



Sustainability within and beyond the ICT industry

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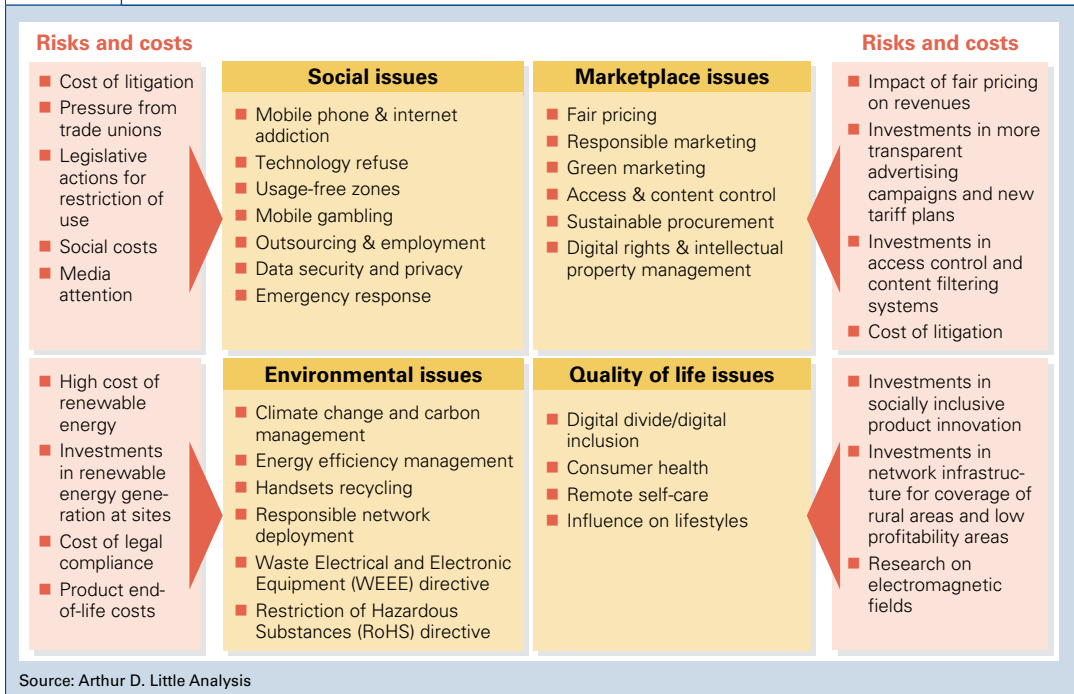
How can information and communication technologies help to address sustainability issues? This article shows that, as well as using innovative methods to improve its own sustainability profile, the ICT industry is perfectly placed to enhance sustainability in other sectors, using the challenge of sustainability to create new markets for innovative products and services.

The information and communication technologies (ICT) industry is ordinarily much less associated with the theme of sustainability than many other so-called “heavy” industries, such as energy, chemicals or the automotive industry. An obvious explanation for this is that the ICT industry is much less carbon-intensive, and consequently could be seen as greener. However, appearances can be deceptive.

It is a mistake to equate “sustainability” with “green”. Sustainability is more encompassing than green, comprising not only environmental concerns but also social, marketplace and quality-of-life issues. As any ICT executive can testify, the ICT industry has to cope with plenty of the last three types of issues, such as digital inclusion, security, privacy and responsible content. Exhibit 1 (next page) shows a more complete overview of sustainability issues in the ICT industry, along with the risks and costs the industry incurs if it does not address them. Various initiatives have been undertaken in this regard, such as the Global e-Sustainability Initiative (GeSI), a partnership of ICT companies that promotes technologies for sustainable development. Another sign of the times is the Green Technology Initiative, which has been set up to help UK businesses reduce the carbon footprint of their IT systems.

But there is another even more important reason why sustainability is highly relevant for the ICT industry: it may well be the industry that has the best cards for helping other industries cope with sustainability challenges. ICT is not only a medium of communication but also an enabler for several of its customer industries, including health care, education, public services, transportation, building and agriculture. ICT is a tool for the achievement of social, environmental and economic development goals at large. According to the International Telecommunications Union’s 2006 report “Measuring ICT for social and economic development”, the ICT sector can make a real difference in reducing development concerns such as poverty, exclusion and sickness. For example, the spread of wireless broad-

Exhibit 1 Sustainability issues raised by stakeholders in the ICT industry



band technologies, and particularly WiMAX, is expected to contribute significantly to filling infrastructure gaps in rural and underserved areas. Furthermore, ICT has the potential to mitigate global climate change by obviating travel and paper processes through greater reliance on remote working, dematerialisation, video-conferencing and e-learning applications.

The ICT industry is facing both a challenge and an opportunity: it must use the sustainability broom to sweep in front of its own door, so to speak, but it can also provide brooms to its neighbours – and get paid for it – to help them sweep in front of theirs. In this article, we will address two issues:

- How can ICT companies tackle their own sustainability challenges?
- How can ICT companies enable and enhance the sustainability of other industries, and thus open up new market space for their own products and services?

Tackling ICT's own sustainability challenge

Sustainability issues in the ICT industry have four common drivers. Understanding these is an important step in being able to manage the sustainability issues in a strategic manner and at an early stage:

- *Pressure for a low-carbon economy:* According to the Carbon Disclosure Project, an independent not-for-profit organisation, the greenhouse gas emissions produced by the ICT industry are small relative to its share of the world economy. However, the amount of total electricity consumed by ICT for manufacturing and running ICT equipment, applications and services is steadily increasing. In the mobile telecommunications industry, for instance, the energy used to run network equipment translates into thousands of megawatt hours per year, accounting on average for more than 90 per cent of each company's total energy consumption. The ICT industry is much more carbon-intensive than ICT companies believe, reflecting in many cases the lack of an accurate perception of their own carbon footprint.
- *Consumer preferences and predominance of the social dimension:* The increasing integration of ICT products and services into people's lives has increased public awareness of the social role played by major ICT companies, whose products have a pervasive impact on lifestyles and consumption models. Furthermore, environmentally friendly and responsible lifestyle and consumption attitudes are spreading among customers in most developed countries. As a result, consumers attribute increasing value to the environmental and social performance of products and services, and to that of the companies that produce them. For example, according to recent market research by Eurisko, 75 per cent of Italian consumers think that companies must run business responsibly. At one of our clients, a "low-carbon emissions" mobile phone was successfully launched in the consumer mass market to address the expectations of consumers sensitive to environmental and carbon issues. The so-called "green phone" is assembled with regenerated parts from recycled mobile phones, is packed using recycled materials and has a recognisable

label that ensures differentiation from other companies' products.

- *New regulatory paradigm:* The "issue management" life-cycle from political awareness to regulation is shrinking. At the same time the impact of regulatory action on the bottom line has been increasing. Examples include European Union regulation on roaming tariffs and emerging carbon taxes and regulations relating to energy efficiency and carbon emissions at both EU and national level.
- *Pressure from the capital markets:* Investors increasingly consider the possible emergence of real or perceived sustainability issues at the company in which they have invested as a factor that may negatively affect share price. In order to reduce that risk, they are putting growing pressure on companies to demonstrate that they are putting in place the policies, systems and processes to manage sustainability issues responsibly. At one of our clients, for example, a major investor threatened to pull out because the company was unable to account for its management of social risks in its supply chains. The particular concern involved the reputational impacts of failing to follow other telecom operators in setting out its policy for sourcing an important raw material from a war zone in Africa. This led the company to develop a "sustainable procurement strategy".

A strategic approach to sustainability focuses on what a company can do in order to convert risks associated with sustainability issues into opportunities for business development and innovation, rather than on managing these risks to simply avoid or mitigate them.

Once these drivers are understood, it is easier for ICT companies to cope with sustainability issues in a strategic way. A strategic approach to sustainability focuses on what a company can do in order to convert risks associated with sustainability issues into opportunities for business development and innovation, rather than on managing these risks to simply avoid or mitigate them. In other words, ICT companies should shift from a risk-driven to an opportunity-driven approach. They should move from a defensiveness and compliance stage to a strategic one by reframing social and environmental issues not just as risks but also as sizeable market opportunities. They should move from sustainability management to sustainability strategy. By doing so, optimising corporate performance and sustainability becomes something other than a zero-sum game. Both the company and society can win.

Let's look at three examples of how sustainability issues can be converted into opportunities for business development and innovation.

a. Energy-smart technology innovations for energy-efficient computing

Technology is typically responsible for a large percentage of a company's energy bill. According to recent research from IDC, for every dollar of computer hardware, roughly 50 cents is spent on energy used to run and cool servers. This is expected to increase by 42 per cent to 71 cents over the next four years.

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IBM currently runs the world's largest commercial technology infrastructure, with more than 740,000 square metres of data centres around the world. To cope with such a big issue, IBM has recently launched a \$ 1 billion-per-year project across its businesses, called Big Green. This includes a global team of more than 850 energy efficiency specialists from across the company dedicating their attention to new products and services for IBM and its clients in order to reduce data centre energy consumption and increase the level of energy efficiency in ICT. IBM expects to double the computing capacity of its data centres within the next three years without increasing power consumption or carbon emissions. Compared to doubling the size of its data centres by adding new space, IBM expects this will help save more than five billion kilowatt hours of energy per year. Expected savings are significant: for an average 2,300-square-metre data centre, energy savings of around 42 per cent can be achieved, equivalent to reducing CO₂ emissions by more than 7 tonnes per year.

This smart energy technologies initiative, using energy assessment tools, virtual 3-D power management and thermal analytics software, will allow IBM to achieve multiple goals: reduce its energy bill and carbon footprint, increase profitability of the data centre management services and offer new services to its clients.

b. Conferencing services to reduce cost and carbon emissions

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It is now widely recognised that collaboration and conferencing services – which enable meetings by telephone, video and web – allow faster decisions, increase productivity, drastically reduce travel expenses and avoid CO₂ emissions. Recent research by the University of Bradford and SustainIT measured the beneficial impact on the environment of the use of audio/video conferencing services by 6,000 employees of BT Group. The results showed that some 97,000 tonnes of carbon emissions and more than 860,000 face-to-face meetings were avoided. The analysis led to the conclusion that holding a conference call instead of a traditional meeting avoids some 40kg of CO₂ emissions, in addition to saving time and money. Extensive use of conferencing technologies by BT Group is estimated to have saved the company about £238 million annually. Of that total, about £135 million related to employees' travelling and lodging expenses, and £103 million to working time saved.

Leveraging its own experience and know-how, BT Group's Global Sustainability practice has launched carbon impact assessment services for small, medium and large businesses. Their purpose is to reduce the environmental impact of operations in terms of energy consumption and carbon emissions. The initiative, launched in the UK and US markets, focuses on reducing carbon emissions and saving costs by monitoring the impact of employees' working habits (e.g. travelling patterns and technology/IT use) on the environment and the company's bottom line.

c. Handset recycling for strengthening sustainability performance

People in high-income countries replace their mobile telephone handsets more than once every two years. Three triggers are at work: rapidly developing mobile technology, consumer fashion trends and the fact that many operators frequently subsidise handsets in the attempt to attract and keep customers. This fast churn and throwing away of still-useable devices is a source of significant waste, since more than one billion mobile phones were sold worldwide in 2006.

ICT companies have a powerful role to play in enabling and enhancing the sustainability of other industries. By providing new products and services, or innovatively using existing ones, ICT companies can help companies in other industries mitigate the impact of their activities on the environment and society.

In order to solve of this dilemma – customer loyalty versus sustainability – a number of operators are investing in handset recycling programmes. Vodafone’s operating companies, for example, run campaigns and use incentives and collection points to encourage recycling of handsets. Many of these are refurbished for reuse, enabling people who could not afford a new phone to buy cheaper ones, thus bringing economic benefits to developing and middle-income countries. The incentives include free airtime or a donation to charity for every handset collected. While the number of mobile phones thus collected is not yet enormous - 1.4 million in 2006 - the programme is an example of how the application of a clever business model can bring financial, environmental and reputational benefits.

Enabling sustainability in other industries

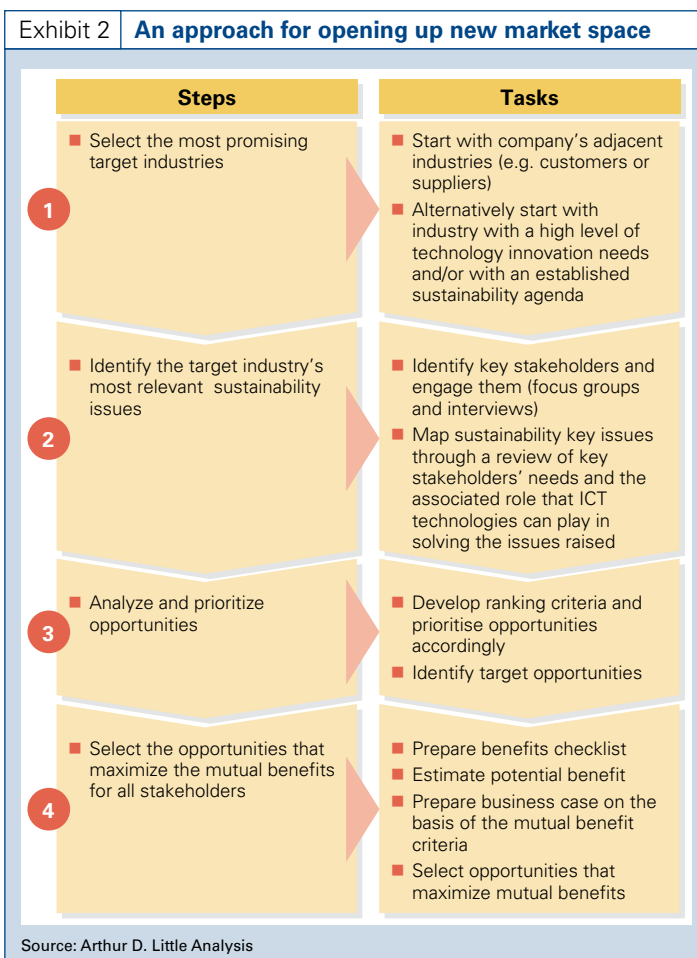
ICT companies have a powerful role to play in enabling and enhancing the sustainability of other industries. By providing new products and services, or innovatively using existing ones, ICT companies can help companies in other industries mitigate the impact of their activities on the environment and society. They can transform sustainability issues arising in other industries into new sources of revenues and competitive advantage for themselves, while at the same time providing benefits to the recipient industry, society and the environment.

For that purpose, ICT companies should combine a dual approach:

- “Outside-in”: identify a set of sustainability issues in the other industry and then design, test and commercialise new products and services to address these.
- “Inside-out”: take existing viable solutions and find innovative uses and applications to tackle mature or emerging social and environmental problems in the other industry.

In practice, the approach consists of four steps (see Exhibit 2, next page), which we explain below. We will illustrate the approach with the case of a global telecommunications player that is one of the world’s leading providers of

communications solutions and services, has operations in more than 150 countries, and is listed on stock exchanges in London and New York.



Step 1: Select the most promising target industries

A good place to start identifying opportunities is with the company's most adjacent industries, such as those where its customers and/or suppliers are active. An alternative is to take industries with high demand for ICT products and services, with low ICT penetration rates or with an established commitment to deliver a sustainable development agenda. These industries often offer opportunities for technological innovation both at product and process level. It is all about identifying a match between another indus-

try's ICT needs and your company's knowledge base and capabilities to deliver sustainable technological innovation.

The global telecommunications player to which we referred above implemented this step by first setting up a dedicated multi-disciplinary team to carry out research and analysis. The team was asked to conduct an overview of plausible opportunities for ICT to address key sustainability requirements and to conduct an initial assessment of the commercial viability of the most attractive ones. Considering the global scale of its operations, the company initially focused on large organisations, in which ICT can play an increasingly important role in delivering broad-scale sustainable solutions. It also looked at organisations that are strongly committed to delivering a sustainable development agenda. On that basis the main industry sectors identified for analysis included oil and gas, rail and road transportation, public health care, government, pharmaceuticals, automotive, construction and utilities.

Step 2: Identify the target industry's most relevant sustainability issues

In order to identify the sustainability issues that are the most relevant, deep expertise and knowledge of the target industry are required.

In order to identify the sustainability issues that are the most relevant, deep expertise and knowledge of the target industry are required. This can be achieved through a variety of means: research, consultation with panels of industry experts and NGOs, intense stakeholder engagement activities and active participation in and/or sponsorship of industry events. Once you have identified the most relevant sustainability issues, you can go on to understand how ICT (and your company) can really solve them: through the innovative use of existing products/services or through the development of new products/services. This is the stage where the "outside-in" and "inside-out" approaches can be simultaneously used to identify marketable ideas.

The multi-disciplinary team at the abovementioned global telecommunications player conducted desk research and interviewed more than 20 leading authorities in sustainable development, such as Sustainability directors, heads of CSR and Public Affairs, Risk managers and Health Safety & Environment managers within large companies, leading academics and policy makers. A wide-ranging "scop-

ing review” of the needs of these organisations resulted in a long list of some 30 potential opportunities. For each of these, the team identified a relevant preliminary ICT solution. The long list included solutions such as building energy management, occupancy sensors for lighting in conference and office rooms, road use monitoring, tracking of supply chains, CO₂ credits through clean ICT use, medication reminders, on-line health diagnostics, RFID tags on products, Intelligent Transport Systems, security and surveillance system and SMS service to provide access to real-time public transport timetables.

Step 3: Analyse and prioritise opportunities

This step starts by establishing criteria for screening and ranking the identified opportunities. “Attractiveness” versus “feasibility” or “ease of addressing” are usually good criteria to assess the match between the potential of the targeted opportunities and your company’s capability to implement adequate solutions. A commercially very attractive opportunity that requires the application of very specific technologies and/or skills that are not available within your company or that can only be acquired at very high cost might not be pursuable. Another example of a non-viable opportunity is one that requires your company to invest to “make the market” but with uncertain returns. By applying the criteria, a shortlist of opportunities is established.

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At the global telecommunications player in question, attractiveness/fit criteria were used to identify priorities within the long list of potential opportunities. The team analysed each opportunity in terms of the size of the opportunity, its near-term attractiveness, the ease of addressing and fit with the company, and related risk factors. The analysis led to four clusters of opportunities: 1) opportunities to be pursued; 2) opportunities to keep on standby; 3) opportunities to dismiss; 4) opportunities to be further investigated at a later stage.

The first cluster consisted of five top opportunities that were both highly attractive and fitted very well. They addressed issues such as network infrastructure and transport safety, integrity of sourcing and supply chain, accuracy of information-based environmental management systems

and RFID tags on products for product recognition and information.

Let's look in more detail at two examples of opportunities that were selected for further business case preparation. The first example is a telemetric solution aimed at addressing the issue of pipeline security and integrity in the oil sector through the application of sensors technology. The envisaged solution translated into the potential deployment of an extensive network of telemetric sensors to provide reliable, cost-effective and accurate information on pipeline integrity, particularly with respect to oil leakages that can occur in oil and gas transportation infrastructure in the developing world, where monitoring of pipelines is currently less common. Oil and gas pipelines are susceptible to a number of risks, such as corrosion, accidental damage through excavation, natural disasters and sabotage, that reinforce the need to have reliable and precise data on leaks. A network of sensors that provide accurate information on leaks and irregularities would help pipeline operations maximise throughput and predict (and avoid) major disasters (especially in high-density residential areas). The proposed value statement was based on helping pipeline owners better manage their assets and mitigate potentially costly risks through the provision of reliable, accurate and cost-effective data that feeds back on the integrity of the pipe.

The second example is Radio Frequency ID (RFID) tagging or better use of existing bar-coding technology for consumer goods identification and explanation at supermarkets and malls. The proposed solution consisted of software embedded into a mobile phone that could read products' bar codes and provide consumers, through connection to the internet, with real-time accurate information from specialised websites or consumers' forums about the products they are about to purchase. The solution's proposed value statement was based on helping consumers enrich their purchasing experience by providing them with information on the product itself, such as performance, quality and environmental standards, on the company making the product, such as production sites and facilities, corporate responsibility policies and environmental standards, and on the opinions of other consumers who have already purchased the product, whether it be a book or an energy

drink. In short, it would provide information that can help consumers make a more conscious and responsible purchase. Fast-moving consumer goods companies can also benefit from the solution by better marketing their products and getting more in touch with their customers.

Step 4: Select the opportunities that maximise the mutual benefits for all stakeholders

The purpose of this step is to select from the shortlist of opportunities those that will have benefits for your company, the targeted industry, the environment and society. Obviously, the nature of the benefits will depend on the stakeholder. For example, for your company, it could be a new source of revenues; for the target industry, it could be a cost reduction; for the environment, it could be a reduction of CO₂ emissions; and for society, it could be an improvement of working conditions or an increase in the employment rate or the level of education. By quantifying the potential benefits, you can prepare business cases and thus select the opportunities that maximise the mutual benefits.

As far as sustainability issues are concerned, the opportunities for creating ICT-driven solutions that benefit all stakeholders – the ICT company, the target industry, and society and the environment – are endless.

At the abovementioned global telecommunications player, a review of the five top opportunities provided the foundation for making a “go/no go” decision about the development of detailed business cases. The review answered fundamental questions. What is the opportunity? How does it work? Why should the company do this? Who are the customers/stakeholders involved? What are their needs? How does it make money? How big is the market? Who is already doing this? Desk research and interviews with some 30 industry experts were conducted to gather more detailed information about the size of the market, the potential addressable opportunity and the benefits for the target industry and the stakeholders. The total potential market for the selected top opportunities was estimated at €95-100 million per annum in terms of additional revenues for the company. Finally, for each of the top opportunities, the team established a high-level business model, a value statement, a time plan and a preliminary launch strategy.

In the example of the sensor technology solution for pipeline security, potential additional sources of revenues for

the company were identified in the provision of software, connectivity and networking (wireless or cable), potential for managed services and licence fees for annual revenues. The main benefits for the target industry related to reduction of economic loss, mitigation of environmental and safety risks, better management of media and investor concerns and improvement of legislative compliance.

Exhibit 3 **Examples of ICT-driven solutions that benefit all stakeholders**

	Sustainability issue and solution	Benefits for target industry	Benefits for society & environment	Benefits for ICT company
Health-care	<ul style="list-style-type: none"> ■ Issue: Reduce economic impact of long term care (LTC) for chronic diseases on hospitals' bottom lines; dependency of elderly patients on relatives ■ Solution: Remote healthcare and self-care applications, services and infrastructure 	<ul style="list-style-type: none"> ■ Larger healthcare capacity as a result of a more effective utilization of hospital beds and acute intakes ■ Lower cost of public healthcare and hospitalization 	<ul style="list-style-type: none"> ■ Society: Improvement of care recipients' quality of life; diffusion of ICT skills among elderly people ■ Environment: Reduction of CO₂ emissions by avoiding trips by car or public transport 	<ul style="list-style-type: none"> ■ Expand penetration of the public/private healthcare market ■ Increase voice/data revenues ■ Create a new line of business
Water supply	<ul style="list-style-type: none"> ■ Issue: Make water available to population; reduce water losses ■ Solution: Geographical Information Systems for identifying water availability, storage, transmission and distribution; water quality monitoring systems 	<ul style="list-style-type: none"> ■ Water loss reduction (improving profit) ■ Tariff collection and utilization efficiency improvement ■ Improvement of allocation, storage and transmission operations through the availability of more analytical data 	<ul style="list-style-type: none"> ■ Society: Optimization of water allocation and availability to population; public availability of data on water resources, reserves and their quality for local users ■ Environment: Water loss reduction 	<ul style="list-style-type: none"> ■ Expand penetration of the utilities market ■ Develop a dedicated service offering
Public services	<ul style="list-style-type: none"> ■ Issue: Improve efficiency and timeliness of emergency management ■ Solution: Geographical Information Systems for the empowerment of Civil Protection 	<ul style="list-style-type: none"> ■ Higher cost efficiency in emergency and disaster management ■ Cost avoidance through risk prevention (fire, avalanches, hydro-geologic accidents, etc.) 	<ul style="list-style-type: none"> ■ Society: Prevention of injuries ■ Environment: Prevention of environmental disasters (fires, industrial accidents, etc.) 	<ul style="list-style-type: none"> ■ Expand revenues in the public sector ■ Generate business in hardware (e.g. sensors), software (GIS, GPS, modelling, etc.), managed services, emergency number service, etc.
Auto-motive	<ul style="list-style-type: none"> ■ Issue: Prevent or reduce accidents; enable more efficient driving ■ Solution: Intelligent Vehicle Systems and ADAS (Advanced Driver Assistance Systems) 	<ul style="list-style-type: none"> ■ Improvement of product safety and in-vehicle safety ■ Competitive advantage through commercialization of safer vehicles 	<ul style="list-style-type: none"> ■ Society: Better accident prevention and reduction of fatal accidents ■ Environment: Reduction of CO₂ emissions through more efficient driving 	<ul style="list-style-type: none"> ■ Expand revenues in the automotive industry ■ Generate business in software, equipment or application maintenance services

Source: Arthur D. Little Analysis

As far as sustainability issues are concerned, the opportunities for creating ICT-driven solutions that benefit all stakeholders – the ICT company, the target industry, and society and the environment – are endless. Exhibit 3 shows a number of examples in diverse industries.

It is no surprise that the healthcare industry is one where the demand for ICT-enabled solutions is very strong. The application of ICT can make the healthcare system more efficient by reducing the trade-off between quality of service and cost of service. As a consequence, most

Case study: Telecom Italia's eHealth platform

Telecom Italia Group is active in fixed-line and mobile telecommunications, internet, media and in-office and systems solutions. With around 83,000 employees, 24 million fixed-line customers and 34.3 million mobile customers in Italy, it is Italy's leading provider of advanced telecommunications. It also has more than 10.5 million broadband connections in Europe and 27.5 million mobile customers in Brazil.

In order to support the Italian National Health System in the development and deployment of ehealth services and solutions, Telecom Italia set up a dedicated eHealth platform by leveraging its primary assets; broadband capacity, country-wide data centres and network infrastructure. The platform provides a communication layer based on the HL7 standard, which enables a collaborative environment for shared services and infrastructures. It also has a data layer for the integration of patient record information and data exchange between different databases. A dedicated eHealth & Personal Services function within the marketing department manages the eHealth platform, which is designed to address the three layers of the NHS:

Regional level: Creation of an eHealth platform that supports the aggregation of data from all regional healthcare organisations and ensures interoperability between different organisations.

Hospital level: A dedicated solution, called "Hospital in a box", designed to support both clinical and management processes such as drug-related risk management, electronic patient records,

developed countries today have developed a so-called “National eHealth Plan” that aims at helping the national health system cope better with a number of pressures:

- An ageing population (for example, the average age in Italy will rise from 42 today to 56 years by 2027);
- Growing demand for healthcare services;
- Increasing cost of healthcare services (in Italy, for example, they account for 8 per cent of GDP today);

patient and assets localisation (based on RFID technologies), an image diagnostics archive and document management.

Local level: Integration of local services with the eHealth platform for the creation of a territorial healthcare network mainly based on remote diagnostic and remote-care technologies. The system empowers the user to constantly monitor biological parameters through simple devices, which eliminates trips to the hospital. It then delivers a diagnostic report directly to the general practitioner through a wireless link for a real-time diagnosis and therapy definition.

The expected benefits of the system for society and environment are:

- better accessibility and timely diagnosis for patients;
- improved patient-health system proximity;
- rationalisation of hospital bed capacity;
- travel cost savings and reduction of CO₂ emissions;
- reduction of costs related to on-duty hours of healthcare operators.

Telecom Italia has created a dedicated section on its corporate website (www.salute.telecomitalia.it) to promote the eHealth plan and to provide information and targeted services to citizens, practitioners and healthcare organisations. The website is planned to become a point of access for stakeholders to the eHealth platform’s solutions and services.

- The changing nature of required healthcare services, i.e. the transition from treatment of acute diseases to long-term care (LTC) for chronic diseases;
- Low ICT spending in the healthcare sector (in Italy, for example, it accounts for only 0.9 per cent of total ICT spending by the public sector).

One sector's challenges are another sector's opportunities, as is shown by the case of Telecom Italia. It set up a dedicated eHealth platform to support the Italian health system in coping with the pressures on the provision of health care services in Italy (see box).

Insights for the Executive

Sustainability is highly relevant for the ICT industry for two reasons. First, there are plenty of sustainability issues with which the ICT industry has to cope within its own confines. These include environmental issues such as the carbon footprint of IT systems and mobile handsets recycling, social issues such as privacy and mobile gambling, market-place issues such as fair pricing and responsible marketing, and quality of life issues such as digital inclusion and remote self-care.

Consumers attribute increasing value to the environmental and social performance of products and services and to those of the companies that produce them. Consumers whose choices are increasingly driven by environmentally friendly and responsible lifestyle and consumption attitudes will exclude unsustainable companies. Likewise, investors are investing their money with an eye on the value of sustainability. They are increasingly considering the possible emergence of real or perceived sustainability issues as a factor that may negatively affect the share price of companies they have invested in.

The other reason why sustainability is of high relevance for the ICT industry lies outside its own confines: the ICT industry is uniquely positioned to help other industries cope with their sustainability issues. ICT is not only a medium of communication but also an enabler of innovative solutions to sustainability challenges that exist in other industries.

ICT companies can develop products and services that provide mutual benefits to all stakeholders - the target industry, the environment and society, and themselves.

Whether addressing sustainability issues within their own confines or those of other industries, ICT companies will have to adopt a strategic approach to sustainability. They should shift from a risk-driven to an opportunity-driven approach, i.e. move from a defensiveness and compliance stage to a strategic one by reframing social and environmental issues not just as risks but also as sizeable and tangible market opportunities. By doing so, both the company and society can win.

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