



Accenture Development Partnerships Insights into the role of technology in addressing development challenges

The need for markedly different approaches to engage with people in emerging markets.



Chapter 1

The need for markedly different approaches to engage with people in emerging markets.

One-size does not necessarily fit all when it comes to utilizing technology solutions in the developing world; often, simpler fit-for-purpose approaches tailored to local needs are the most successful way to engage with people in emerging markets.

In a remote corner of South Africa, a cutting-edge charity called Mobile Alliance for Maternal Action (MAMA) is delivering crucial pre- and neonatal advice by mobile phone to thousands of poor women who lack regular medical care. The experiment faltered at first because it relied on a developed world solution—text messages—to deliver its guidance. As many of the local women had little or no formal education, text messages were not easily understood. When MAMA added more accessible voice support from women speaking one of seven local languages to its mobile service, the project turned into a dramatic success story.¹

While technology is having a profound effect on the developing world, impacting everything from the delivery of healthcare to making financial services available to people far from traditional banks, as new research from Accenture and NetHope demonstrates, the end-user's situation is central to the application of technology. Consumers in the developing world need to be engaged in a different manner from consumers in the developed world, and often a simpler local solution succeeds better than a top-down, high-tech approach.

To assess technology's role in the developing world, Accenture Development Partnerships and NetHope surveyed four key stakeholder groups: non-governmental organizations (NGOs), private sector firms, foundations and government officials. Working across 13 geographies, they engaged with nearly 300 private-sector business decision-makers operating in emerging markets, 25 leading international NGOs and more than 20 thought-leaders across the business, government and development sectors.

Consumers will lead adoption of technology

The research supports the notion that consumers will play an increasingly important role in driving technological innovation within emerging markets over the next five years. Overwhelmingly 71% of NGOs believe that local consumers will lead the charge of technological innovation. And there is no doubt that, with 41 percent agreeing, the private sector also sees the importance of the consumer in the innovation valuechain. At the same time, the private sector still anticipates that large multinationals and international technological companies will continue to play an important role in driving change in the emerging market, which may open the door for new partnerships between local and global innovators.

How will the developing world impact global growth?

80 percent of business leaders see the next stage of global growth occurring mainly in emerging markets,² where household income is expected to jump by more than \$8.5 trillion between 2010 and 2020.³ Adoption of technology will certainly spur growth.

Potential barriers to technological advancement

In our surveys, nearly a third of private sector firms and an even larger number of NGOs cautioned that a lack of basic information communication technology (ICT) infrastructure in developing countries is the largest factor holding back growth and development in those economies. However, in the next five years, they expect to see the greatest technological advances in the energy, utilities, telecoms and consumer goods sectors. Only 11 percent of business leaders across all regions believed developing world governments would benefit from technological advancements, even though these governments were perceived as critical to driving economic development over the next five years.

Who will lead the charge of technology in the developing world?

In North America, the home of Silicon Valley, business leaders don't think that it will be the large technological firms that lead the technology charge in the developing world—a larger proportion of North American business leaders think it will be local consumers and small to medium enterprises (SMEs) in the developing world who will lead the way. Business leaders from Asia Pacific, South America and Africa, however, do think that international technology or large multi-national firms will lead. What does this say about the confidence American business leaders have in the ability of their technology firms to crack developing markets? Or does it point to recognition by American business leaders that locally-appropriate solutions, generated at a local level, will be most effective in addressing development challenges?

As well as defining the role of technology, local consumers will be the main benefactors of technological change in the next five years. Private sector companies based in the Global South expect consumers in their own regions to be the biggest benefactors of technological change, while Europe and North America expect this to be focused on China. Among the benefits developing world consumers are seeking from technology are access to real-time information about weather, crops and health; a bolstering of their rights as consumers; and more active participation in their healthcare.

Technology fit is a key factor

An important insight from the survey of 25 leading international NGOs was that while mobile technology, especially text messaging, was viewed as the most promising method to reach beneficiaries, older, simpler and more cost-effective technologies such as radio comes a close second in their preferred list of technologies for providing leverage to achieve development impact.

The private sector is equally convinced of the need for bottom-up development of technology in the developing world. Asked whether developing markets could use the same technology as developed countries, an overwhelming 68 percent of 293 global business leaders surveyed said technology needs to be specially tailored to meet the needs of the customer in the developing world and that they could not effectively use developed world solutions. This contrast is even more marked when looking at the results by region: 80 percent of business leaders from Africa believe that locally-tailored solutions are required, with 72 percent from North America, 68 percent from Asia Pacific, 63 percent from South America and 60 percent from Europe agreeing.

A good example of the need for a "bottom up approach" is the M-PESA™ system of mobile phone banking in East Africa, which has gained 19 million enthusiastic users in Kenya and Tanzania since its launch in 2007.⁴ M-PESA™ was initially designed as a way for microfinance borrowers to receive and repay loans. But when the service became operational, customers quickly developed their own uses. It is now used mainly to send remittances from one part of the country to another and for shopkeepers to receive payments from customers without having to keep large sums of cash on hand.

End users themselves are demonstrating a strong preference for personalizing and customizing the products they use; from weather disaster alerts to politically empowering initiatives. In Kenya, an organization called Ushahidi, which means "testimony" in Swahili, set up a website to monitor violence in the 2008 elections using crowdsourcing information from text messages, Twitter, email and the Web. Within a short time, they had amassed 45,000 citizen journalists to report acts of violence and intimidation. After its overwhelming success in Kenya, Ushahidi projects were launched in Libya, Turkey, South Africa, Saudi Arabia, Afghanistan, Iran, Malaysia, Indonesia, Cambodia and Morocco.⁶

Big companies keep it local

By a large measure, multinational firms are leading the way in rolling out technology in emerging markets and thus driving consumer engagement. But the importance of a local connection is also apparent: Some 57 percent of private sector respondents said they are partnering with local businesses in developing countries in an effort to spur growth, and 42 percent had already started collaborating with local governments, with a majority of those from Africa and Asia Pacific doing so. Interestingly, business leaders across all the regions surveyed agreed that governments are critical to driving economic development. Traditionally, NGOs view themselves as having to catch up with the private sector in the technology space, and 81 percent of those surveyed reported that they are partnering with local private sector firms to achieve the most effective use of their technology budgets.

In West Africa, Cocoa Link, a program funded by the chocolate maker The Hershey Company, uses mobile technology to deliver information to local farmers about crop prices and other best-in-class farming practices. Despite the foreign sponsorship, the program is entirely locally run, with Ghanaian instructors helping train farmers in the use of mobile technology. It has expanded to farmers in the Ivory Coast.⁵

Who will benefit from technological advancement?

Overwhelmingly, 67 percent of African business leaders think that technological changes will benefit the consumer—this is in contrast to 53 percent of North American business leaders and only 50 percent of business leaders in Asia Pacific (where international technology companies are perceived as being most likely to benefit most from technological change within the next five years).

"Studies have shown that for every 10 percent increase in penetration by mobile phones, the overall economy grows by 2 percent," says Dr Bitange Ndemo, former Permanent Secretary of the Ministry of ICT, Kenya. "In the past, if you lived in a remote place and had harvested your produce, you knew nothing about who was going to buy it. Now, thanks to mobile technology, you get to tell buyers when you are coming to market."

Complexity and what's appropriate

Not all technology is appropriate for the developing world. Thought leaders from all sectors are seeing a disproportionate number of projects that are misguided in understanding the capabilities and resources of the target audience. As one senior consultant put it "there are these snazzy apps for rural agriculture workers who don't have smartphones and who aren't even literate".

In fact, at times, it seems that the best use of technology may be one step removed from the consumer. In Africa, for example, health care workers are being trained to use smart phones to diagnose illnesses, a process that would be too complicated for most users.

"Technology has become a major game changer," says Maura O'Neill, former Chief Innovation Officer, US Agency for International Development. "But lots of people are still illiterate, so the traditional things we've done will not work. But you can learn through video. Two-year-old children who cannot construct sentences are able to navigate an iPad® mobile digital device by themselves. The icons in a graphical interface will soon be translated into a mobile phone app. People who use smart phone technology will become more literate."

While increasing literacy with smart phones may be more aspirational than realistic in the short-term, it is clear that technology is transforming the developing world in ways that are entirely different than in industrialized countries.

In agriculturally-focused mobile projects in Africa and India, where there is a high degree of illiteracy, technology firms are working to develop special smart phone icons that are readily understood by all farmers. It is thought that more than 10 percent of all crops are wasted each year and that providing timely, more accurate farming information by mobile, such as the best time to start planting, will dramatically increase agricultural yields. Knowing about prices and market availability will also help poor farmers cut out the middlemen who traditionally take most of their profits.

Success will depend to a large extent on employing innovative uses of technology that are tailored to consumers in developing markets rather than using cookie-cutter approaches adopted from the developed world.

Technology has a crucial role to play in opening up new opportunities to reach consumers in the developing world in ways that are custom-made to fit local needs. But there isn't a one-size-fits-all solution for engaging people in emerging

markets, presenting a challenge to both the private sector and NGOs. "Solutions need to be developed that are appropriate to the local situation, " says Anna Swaithes, head of Water Security and Food Policy for SAB Miller plc. "For example, using newspapers or radio effectively is possible. You need to be innovative, but not necessarily use the latest technology."

In conclusion, it's not always the newest or most exciting technologies that deliver the desired development outcomes and impact. They certainly highlight the possibilities, but as our research demonstrates, to make an impact, a practical solution using available, and often existing technology, that fits local conditions works best. There is no doubt of the global value of the emerging market, but there is lots to learn in terms of how best to penetrate it and deliver the best solutions.

Discussion and action points

- Who is going to work on improving existing technologies? Whose role is it? Indeed, do companies want to invest in "older" technologies?
- What are the most effective partnerships going to look like to drive adoption of new technologies

 will it be government and NGOs, or government and private sector organizations? Or will the best solutions be delivered by entirely different collaborations to those we typically see today?
- Can NGOs become leaders rather than play catch up? Can this spur new partnerships that lead to innovation?
- New partnerships are needed to understand the local situation requirement: local communities, local universities, nonprofits and government all need to work together effectively.
- How can big private-sector organizations ensure they are agile enough to engage with, and respond to, the changing demands of the emerging-market consumer?
- How do we ensure that the voice of the emerging-market consumer is embedded into the innovation value-chain?

Who is leading the way in terms of engaging consumers with new technology?

African business leaders (73 percent) are very bullish compared to business leaders in other regions in believing that private companies are leading the way in terms of engaging consumers with new technology. Only half of those from South America, which is the lowest response from all regions, agree that the private sector is leading in terms of engaging consumers with new technology. These figures are in stark contrast to their responses when asked whether they think businesses are using

innovative technology, with 57 percent from Africa and a phenomenal 70 percent from South America agreeing. Could this suggest that, from a South American perspective, although private sector businesses are seen as being very technologically-savvy, that they are not yet bringing their expertise to bear in engaging consumers? Importantly, these different responses again highlight the need to locally tailor approaches.

This chapter is the first in a series that will look at the different ways technology is being deployed in the developing world. It draws on the insights of our global surveys of 293 private sector business leaders across Asia Pacific, Europe, North America, South America and Africa, and 25 non-profit leaders, as well as in-depth interviews with thought leaders across the development sector. Future chapters will take a deeper look at mobile and other technology trends, the power of data analytics, the potential impact of technology on job creation, and new business and financing models aimed at achieving scale in developing markets.

www.accenture.com/technologyindevelopment

Research Methodology

Private sector survey

- 293 business decision makers were interviewed online across 13 markets between 4 February and 4 March 2013.
- Business decision-makers (BDMs) were identified as managers
 working in companies that have \$10 million or more in revenue
 and more than 100 employees; have significant influence or
 decision-making responsibilities for strategy or marketing in a
 developing and/or emerging market(s); and work in one of the
 following five sectors: financial services, resources and energy,
 consumer goods, agri-business or health.

Public sector survey

• 25 non-profit leaders from international NGOs were interviewed online during February and March 2013.

In-depth interviews

• In-depth interviews with conducted with thought leaders across the development sector between February and April 2013.

Region	Market	Number	of interviews
Asia Pacific	Australia	25	76
	China	25	
	India	26	
Europe	UK	21	81
	Italy	15	
	France	15	
	Germany	15	
	Russia	15	
North America	US	46	76
	Canada	30	
South America	Brazil	15	30
	Mexico	15	
Africa	South Africa	30	30
Total:		293	

References

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- 2. A decade ago, emerging countries included the BRIC countries (Brazil, Russian, India and China), but today has evolved to also include many others: http://www.businessweek.com/articles/2013-07-02/emerging-markets-beyond-the-brics
- 3. http://www.accenture.com/SiteCollectionDocuments/PDF/ Accenture-fast-forward-to-growth.pdf
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About Accenture Development Partnerships

Accenture Development Partnerships collaborates with organizations working in the international development sector to help deliver innovative solutions that change the way people work and live. Its award-winning business model enables Accenture's core capabilities—its best people and strategic business, technology and project management expertise—to be made available to clients in the international development sector on a not-for-profit basis.

About NetHope

NetHope is a new-generation collaboration of over 40 international leading NGOs representing \$40 billion of disaster response, human development and conservation programs in more than 180 countries. The organization facilitates public-private collaboration among leading NGOs, technology corporations, private foundations and public sector organizations. Together, they leverage technology to better serve millions of end beneficiaries around the world. For more information, visit www.nethope.org

About Accenture

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