

MOBILE FOR EVERYBODY

MTN is the leading telecoms player across Africa and the Middle East, and Karel Pienaar was its first employee. On the wall of his office is a framed market study, written back in 1994, as South Africa was celebrating the election of Nelson Mandela and a new start for the nation. The market study forecasts that by 2010 the company would have 350,000 subscribers. When 2010 came around, the reality was very different: MTN had 129 million customers, and today it has approaching 170 million. ‘It really is laughable, looking back on it,’ says Karel, who is now the CEO of MTN in South Africa. ‘Today, cell phones are such an important part of life, across the continent.’

MTN’s story brings to mind an old business fable in which two consultants are sent to Africa to assess the market opportunity for shoes. The first consultant concludes that there isn’t much of a market, saying ‘Bad news: people don’t wear shoes here.’ But the second consultant takes a different view: ‘Great news: people don’t wear shoes here.’ Opportunity, the story suggests, is in the eye of the beholder. It’s a neat parable for MTN: two decades ago, Africa was suffering from terrible poverty and the devastating HIV/AIDS epidemic. Few thought of it as a telecoms investment opportunity. MTN took a different view, says Karel: ‘We have a different mindset. Maybe it’s because we’re an African company, coming from South Africa, but we see things differently. What others see as a challenge, we see as an opportunity to build a business.’

Indeed, MTN is now one of Africa's most successful businesses: it has built operations in twenty-two countries, becoming the largest company with a primary listing on the Johannesburg Stock Exchange and the most valuable brand on the continent. It's based in Fairlands, a leafy low-density suburb of the city, in a gleaming new headquarters called the Innovation Centre. Arranged around large open atriums the building is light and spacious, with sleek steel-grey columns and flashes of MTN's trademark yellow. Three-storey walls of sheer glass open onto the rolling hills of Fairlands, and for a moment you might think you were in a Silicon Valley tech campus. But these rarefied surroundings belie the hard graft and guts it took to roll out a telecoms network across some very challenging environments. After establishing itself in South Africa, MTN got the network up and running in difficult markets like Rwanda, Uganda, Cameroon and Nigeria, and kept it up and running in war-torn countries like Côte d'Ivoire and Afghanistan.

Today, much is said about the power of telecoms to transform life for people in countries such as these. International institutions like the International Telecommunications Union (ITU) and the Global Network Initiative (GNI) enthuse about the role of communications technologies in economic development and stimulating democracy. Aid organisations such as USAID and Oxfam all now have extensive mobile initiatives. United Nations Secretary-General Ban Ki-moon praised the 'phenomenal spread of mobile phone technology' which he said has 'touched every corner of the world and empowered billions of people'. But there was little such enthusiasm in MTN's early days. Indeed, there was even some outright hostility to the mobile phone: some African National Congress politicians labelled it 'white elitist technology',⁴⁷ arguing it would benefit only a privileged few.

From the outset, MTN was determined that the reverse would be true, as Karel explains. 'We were a country that

was very clearly orientated between the haves and the have-nots, and that was always part of our vision,' he tells us. 'Our focus from day one has been, "how do you address the whole market?" That was always our ticket.' His story demonstrates how it's often business that has the vision, the appetite for risk, and the operational capability to make a difference.

In MTN's case, the initial scepticism that there would even be a demand for mobile didn't just come from the non-commercial sectors, but also some parts of the business world – especially as the company began to expand out of South Africa and across the continent. Karel remembers a conversation with an employee from one of MTN's main competitors, in the early days: 'He said, "why the f*ck are you going into Africa? It's just potholes and squalor."'

One of the first markets MTN took on outside of South Africa was Rwanda, which was up and running in 1998. The country was still reeling from the genocide, and many questioned MTN's decision. Themba Khumalo, who ran the operation in Rwanda, describes the scepticism: 'People said, "There's no money in these rural areas, these people don't even have houses!"' But once again, MTN saw things differently, says Themba: 'We knew people had one fundamental need: to communicate across long distances. So we built the coverage and the demand was so strong that we had to add capacity within three months.' Today, the bright yellow of MTN's logo has become an integral part of Rwanda's lush landscape: every village in the so-called land of a thousand hills has independent MTN distributors jostling to sell airtime from yellow-painted huts, or booths, or bicycle-trailers. You get the impression that MTN really means its slogan: 'Everywhere You Go'.

In 2001, as operations elsewhere began to settle, MTN set its sights on the big prize: Nigeria, a market of 160 million people and widely expected to become the largest economy in Africa. Then, as today, Nigeria was a notoriously difficult environment to operate in: poor infrastructure, badly maintained roads, a patchy power grid and a reputation for endemic corruption. Other network operators had tried to enter Nigeria, only to crash and burn: Vodacom, for example, ditched its V-Network Nigeria business after only six months, finding it too tough going. Unsurprisingly, the markets reacted with alarm when news leaked that MTN had paid \$285 million for a licence. At the time, it seemed to many an eye-watering amount. 'People thought we were crazy, and our share price dropped,' says Christian de Faria, who was the company's Chief Commercial Officer. 'But we knew we could make it work, and it's turned out to be one of the best decisions we ever took.'

Make it work they did: MTN in Nigeria now has over 45 million subscribers. What made it possible for MTN to succeed where others had failed? Listening to the company's managers tell the story, two themes sing out: the sheer on-the-ground, get-it-done executorial ability of the company, coupled with a really clear vision for the potential of mobile in Africa. 'When we encounter a problem, we deal with it,' says Khumo Sheunyane, who is in charge of strategy for the group. 'When we need to build a road, we build a road. If we need 10,000 generators, we buy 10,000 generators. We do what it takes.' This make-it-happen mentality is rooted in a real sense of purpose for MTN. Khumo tells us: 'It all starts with the vision that mobile telephony would revolutionise the continent.' It's a theme we also hear from Karel, MTN's Employee No. 1: 'We always believed in the absolute catalyst that a cellular infrastructure brings to a country,' he says – and he's seen it first-hand. As soon as MTN was awarded the licence, Karel

was sent to lead the team in Nigeria setting up the network. It was hands-on work: 'I used to walk the streets looking for places to put switching centres,' he tells us, 'knocking on doors, getting it started. That's how it happens. We get going, we invest with conviction, we go in boots and all, hire the right people, and build the network.'

This risk-on, get-it-done approach has proved hugely rewarding: in the eleven-year period from 2001, shareholders saw their earnings rise by 26 per cent each year on average, and the share price climbed by 16 per cent a year over the whole period.⁴⁸ But getting the network up and running is only the start of it: *keeping* it up and running can also be a major operational challenge. Spend time with MTN people, and you soon hear a rich lore around what it takes to keep the network going – especially in war-torn countries. We hear that in Afghanistan, base-stations have been regularly burnt down by the Taliban, who were suspicious that networks were being used against them. We're told of an MTN employee who was kidnapped by jihadists while doing maintenance work in a remote part of the country, only to return to work upon his release to finish the job in hand. In 2011, as civil war broke out in Côte d'Ivoire, MTN employees refused to leave the country – even as hundreds of thousands of people were fleeing for their safety. As chaos spread through the country, MTN staff knew that people needed the network more than ever. There is a deep sense among the company's front-line employees that people depend on them, especially people who are experiencing difficult times.

Few places have proved more challenging than Syria, where MTN has nearly six million customers – almost half of the market. In 2011, the demonstrations against President Assad developed into a national uprising, which soon slid into violent civil conflict claiming tens of thousands of lives. From the start, the war had no clear front lines, with flashpoints

erupting in towns and cities across the country. In such a volatile and chaotic situation, people needed their mobile networks more than ever. But aside from keeping people connected in a time of great crisis, the network played another crucial role: it was the eyes of the world. Even as dozens of journalists were being killed, imprisoned and tortured by the government, the country's citizens had a new weapon in their hands: the camera phone. Amateur footage soon began flooding the international media: shaky images of violence and confusion, taken on the streets by a brave new legion of citizen journalists. The government may have done its best to terrorise the press in Syria – it's been ranked as the world's most dangerous country for journalists⁴⁹ – but as long as the network was up and running, anybody with a camera phone could broadcast to the world.

A similar story had unfolded across the region during the Arab Spring, with mobile playing a central role as the spirit of revolution cascaded from country to country. Many have called this the 'social media revolution', and while social media was undoubtedly an important tool for protest leaders, the impact of mobile is likely to have been far greater – especially in the form of SMS text messages. For example, as the revolution began in Egypt, there may have been around 15,000 Twitter users, but there were up to 80 million mobile phone subscribers. Without mobile networks, the transformative changes that got under way with the Arab Spring may never have gathered momentum.

The people we spoke to at MTN are clearly proud of their company's determination to keep the network up and running, even in environments of real adversity. However, MTN's role in countries like Syria is not uncontroversial. Bloomberg News, for example, obtained a document with details of the SMS censoring activities imposed on the networks by the Syrian intelligence services: MTN was

ordered to block politically sensitive terms such as ‘revolution’ or ‘demonstration’, or even ‘Syrian men’.⁵⁰ The *Financial Times*, in a piece with the headline ‘Syria finds means of financial survival’, explained how the government was reaping revenues from MTN under its pre-war licensing agreement. Critics of the company have used stories such as these to paint a picture of a morally bankrupt business supporting a murderous regime. Some argue that MTN should pull out of Syria. It’s a logic that many in the company find deeply vexing. ‘People are looking at the short-term benefits of frustrating a dictator, rather than the consequences for the people of the country,’ says Jennifer Roberti, the group’s overall head of marketing, explaining that shutting down the network would ‘create chaos and reverse development’ for the people of Syria. Themba agrees: ‘The implications of a closure of an MTN service are dramatic. To take the service out is like winding back the clock.’

MTN’s CEO, Sifiso Dabengwa, articulates this as a deeply held philosophy. ‘At the heart of human existence is *communication*,’ he tells us. ‘We see telecommunications as a basic human right no different from water or medicine.’ You get the impression this is an outlook that pervades the company, from the very top right through to the front-line workers who risk their personal security to keep the network running. It’s not just Syria that has tested this philosophy: MTN’s presence in Iran has also been heavily criticised. Mark Wallace, a former US ambassador to the UN, has been one of the more vocal detractors: ‘At any hour the regime could be using MTN cellular technology to monitor dissidents,’ he is reported as saying.⁵¹ Wallace is the chief executive of United Against a Nuclear Iran, which believes that all businesses should withdraw from the country. ‘Any company that does business in Iran is not only financially enabling the regime but also risks having its products misused for nefarious ends,’ Wallace says.

For MTN, this view overlooks the benefits they have brought to the country, in terms of access to communications, and the political and social benefits that flow from that. Not long ago, getting hold of a SIM card used to take months and cost hundreds of dollars. When MTN was awarded the licence it got the network up and running in just six weeks, shipping in containers of pre-assembled base-stations. Suddenly, anyone could walk into a shop and walk out again with a SIM card for a few dollars. For Iran, MTN's arrival marked a step change in access to communications, a fact even acknowledged by some of MTN's critics. Access, a digital rights campaign group that has also expressed concerns about the company's involvement in Iran, is anxious precisely because of the importance they ascribe to mobile access:

At the time that MTN was awarded Iran's second private mobile communication licence, cell phone services were outside the reach of much of the public, plagued by waiting lists, high costs, congested networks, poor service quality, and low network coverage. MTN Irancell presented the first serious challenge to the state telecommunications company's effective monopoly, becoming the most popular service within six years (49 per cent market share) and, in doing so, entered into a moral obligation to defend the free flow of information to the Iranian people. The availability of stable, open and inexpensive internet and communications connectivity must be vigilantly protected and encouraged.⁵²

To a large extent MTN seems to share this sentiment, although it's not obvious that walking away from the country would help to 'defend the free flow of information'. MTN's instinct is to stay and keep the network running, in Iran, as elsewhere. There is an interesting parallel with Google's

highly publicised withdrawal from China in 2010, following sustained criticism from anti-censorship campaigners. What is less known outside China is that this decision provoked a backlash among Chinese internet users. On a visit to Beijing, we met an executive from one of China's leading web companies who told us: 'People felt that Google had just given up and walked away, instead of staying and working a way through a difficult environment... Chinese web users are very sophisticated, they know what's going on, they understand the pressures that companies face. Google pulled out of China to satisfy Western critics – it had nothing to do with its users in China.'

From the outset, MTN was intent on addressing 'the whole market' – including those on very low incomes, not just the affluent. Any company looking to build an inclusive business like this needs to do more than cut costs and lower prices: real affordability usually requires a complete overhaul of the business model, to make sure the economics work in the long term. For MTN, affordability has been the 'north star' for the company's innovation. In the 1990s, as the company began rolling out the network in South Africa, it became clear that the contract-based model that had been dominant in the developed world wouldn't work for many people in Africa. In a largely informal market, there was usually no way to verify identities or credit histories, and most people would be unlikely to be able to afford a big monthly bill. A new approach was needed, and so MTN became pioneers of the 'pay as you go' model for pre-paid mobile phone use, which is now a global standard for lower-income customers, and has extended into other industries such as electricity.

Another breakthrough in the business model was 'MTN

Zone', a pricing tariff that adapts charges according to how busy the network is, and displays the current rate on the phone's screen. At quieter times, customers can be offered up to 95 per cent off the charge, allowing users to save money by deciding when to make calls. Some users even move around looking for cells where the call traffic is lower and the price is cheaper. It sounds simple, but it took some careful planning to get the technology right, and to make sure the business model worked – get it wrong, and MTN could soon find itself out of pocket. MTN partnered with Ericsson to develop the hardware and software, and ran tests to understand how the dynamic pricing would affect call volumes. Launched in 2007, MTN Zone has been a huge success: it's made mobile services available to many who couldn't afford them before, which in turn has helped to grow MTN's customer base. It's also helped MTN to manage network congestion, resulting in a better service.

In launching this new service, MTN hit upon another idea that would transform the market: the MTN Zoners, an informal distribution network of street vendors and hawkers that sell airtime, as well as signing up new customers. It began when MTN was planning the launch of the new MTN Zone tariff. Simo Dabengwa, who runs the Zoners from MTN's Innovation Centre in Johannesburg, explains how the idea came about: 'MTN decided that the first launch of MTN Zone will be below-the-line, it won't be above-the-line. We won't go with big events, we won't be going to the media. We actually have people go out there and explain it to the customers, help them change the settings on their phones, so they can enjoy the discounted calls.' Instead of a slick advertising campaign, MTN Zone recruited around 250 enterprising street vendors, trained them up, gave them MTN uniforms, and sent them out on a mission to switch existing customers onto the new plan. It really took off: pretty soon they had switched a million

customers onto MTN Zone. Simo and his team were taken aback by this swift success. They had plugged into a high-voltage new channel that could do much more than switch customers to a new plan: these energetic young vendors could become a major sales and customer service network.

‘After that we put together a board paper to scale it up, and put together a management structure to support the running of this channel,’ Simo tells us. ‘We need to make sure people report for work, we need to be able to collect the cash, we need to give them airtime, we make sure they’re properly trained, properly dressed in uniforms.’ The board approved the paper, and soon there were 3,000 vendors on the scheme, supported by 200 ‘Zone managers’. The Zoners were immediately popular with customers – in fact, it was customers who first started calling them Zoners. Suddenly it was much easier to buy airtime. ‘Some of the guys are up at 4am, they’re at the train stations, they’re at the bus stations, they’re on the commuter routes, making sure they capture the customers going to work,’ says Simo. Some of the Zoners build up a loyal base of customers, who buy airtime from them every day. ‘A customer might send them an SMS asking for airtime, “Load my phone with 50 Rand”, and the Zoner knows that when the person gets off the bus they will pay this money. There is that rapport and that trust between them.’ The Zoners help resolve service problems customers might have, and they run MTN marketing promotions. ‘They become the MTN champion for their area,’ says Simo.

It’s become an integral part of the street-scape in many African cities: the bright-yellow MTN umbrella stands on the roadside, and the Zoners with their bright-yellow flags and rucksacks selling airtime scratch-cards in the commuter-flow, blending seamlessly into the continent’s hawker culture. As many parts of Africa struggle to deal with high levels of youth unemployment, the scheme is a great opportunity to

make something of yourself, Simo tells us. 'It's mainly young people in their mid-twenties; some of them are single parents, some of them haven't had the opportunity to get a formal job somewhere, and this is an opportunity to earn a good living,' he says. Being an MTN Zoner is considered a prestigious job: aside from making good commissions, they each get regular training and their own 3G BlackBerry. Some of the more successful Zoners see big changes in their lives. We hear of Dudu Nkosi, a Zoner in Mpumalanga in South Africa, who is the sole bread-winner for her extended family. Dudu is building a seven-bedroom house, and Simo shows us a photograph of her standing proudly in front of the half-complete structure: the walls are up, the roof is on, and she's currently saving for the plastering and the windows. Dudu doesn't own a car, but the house includes a garage – a sign of her optimism for the future.

'Some of our Zoners were about to go destitute, and we help them set up businesses that are now thriving,' says Simo, who clearly finds his job running the Zoners extremely rewarding. 'I have the pleasure of seeing these young people, their stories of how they are making a difference for themselves and supporting their families.' He shares with us an internal paper on the scheme, which describes MTN as 'a people's business'. It goes right to the heart of the central idea behind this book: when businesses are smart about their place in society, they can grow in ways that bring benefits to a broad range of people – not just their shareholders. MTN is a great example of this: by pioneering new ways to get mobile into the hands of more people, the company has had a profound impact in its markets. 'My team says I sound like a politician when I say this,' Simo smiles modestly, proud but not boastful. 'We make changes in the lives of people. We are impacting the lives of people, and we do it whilst we are making money and making profit for MTN.'

MTN's network of umbrella stands and street hawkers has worked especially well in Nigeria, where the informal market is particularly vibrant. At first, MTN had tried to build a formal distribution network modelled on the car dealerships and mobile phone distributors of the UK. According to this plan, independent, registered businesses would set up chains of MTN shops, selling contracts. It soon became clear that this wasn't the best approach for a low-income country with such a fast moving, energetic market culture. Mobile needed to be cheap, instant, and easy to buy – and Zoners provided the perfect model. Instead of an established, formal distribution chain, MTN now has a dynamic network of dealers, subdealers, sub-subdealers and street-retailers. It's the perfect fit for Nigeria – and indeed for many developing world countries, which have thriving informal economies. The American journalist Robert Neuwirth gives a striking description of informal economies in his book *The Stealth of Nations*:⁵³

There is another economy out there. Its edges are diffuse and it disappears the moment you try to catch it. It stands beyond the law, yet is deeply entwined with the legally recognised business world. It is based on small sales and tiny increments of profit, yet it produces, cumulatively, a huge amount of wealth. It is massive yet disparaged, open yet feared, microscopic yet global. It is how much of the world survives, and how many people thrive, yet it is ignored and sometimes disparaged by most economists, business leaders, and politicians. At the same time, many major corporations make their money through [the informal economy].

The MTN Zoners operate on the untidy edges between the corporate world and the informal economy, where big business meets individual improvisation. It's not easy doing

business at this unruly interface: corporate structures don't easily lend themselves to ongoing economic relationships with large numbers of individuals. In Chapter 1 we saw how Coca-Cola used the NGO TechnoServe to facilitate its relationship with thousands of smallholder farmers in Uganda. For MTN in Nigeria, a private company stepped in to help MTN run its network of distributors - and it was the kind of institution that was used to handling financial relationships with large numbers of individuals: a bank. When Access Bank first started working with MTN, they were a relatively obscure bank. In 2002, they were number sixty-eight in Nigeria; by 2013 they were number four. A big part of this stellar growth is what they describe as the 'Value-Chain Model': helping big corporate clients to grow by making sure that all of their suppliers, distributors and employees have the financial products and services they need to be successful. For MTN, this solved a major problem: how to manage the many small increments of cash that began flooding in from thousands of street vendors - cumulatively, a significant flow of income. Access Bank went out and made sure that they all had bank accounts, into which they could regularly deposit cash. And so Access Bank became an important part of the cash-cycle for MTN, which positioned them well for managing the company's other requirements, such as advancing credit to distributors, and paying salaries to employees.

When you see Access Bank's work with MTN, it's a reminder of what a bank can be: directly enabling economic activity by understanding its clients' businesses, so it can empower their employees, suppliers and distributors. We visited Access Bank in Lagos, and discovered a company ambitious to be part of taking Nigeria to a new level. In 2002 a new, young management team took over the bank, determined to adopt international standards - especially in the area of business ethics. In a country mired in corruption, they set about building a

different type of organisation. 'It started with some restless young men,' says Herbert Wigwe, the bank's incoming CEO – referring to himself and his colleagues. 'We believed that we could create a new type of bank, in an environment where not much is said about ethics: a new type of bank which we could control.' They single-mindedly applied global principles of transparent reporting, which won the trust of investors, as well as partners like the International Finance Corporation. In the context of business in Nigeria, this set them apart. When shockwaves from the 2008 financial crisis hit Nigeria's banking sector, Access Bank were able to raise sufficient capital to weather the storm. It was a massive shake-out for the country's banks. Not only did Access survive, but it was able to grow through a series of acquisitions and mergers. Only a decade ago, the bank was nothing special; now it's one of five so-called SIFIs (Significant Financial Institutions) in Nigeria. 'Access Bank is the perfect example that you can do business in Nigeria, grow, make good profits by applying rigorous ethics,' says Omobolanle Babatunde, the bank's head of corporate affairs.

Access Bank lists as one of its values 'courage to be the change we want to see' – a sentiment that may sound high-minded coming from many organisations, but when you appreciate the scale of ambition, you realise they really mean it. 'The perception of Nigeria from the outside is not always the best,' says Herbert. People assume the banks are fiddling the books: 'External commentators say the reported numbers of many institutions are not representative of the true state of their affairs. We wanted to create an oasis of sanity: an institution you could trust – to show that Nigerians can do the right thing.' Omobolanle agrees: 'We want to show you can do clean business in Africa.' The bank's then CEO, Aigboje Aig-Imoukhuede, was keen to point out this is about business first and foremost: 'It's not about being altruistic – it's because

Access Bank cannot achieve its objectives if things in Nigeria stay as they are.' It may not be about altruism, but there's no doubt that many people see the bank playing a role in taking Nigeria to the next level. Okey Nwuke is one of the bank's Executive Directors, and in his words:

In ten or twenty years when history is written, we hope that we will be part of the change – of fighting for governments that function well and aren't open to corruption. We hope that this momentum builds, and that we earn respect and that we make money and that we are known for this.

Back in Johannesburg, MTN's management feels a similar sense that their company has a broader role in society. 'We want to be a good news story of a good company coming out of Africa,' says Serame Taukobong, who looks after MTN's marketing in South Africa. Like any large company doing business across Africa, MTN has had its fair share of struggles with corruption, but the people we spoke to are determined to get on top of the issue. 'This is the first example of a company operating on a global scale with a black African leadership,' says Khumo. 'This company has a special responsibility in the way it behaves because it represents a black African success story.' Jennifer picks up this theme: 'MTN has a huge responsibility because we are a role model on the continent and a beacon of what is possible: an African company solving African problems.'

Solving African problems: that's no small scope of ambition. But MTN have a sense of what is possible, having seen first-hand how access to communications has driven progress in Africa and the Middle East. And of course this is a global

story: in developing countries around the world, people have seen tangible improvements in their lives thanks to mobile, whether that's through access to health information, educational resources, market information such as crop prices, or financial services. Having a mobile phone in your pocket gives people a new sense of security and freedom – especially for women. Across the developing world, what was once a luxury has become a necessity. Keeping your phone in credit has become a top priority, even for those on very low incomes. One report showed that those living on as little as \$2.50 a day (the World Bank's standard definition of poverty) would choose to walk instead of paying for the bus, or even skip a meal, rather than run out of credit.⁵⁴ Economist Jeffrey Sachs told a conference at the London Business School:

The cell phone is the single most transformative technology for development. I've been in the development sphere for thirty years and I've never seen anything as amazing as what mobile has done. It's a unique combination of fantastic technology and business model for the poor as well as the well-to-do. Everybody loves their mobile and everybody has multiple uses for it. The transformation power is phenomenal.

It's not hard to find evidence of the 'phenomenal' impact that mobile businesses are having. Meet people in any part of the developing world, and you soon hear stories of how mobile connectivity has made a practical difference – as the GSM Association's 'Mobile For Development' team found out when they made a series of short films capturing some of these stories. Here are some examples:

Jaipal is a 27-year-old farmer from a remote part of rural India. Like many smallholder farmers, his livelihood depends entirely on his crops doing well. He uses a mobile phone

information service to get advice on how to protect his crops, control pests and increase productivity. 'It's really helped me,' he tells the GSMA team. 'Though I trusted my elders before, they weren't right 100 per cent of the time. I can be a lot more certain about which pesticide I should use when insects and other pests affect my crops.'

Florence lives in Kibera, Kenya, the largest slum in Africa and home to approximately one million people. She lives with her husband Nicholas and her one-year-old son Joseph. For her, access to mobile communications has proved a real life-saver – literally: 'The day my kid felt sick, the mobile phone gave me a chance. I just called the doctor direct and asked for the first aid I could perform to the baby.'

Muniba is a seventeen-year-old student in Bangladesh, and she's learning English using a mobile phone service run by BBC Media Action called Janala. 'I want to work for a multinational company,' she says, explaining to a researcher why she wants to learn English. Anyone can call the Janala service for an English lesson, all for the price of a cup of tea. At her college, Muniba's English teacher, Mr Sazzad, says it's really boosting opportunities for his students. 'A lot of our girls are going for jobs,' he says. 'Without learning English they won't get any good jobs, because the job market is getting so squeezed these days.'

John runs a small taxi service on the busy streets of Nairobi. He uses mobile money every day, to make a variety of payments. 'I have a couple of cars on the road,' he says. 'When one of my drivers runs out of fuel or he needs some cash, he will just call me and I will text him the money.' He also uses his mobile to send money back to his parents. 'I come very far from Nairobi and I can't visit my parents weekly or monthly. So I used to look for who is travelling back home, a friend or a relative. You give them the money to drop to your parents, but sometimes you have many problems. Sometimes

they use half of the money.’ Now John can regularly send money directly to his parents using his mobile phone.

This is a story we heard repeated in many parts of Africa we visited: using mobile to transfer money to relatives, eliminating the need to make long, time-consuming journeys, and reducing the risk of carrying cash around. Of the many mobile applications, mobile money is proving to be particularly powerful. It began in 2007, with a service launched by Safaricom, the Kenyan local operator owned by Vodacom. The system is called M-pesa, and allows customers to charge their phones with credit bought from an agent, which can then be transferred by SMS and cashed in with another agent. The service has become part of life in Kenya: according to Safaricom, M-pesa has 15 million users and up to a third of the Kenyan GDP passes through the system – it handles \$21 million a day. Mobile money is reaching such a scale that the African Development Bank is worried that it might actually be driving inflation, because it has increased the speed and efficiency with which money moves through the Kenyan economy.

Assuming central bankers are able to adjust their anti-inflationary policies, mobile money promises to be a great boost to economic activity in the developing world. In many countries, the majority of people don’t have bank accounts, and so mobile money provides an alternative way for them to participate in the formal economy. In Indonesia, for example, mobile phone penetration is 106 per cent (in other words, there are more phones than people), while only 20 per cent of the population hold a bank account. There are already more mobile money accounts than bank accounts in Kenya, Madagascar, Tanzania and Uganda, and there are now more mobile money agent outlets than bank branches in at least twenty-eight countries. Across the developing world, people are using their mobile phones to pay electricity bills, water bills, school fees and even taxes.

Across the developing world, mobile phones are changing the way that people work, the way they learn, and the way they do business. Mobile services are improving the productivity of farmers, and improving access to health information. It's not surprising that the number of mobile phone users in Africa is soaring towards 1 billion. But behind the astonishing growth and the stories of transformation lies the hard graft of companies like MTN, who were prepared to take on the risks of building a network in some difficult environments, and were ready to invest heavily to make it happen. Renaissance Capital, an investment bank that operates exclusively in emerging markets, calculated that over a seven-year period to 2012, business invested \$80 billion in Africa – and MTN alone accounted for almost 20 per cent of this – some \$15 billion of capital investment. This means that MTN has probably invested more in Africa than all other private sector investment, apart from the resources industry.

For MTN, this is all only the beginning. 'What we've done is built the first layer – sheer connectivity. That's the phase we've passed,' says the CEO, Sifiso Dabengwa, talking to us over a healthy lunch in the calm expanses of the Innovation Centre. 'Now the phase is to convert this connectivity into commercial activity.' And so the company that set out to put a mobile into everyone's hands in the 1990s has set itself a new mission, according to Sifiso: 'We want to make the capabilities of the internet available for all,' he says. 'Our vision is to roll out internet for everybody by 2020.' Revenue from data services will be the next wave of growth for operators, and so this is the new frontier of investment for MTN: the company has invested more than \$230 million in fibre-optic cables since 2009. That's why MTN is a great example of the theme of *Everybody's Business*: a positive force for change coming from a business acting purposefully, understanding how it can grow by improving the world around it. Karel, MTN's Employee

No. 1, remains as excited as ever by the impact MTN can make. 'I've been expecting it, hoping for it, advocating for it, and now it's here,' he says, brimming with enthusiasm for mobile internet. Like many at MTN, he is full of optimism for the future:

It's fantastic technology. You only need a certain amount of literacy and you have the world's knowledge at your fingertips. It's a way of equalising the opportunities around the world. Imagine a community that has been totally isolated, and now they can connect to the worldwide web, and access the same information as anyone in the first world. That's what we're doing now.