

## Localization 2.0

JEFF KELLY and NEIL BLAKESLEY, BT plc

Transformation 1.0—the convergence of information and communication technologies (ICT) that gathered momentum through the 1990s—has had a dramatic and well-documented impact on the way the world lives, works, and does business.

But while it may be tempting to think that the world has become a global village where everyone is free to express his or her views on an equal footing and organizations are free to trade with one another as they wish, the reality not only remains rather different, it is perhaps becoming ever more different as our understanding and use of the new technologies at our disposal extend and mature.

Rightly, people expect ICT and global networks to enrich their cultures and their senses of identity, not obliterate them. Organizations and governments feel much the same when it comes to ways of doing business, legislation, and so on.

The next wave of transformation—Transformation 2.0—must address such expectations head on, going beyond “localization 1.0”—the adaptation of ICT products and services to different languages, character sets, and so on—to “localization 2.0”—a new level of adaptation that fits them to local laws, customs, and cultures.

This chapter expands on the issues that need to be addressed as the ICT industry moves forward, and provides examples of how forward thinkers are beginning to tackle them. In particular, it focuses on how the new era of localization will allow organizations to have the best of both worlds—to be both local and global at the same time.

### Le plus ça change

Back in the 1980s, some 25 years ago, there was relatively little need for communication or information technology (IT) products and services to be localized. There were notable exceptions—BT among them—but communication service providers generally operated as state-owned monopolies. Naturally, they designed everything—their products and services, as well as the associated delivery and support systems—in ways that appealed to the populations they served and that worked as their customers would expect. Much the same was true of IT, a great deal of which was supplied by national champions. Again, the result was that products and services were inherently localized—designed to meet the specific needs of the communities and countries in which they were sold.

The ICT industry has changed dramatically since then. The commercial landscape has been transformed. Monopolies have been lost, IT businesses have merged, and global footprints have become the order of the day. The technologies involved are radically different as well. They linger on in some organizations, but the proprietary operating systems and divergent networking

technologies of the past are rapidly being swept away. To all intents and purposes, they have been replaced by industry-standard operating systems Windows and UNIX, the Internet Protocol (IP), and so on.

These changes have made the world both simpler and more complex, as follows:

- simpler because “everything” is now based on standard platforms and IP; and
- more complex because this standardization has enabled an explosion of new devices, new software applications, new ways of doing things, and new things to do.

Compounding the complexity is the fact that the world is far from a homogenous place. There are big differences not only in the languages people speak and the alphabets in which they write, but also in cultures, thought processes, ways of doing business, legislation, and much more besides. To operate effectively, multinational corporations have had to overcome such differences. Even when their headquarters are not in the United States, the United Kingdom, or another English-speaking country, many have established English as their *lingua franca* and adopted Western norms when it comes to business practice.

When it comes to lower tiers of business—to national champions and small- and medium-sized enterprises (SMEs)—and consumers, the situation remains very different. Thanks to the Internet, smaller businesses have become as much a part of the global economy as multinational corporations. Many now have customers spread all over the world. Others are key components of supply chains that stretch from their home countries to factories and retail outlets on the far side of the planet. At their heart, however, they remain very much part of the countries in which they are based, operating from boardroom to shop floor according to local cultures and traditions.

It has become common to talk about world citizens and the global village, but consumers are even more the “children” of the cultures in which they grew up. Tech-savvy early adopters may be prepared to adapt their ways to accommodate the vagaries of the networked information applications currently on the market, but those who follow them will expect the devices they are offered to fit more smoothly into the fabric of their everyday lives. There may be an application for that, but is there an application for me?

### Going local

The conclusion of the above for the ICT industry seems clear: to operate successfully all over the world, one has to be aware of the differences between countries and cultures, to be understanding of them and ready and willing to adapt one’s products, services, and

ways of doing business to meet local needs. That is, there is the need to localize one’s offer.

Thus far, localization has focused on the basics—on adapting user interfaces, translating documentation, providing help lines in different languages, and so on. This is a start, but it does not get over the fact that the underlying product or service does the same thing in the same ways.

Think of this as localization 1.0—a first-generation approach to the adaptation of ICT products and services. It has tended to happen in three phases:

- First, products were internationalized: designed to meet the requirements of *all* the markets in which they would have been sold.
- Then they were localized: for example, by enabling and disabling options, plugging in alternative modules (dictionaries, for example), and so on.
- Finally, local infrastructure was put into place to sell and support them, in the form of sales material, product documentation, contact centers, and so on.

### The world moves on

At this stage, it is important to note that the very meaning of “local” is changing. In the past, the relationships between countries and cultures were clear. Things were fuzzy at the edges but, by and large, both were defined by geographic borders. Germans lived in Germany, Chinese in China, and so on.

The relationship today is much looser. Countries have become home not just to their indigenous populations, but also to significant communities from other parts of the world that are fiercely protective of their own languages and cultures. This complicates matters for the ICT industry quite considerably.

Simple assumptions—that people in England speak English, for example—can no longer be made. The number of people who may want to buy products or use services that are linguistically and culturally localized to countries other than that in which they are based is increasing all the time. Nor can the industry assume that people who buy products that are linguistically and culturally localized to, say, the Japanese market, are bound by data protection and other laws that apply in Japan. Users can be culturally Japanese but legally American, for example.

Other, equally significant, changes are afoot in the world of business. As the BRICS economies mature and the costs of doing business in them rise,<sup>1</sup> work is moving to other locations—Africa and South America, for example—and new trade routes are opening up as a result.

Technically, global networks can now make any application available anywhere anyone chooses. Organizations are keen to exploit the opportunities this has created. In particular, many are replacing the separate ICT infrastructures that have historically served their

operations in different countries or territories with common platforms that deliver a standard set of applications and services worldwide. The advent of cloud computing and the “as-a-service” model, which makes it easier and cheaper for organizations to equip their employees with the tools they need, is accelerating this trend.

Such changes bring the higher-level differences mentioned earlier—those in cultures, thought processes, ways of doing business, legislation, and so on—to the fore. There is no one-size-fits-all solution when it comes to information security, for example, as recent disputes between Arab and Asian governments and Research in Motion,<sup>2</sup> the Chinese government and Google,<sup>3</sup> among others, have made abundantly clear.

The “great rebalancing” (as McKinsey called it) of the global economy that is occurring as emerging economies contribute more growth than developed ones will doubtless exacerbate the situation.<sup>4</sup> Perhaps it will be Chinese or Indian languages and business practices that become the standards for global corporations in years to come. We will have to wait and see but, in the meantime, it seems that there is an obvious conclusion that needs to be drawn from recent experience and acted on: just because technology *can* deliver the same service everywhere does not mean that it should.

So what is the answer? The age-old axiom, “when in Rome, do as the Romans do,” should apply not just to people or organizations, but also to the technologies they use. This implies a new level of localization—call it *localization 2.0*—that adapts ICT products and services more fully to local market expectations and needs, accommodating variations in attitudes, approaches, laws, and regulations in a way that values differences and respects them rather than attempting to sweep them away.

This view is quite widespread. CSOFT International Limited, a US company that helps businesses localize their products, points out that “the global market is not an extension of the US and must not be treated as such. Beyond basic language translation, products must be considered in terms of cultural differences. Failing to take notice of such differences can result in embarrassing, albeit humorous, miscommunications at best; or insults and loss of business at worst.”<sup>5</sup> And the recently retired Chief Executive Officer of British supermarket chain Tesco, Sir Terry Leahy, put the company’s success in Asian markets down to the fact that it had sought to build businesses there, not an empire. “We didn’t want to export what made us strong in our home market,” he said. “From the outset we didn’t have an imperial outlook. You have to be comfortable adapting to fit in.”<sup>6</sup>

Commercially, BT’s thinking and approach are similar to that of Tesco. The company has strong local operations not just in the United Kingdom, but in other European countries and, more recently, in Brazil as well. Complementing these, BT works with a global network

of more than 100 strategic partners and distributors to meet customers’ needs worldwide. The strategy has proved to be highly successful. Organizations such as the Spanish Ministry of Foreign Affairs, Caixa Galicia, Commerzbank, Deutsche Post DHL, Munich Re, PaperlinX Europe, Sasol, and Syngenta come to BT specifically because it combines a strong locally adapted presence in their home countries with the global reach they need to connect operations worldwide.

### Localization 1.0

Technically, the level of localization required to match products and services to countries and cultures varies quite considerably. Until quite recently, the task was relatively simple and straightforward.

Consider basic phone services, for example. The tones used to indicate conditions on lines—whether the number called is ringing, engaged, or unavailable—might need to be changed to localize services to particular countries, as might any recorded announcements. Otherwise, people expect phones to work in the same way all over the world. The user interface needs to be different, but the functionality behind it remains the same. Much the same has been the case for computer hardware and software applications. There are occasions when modifications are needed to meet the requirements of different cultures and regulatory regimes. When Apple devotees attempted to import iPads compliant to US standards into Israel, they were confiscated by customs officials concerned that, because the signals they transmitted were stronger than permitted by Israeli regulators, they would “trample the wireless connections of other users.”<sup>7</sup> By and large, however, the approach up to now has been focused on basics such as languages and character sets.

Online, the search engine company Google has taken a similar approach as it has extended its services around the world. It has created sites in 190 domains, covering a complete alphabet of countries from Ascension Island to Zimbabwe.<sup>8</sup> And its user interface has been translated into a total of 130 different languages, from Afrikaans to Zulu.<sup>9</sup>

Overall, the company has clearly made a significant commitment to meeting the needs of different communities around the world, but some commentators have questioned whether it has gone far enough. They point to the fact that Google is not the dominant search engine in every country it serves, and that this might be because its minimalist interface does not appeal as much to, say, Indian audiences as it does elsewhere. Rediff—a Mumbai-based provider of online news, information, communication, entertainment, and shopping services—appears to have been more successful at meeting the needs of such audiences, both at home and elsewhere, largely as a result of having tailored its services to meet its home country’s particular needs. This highlights the

need for companies in the ICT industry to take a more sophisticated approach to localization—one that, as suggested earlier, goes beyond the basics to look at cultural, legal, regulatory, and other aspects of adapting products and services for use by diverse communities in different parts of the world.

### Localization 2.0

The following examples illustrate the multi-dimensional challenge suppliers of ICT products and services face today as they extend their reach around the world.

#### Alternative desktops

It is tempting to think that, translated into the right language, the desktop user interface found on most computers these days would meet everyone's needs.

However, as those working on the One Laptop Per Child (OLPC) project pointed out when their first product was about to be launched in 2007, an interface based on a desktop metaphor does not necessarily make sense in places such as African classrooms, where students frequently do not have desks to begin with.<sup>10</sup>

To meet the needs of its target “customers”—disadvantaged children in developing countries—the OLPC team decided it needed to take a fresh approach. It developed Sugar, an interface that is more about relationships between people and applications than filing systems and trash cans. The first thing children see when they turn on their low-cost PC is a map showing who else is online in their neighborhood, clustered around icons representing the things they are doing or working on.<sup>11</sup>

The Taiwanese computer company, ASUS, reached a similar conclusion when it launched an entry-level netbook PC it thought (mistakenly as it worked out) would be used more by schoolchildren than adults. It equipped them with an alternative “desktop” interface designed with younger and less-experienced users in mind.

The interesting thing here is that, while the interfaces were very different, the applications to which they provided access were in many cases the same. This meant that, in principle at least, children using OLPC machines in, say, Africa could interact with others using standard PCs, ASUS netbooks, and other platforms in developed countries such as Europe and the United States. Equally, they were just as able to explore the Internet as peers using computers equipped with other, more conventional user interfaces.<sup>12</sup>

#### Alternative devices

It would be wrong to single out children as requiring different interfaces to online services, of course. There are also significant differences in the methods adults use to access them, some of which are the result of differences in the ways in which telecommunications services have evolved in different markets.

Conducted by Norwegian web browser developer Opera Software, a 2010 survey of mobile phone users worldwide found that more than 90 percent of Generation Y users in Nigeria, South Africa, and Indonesia used mobile phones more often than desktop or laptop computers to access the Internet. In the United States, the figure was much lower—51 percent.<sup>13</sup>

Given the significant differences between the two classes of device—most obviously, the size of the screens with which they are equipped and the availability or not of keyboards—such variations in the ways in which users interact with online services will clearly have a big impact when it comes to deciding what is best practice for their design in different countries.

#### Regulatory considerations

The global reach of today's digital networks makes it possible for applications to be delivered from large-scale data centers to desktops, notebooks, and mobile devices all over the world.

Multinational corporations were quick to take advantage of the opportunity to replace the regional provision of applications and services with global solutions delivered from central locations. More recently, others—both business and consumers—have followed suit, switching from applications they either run in-house or install on individual PCs to services delivered online from data centers in the cloud.

Technically, there are few limits. Provided sufficient network capacity exists and its use is appropriately controlled, the response times users experience will differ little regardless of their location or that of the data center that “generates” the services they use. On this basis, one could argue that localization is simply a matter of matching the language “spoken” by the user interface to that of the user, much as Google adapts its search service to suit the different communities it serves.

However, there are legal and regulatory considerations that both users and providers of cloud services (and their in-house equivalents) must take into account. Prominent among these are the data protection regulations that apply in different parts of the world, many of which place strict limits on the movement of personal data about customers and citizens collected by companies and government organizations. For example, such data can be transferred outside the European Economic Area only if the country to which they are destined has laws and regulations in place to ensure they will be adequately protected.

To comply with such regulations, organizations that want to use cloud services must know not just what measures providers have taken to keep any data transmitted to them safe and secure, but where their data centers are located. In addition, organizations must obtain adequate assurances that providers will not arbitrarily move the applications they are using from

data centers that are “in region” as far as data protection legislation is concerned to others elsewhere.

Providers must similarly adapt their services to the requirements of regulatory regimes. Take Microsoft, for example—technically, it could deliver its online services from a single global data center, but to make its services available to customers within the European Union it opened a facility in Dublin in 2009.<sup>14</sup>

Even within Europe, the regulatory situation is complex. In November 2010, Microsoft CEO Steve Ballmer highlighted the problem, calling on the European Union to provide clearer rules on privacy and data retention. To emphasize why rules needed to be clear, he used the fictitious example of a Swedish company that delivers a healthcare application from data centers in Finland to consumers in the United Kingdom. “There needs to be a single framework,” said Ballmer. “We need to know what the responsibilities and obligations are.”<sup>15</sup>

### Customer support

Another area of ICT in which global organizations need to think carefully before adopting one-size-fits-all solutions is customer contact.

No matter how conversations take place—and today the customer has a wide range of media from which to choose—there are situations that can be resolved only by talking to someone. That someone needs to have in-depth knowledge of a country’s geographies, business practices, customs, and prevalent ICT.

Factors such as the way customers are greeted, as well as if and how attempts to up-sell can be made, may need to be changed from region to region. It might be acceptable in the United States to greet customers by using their first names, for example, but this will not be the case all over the world.

Local laws and regulations may also have an impact. In some jurisdictions, people may have to opt in to receive mailings; in others, they may have to be given the option to opt out. Likewise, it might be legal to offer certain services—for example, the sale of alcohol—to people aged 18 in some countries, but only to people aged 21 or more in others.

Data protection laws must also be taken into account—especially with regard to where data about customers may be held—and it is important to remember that the remit of such laws can extend well beyond the countries in which they are set. State of California law SB1386, for example, requires any organization that believes unencrypted data it holds about someone living in the state might have been acquired by an unauthorized person to notify the individual concerned, regardless of where the organization is based.

### Avatars

Looking ahead, the need for localization may soon need to extend to the body language of avatars used in customer service and other applications.

People in different parts of the world use gestures of the head to mean different things, for example. In India and other South Asian countries, people tilt their heads from side to side in arcs to indicate they are in broad agreement with what a speaker is saying. Elsewhere, they might nod their heads or throw them back. Facial expressions, eye movements, the way one holds one’s arms, and other aspects of body language differ from culture to culture.

### Conclusion

As we have discussed in the course of this chapter, there are different ways of going global.

One way seeks to impose one-size-fits-all solutions everywhere it goes, sees differences in customs and legislation as inconveniences that should be swept away in the interests of free trade, level playing fields, and so on. This is the approach Sir Terry Leahy, the recently retired CEO of British supermarket chain Tesco, described as “imperial.”

The other way to go global is to become “multi-local”—to fit in wherever you go, but at the same time be present everywhere around the world that your customers need your products and/or services. To adopt this approach itself and enable its customers to do the same, the ICT industry needs to take a far broader view of the localization task, extending it to address the laws, customs, and cultures of the countries its businesses serve.

Amply supported by localization 1.0—the business of adapting ICT products and services simply by changing the languages they work in, the character sets they use, and so on—the former approach may have been appropriate when developed countries dominated consumption of ICT products and services, the *lingua franca* of multinational corporations was predominantly English, and the business practices they used were those that have evolved in the West.

But the balance of global trade is changing fast, accelerated by the recession that hit the United States, Europe, and other developed economies hard in 2008. As a result, it is inevitable that the language of global commerce will change over time, most likely to become more diverse. ICT providers looking to protect and/or grow their businesses would be well advised to adopt a broader view of localization than many do today. The other reason why a more sophisticated approach to localization is becoming essential is that the use of ICT products and services is spreading much further through populations than it did in the past, moving beyond early adopters prepared to adapt their ways to the technologies available to a mass market of users that expect technologies to adapt to them, not the other way around.

Not long ago the perceived wisdom, and the output of many futurologists both scientific and creative, was that IT would accelerate global homogeneity—

particularly when it came to consumer behavior. The paradox is that as IT services have become more standardized and ubiquitous, so has the belief that IT should and can adapt to the way we live and work. Indeed, products and services that fail to adapt to the situations in which they are used have increasingly short life spans. The reason? Users decide it is easier to live without them.

The empires of the past waxed and waned based on their ability to impose themselves on or adapt to the many cultures over which they held sway. This chapter concludes that the longevity of the Internet-fueled consumer empires of the 21st century will similarly depend on their ability to adapt to different cultures, and that this will in turn be dictated by their willingness to adopt localization 2.0—a broader localization strategy than is the norm in the ICT industry today.

## Notes

- 1 The BRICS are Brazil, Russia, India, China, and South Africa.
- 2 Sagani 2010; Gokhale and Kumar 2010.
- 3 BBC News 2010.
- 4 Bisson et al. 2010.
- 5 CSOFT no date.
- 6 Stevenson 2010.
- 7 Wagborn 2010.
- 8 Wikipedia Template: Google.com.
- 9 Wikipedia: Google Search.
- 10 Perry 2007.
- 11 DeKoenigsbert 2007.
- 12 There are limits when it comes to who can connect to whom and who can access what, of course, not all of which are the result of the availability of restricted connectivity or other technical constraints. According to the OpenNet Initiative, in September 2010, more than a dozen countries were blocking access to certain Internet sites for political, social, or security reasons.
- 13 Opera Software 2010.
- 14 Microsoft 2009.
- 15 Kirk 2010.

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