietary systems now accessible through mobile devices, to newly developed applications. See for example at <a href="http://www.practicaledge.com/articles/2763-17-Mobile-Apps-for-Customer-Management">http://www.practicaledge.com/articles/2763-17-Mobile-Apps-for-Customer-Management</a>:</p> <ul style="list-style-type: none"><li>- Sugar mobile with sugarCRM to simultaneously logs calls and data</li><li>- Sales force mobile</li><li>- Oracle mobile sales assistant (to access data)</li><li>- SAP one mobile to access reports, inventory and alerts</li><li>- CWR mobile for microsoft dynamics to log open/closed sale opportunities</li></ul>	
Better partner coordination	Mobile apps to follow the status approved documents, for example, allowing complete approvals directly from the smartphone interface	

Table 2.4 (Continued)

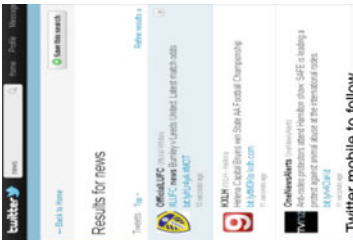
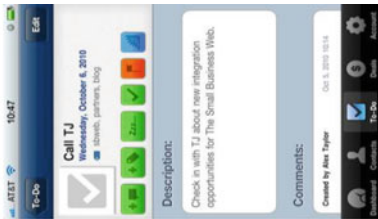

Priority area	Mobile apps	Sample interfaces	
Description			
Better marketing	Mobile apps have contributed to bringing marketing to the next level. These new marketing models are based on the exploitation of the power of social networking. Salesforce personnel can connect to customers on Facebook and Twitter for quicker follow-up and updates. Social networking sites can be used to expand reach to new customers. Sample apps include HubSpot Leads to ease access to new customers; Batchbook, an application for SMEs to manage social networking contacts		
Better Capacity management (supply)	Leverage location-based services to follow the supply chain integrating geo-service with SMS and email messaging. Use mobile device management systems to follow the logistic cycle (routing and dispatch, and pick-up and delivery field services)		
Better demand management (increase in sales)	See marketing apps (above) for additional leads. For demand management, Nice Office applications for SMEs (from AT&T) enable taking the office on the go by synchronizing databases, calendars, forms and documents. They are offered “as-a-service.” <a href="http://www.wireless.att.com/businesscenter/solutions/industry-solutions/mobile-productivity-solutions/nice-office.jsp">http://www.wireless.att.com/businesscenter/solutions/industry-solutions/nice-office.jsp</a>		

Image: Passerini and Adapted from Gregory Szarkiewicz / FreeDigitalPhotos.net

Image: Passerini and Adapted from Gregory Szarkewicz / FreeDigitalPhotos.net

### 2.2.2 *Uniquely Mobile Challenges*

The key challenges for SMEs technological evolution are listed at the bottom of Fig. 2.5 and are primarily security and privacy issues. Interoperability (or lack thereof) is also a particular concern in a dynamic market still dominated by many different devices, standards, and applications.

*Security Challenges* Security of proprietary information is a key concern to organizations that are using mobile networks because of the vulnerability of the connection and the additional disclosure of location-based data. Managing security is considered the most important issue by SMEs adopting, or considering, mobile and wireless Internet [14]. Security issues are only partially technology-related. Data breaches can be caused by inappropriate policies or by user negligence (weak passwords, loss of devices, etc.). In order to address these issues, SMEs need to identify security protocols/policies and shape employee behaviors that may limit their traditional flexibility. For example, SMEs should limit sensitive data downloads on mobile and portable devices (including USB thumb drives), which could be subject to theft or loss.

Lineman [15] describes security threats opened up by mobile technologies and underlines many of the risk factors. These risks are exacerbated by a slowly moving and mostly reactive legislative framework that often plays catch-up with technological advancements. Useful risk mitigation strategies exist, but enterprises need to take a user-centered security mindset, which focuses on educating professionals on how to safely manage their data. Security education is essential for enterprises of any size. Even in the context of large enterprises, Lineman finds that while companies are aware that security breaches are mainly related to human errors, most of their investments continue to be on technical solutions rather than user education. Data from the 2009 CSI-FBI Computer Crime Survey (<http://gocsi.com/survey>) indicates that security awareness training spending was less than 1% of total security spending.

*Privacy Challenges* Closely related to safeguarding security is the broader notion of safeguarding privacy. Broadband supported applications tend to be invasive of privacy. To access the benefits of such applications, users need to disclose information about themselves, their preferences, and their location. This makes privacy one of the most compelling issues of the broadband economy.

In order to effectively protect privacy, its underpinning principles need to be identified and defended. Holtzman [16] states that privacy is founded on three basic principles (the 3-S): Seclusion, solitude, and self-determination. Seclusion refers to the right (of one's own personal information) to be hidden from others; solitude refers to the right to be left alone; and self-determination deals with the right to control information about oneself [16]. These three principles are extremely difficult to protect simultaneously, especially in mobile environments where infringement examples abound because of the anytime/anywhere traceability of individuals.

For instance, adding historical location information to individual personal data could provide a history of a person's habits and whereabouts, which can be easily

cross-linked with the whereabouts of other individuals. Coupling this with the fact that some companies (legally) sell customer data to other companies that may have access to additional databases and start profiling (a better and more politically correct term would be segmenting) various users, the scenarios for the infringement of seclusion, solitude and self-determination principles become infinite. While growing legislative and judicial interventions have tried to address these problems, a lot still needs to be done as the legal system tends to play catch-up with the fast-paced technological innovation [17].

In this chapter, we discussed how with the broadband economy, SMEs enjoy technology-supported opportunities to interact with customers in ways that were neither possible nor thinkable until recently. We also addressed how broadband-driven mobile technologies can actually support SME business needs. We concluded with a discussion of security challenges and privacy principles that all professionals, and particularly the nomadic SME professionals, need to take into account when utilizing mobile apps.

In the next chapter, we introduce another problem that can be or more complex than just technology. The reduction of connectivity barriers between business and employees causes a dramatic change in the “workspace” and “workplace” environment. In today’s information age, where the work output is mostly digital and easily transmitted in the broadband medium, the pressing need for physical interaction in the workplace is diminishing. Chapter 3 illustrates the evolving nature of the “workspace” and “workplace.” The digitization of work along with the increasingly expanding and accelerating rate of connectivity resulted in the evolution (or revolution) currently underway. The path to balance digitization of work with the increase rate of connectivity will be difficult and SMEs need to understand and prepare accordingly.

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