

10 Key Trends to Watch in 2013



December 2012: Why care about Global Trends? Think about Kodak. They invented the digital camera, but side-lined it to focus on their core consumable film business – only to realize too late that their competitors were not who they thought they were and that consumer behavior had shifted. Take Hurricane Sandy, a deadly reminder of the world’s shifting climate patterns, following droughts across the globe – emphasizing the need for new ways to manage the world’s resources and environment. Or take the growing levels of social unrest over rising inequality, austerity, jobs, political ineptitude, institutional failure and more. Power is being redistributed away from traditional institutions that have failed to deliver progress, towards communities and individuals, as well as businesses.

It’s an uncertain and unstable world, one where leaders and organizations need to have a point of view on the future and to act today to address long-term trends. Access to resources, power, value creation, and values and beliefs are all becoming more distributed. The business of the future will not be at the center of the playing field – the consumer will, as cross-industry competition, distributed production and networks become the norm, underpinned by social technologies. Let’s look at 10 key trends to watch for the next year, highlighted in [The Global Trends Report 2013](#).

If you want the quick summary to share with your colleagues, you can find it in [The Economist here](#).

1. Social everything: New generations and their digital world stepping forward

Social technologies are now a central part of everyday life and work. The social generations are reshaping firms from the inside, helping companies to build broader, more agile networks to create and deliver value to customers. Mobility and connectedness will be at the heart of the future business environment: Relationships, communications and marketing are moving from a focus on one-to-one, to many-to-many relationships.

In Action!

Did you know: If [Facebook](#) were a country it would be the world’s 3rd largest and 2 times the size of the U.S. population. The [Ford Explorer](#) launch ad on Facebook was more effective than a Super Bowl

ad. Every second 2 new members join [LinkedIn](#). Social gamers will buy US\$6 billion in virtual goods by 2013; movie goers only buy US\$2.5 million in concessions. If [Wikipedia](#) were made into a book it would be 2.25 million pages long. 97% of [Pinterest](#) Facebook fans are women. 53% of people on [Twitter](#) recommend products in their tweets. 90% of people trust online recommendations from people they know. Only 14% trust traditional TV advertisements. 93% of marketers use social media for business. Did it tickle your interest for more fast facts? Check out this cool [video](#) from [Socialnomics](#).

Social activism: In case you missed out on last month's brief! Along with the rise of the internet and social media a new form of activism has seen the light of day. Hit a button or write a few sentences in whatever online platform you choose and you have raised your voice and participated in a cause you care about. Social activism comes in many shape and forms. Some examples are donating time/money/fundraising, e.g. [Big Help Mob](#) in Australia which is a group of people who team up to lend a helping hand to local good causes like planting 10,000 trees in a few hours, renovating a community center or cleaning up a place that's long been forgotten. Another example is [Benelab](#), a search engine that donates 100% of revenues to charity, founded by Seattle teenager Jack Kim. Another form of activism is social media based protest, with [Coca-Cola](#), for example, recalling 1.4 billion cans of a holiday product due to a Facebook and Twitter outcry. [Bank of America](#) has also felt the downside of social everything: After announcing a monthly US\$5 debit fee during the bank's US\$45 billion bailout, tremendous negative reactions were immediately recorded via Change.org and Facebook. The result: Bank of America and three other major banks dropped their debit card fees. As social everything evolves, expect more social activism!

Look Out For...

Video marketing: In the good old days marketing was all about the four Ps and mediums like newspapers, magazines, yellow pages, posters, billboards, mailers, leaflets, TV and radio spots. These mediums will certainly still be around for a while but things are changing fast as technology advances. In a fast-paced and information-overloaded reality brands need to consider emerging communications and interaction platforms especially when marketing to the ne(x)t generations – generations constantly connected and on-the-move craving real-time information and immediate gratification. Video marketing could be the next big thing (or at least one of them) – this once costly medium is becoming an increasingly easy and affordable way for brands to communicate with consumers online. The [2012 Social Media Marketing Industry Report](#) (from [Social Media Examiner](#)) found that 76% of marketers plan on increasing their use of YouTube and video marketing. Big brands are already doing so, e.g. [Zappos](#), [Dominos Pizza](#), [Apple](#), [Nike](#) and [The University of Phoenix](#).

Gamification: The integration of online game design concepts into non-game scenarios is increasingly popular in the business world. Though still in its infancy research from [Gartner](#) indicates that by 2015, 50% of organizations that manage innovation processes will gamify those processes and that by 2014 more than 70% of Global 2000 organizations will have at least one gamified application. [M2 Research](#) suggests that it will generate US\$ 2.8 billion in consumer spending by 2016. Last year Xerox decided to look at gamification across the organization. The main reasons: to engage users, simplify processes, and compete for mindshare. Also last year [Coca-Cola](#) launched the game "[Happiness Quest](#)" through its vending machines in Japan. Users are asked to scan the QR code on their favorite vending machine and create its virtual identity. German [GreenPocket's](#) has developed a smartphone app, which "helps consumers share their carbon footprint in a competitive and entertaining way on Facebook." (Source: [Springwise](#)). Great inspiration for energy, utility and monitoring companies around the world!

2. Redefining value: The consumer is winning the fight to own the new consumer

The notion of value is being redefined for the 21st century. Consumers have choice. They want personalization, and to participate in value creation, shifting the mindset to "made with me." Value will also be about "shared with me," as the ownerless economy expands, driven particularly by younger generations who value experiences they can share over possessions – ones that also deliver benefits for society.

In Action!

The personalized internet – but filtered: First we had human gatekeeper in the form of editors controlling the information flow, then the internet conquered our lives with a new world of uncontrolled information. However, according to Eli Pariser, gatekeeping is back. This time it is algorithmic gatekeeping. He calls it “The filter bubble”. In December 2009, [Google](#) began tailoring its search results for each user. Now we get search results based on, e.g. our previous search patterns, what browser and computer we are using and many other things. Basically it means that our searches show us what “it” thinks we want to see not necessarily what we need and want to see. However Google is not the only one doing it – [Facebook](#), [Bing](#) and [Yahoo News](#) have jumped on the wagon too – although it is possible to opt out personalized search. (Source: [TED Talks](#)). Does this mean we have fewer choices as services, products or information are automatically filtered out?

Mobile apps rock: Apps are the road to immediate gratification and real-time information, as time becomes an increasingly valuable resource. According to the latest estimate from [Gartner](#) free apps will account for 89% of total downloads in 2012. Worldwide mobile app store downloads will surpass 45.6 billion in 2012, with free downloads accounting for 40.1 billion, and paid-for downloads totaling 5 billion. As we all know there is an app for everything and if there is not, it will be here soon! We can't mention them all but if you want to save time and money this app is one for the shoppers: [Westfield](#), the world's largest shopping center operator, added Google Commerce's search functionality to its in-mall mobile app. Shoppers can now search and compare prices across retailers in their local Westfield shopping mall, and then call the local retailers to check availability with one click. (Source: [Trendwatching](#))

Look Out For...

Social sharing: The French website [LaMachineDuVoisin](#) is taking social sharing to a new level by bringing together people whose washing machines are sitting unused during the day, with those who need a handy place to wash their clothes. The site invites machine-owners to sign up and set the days and hours when their machine is available. People nearby can then book a time slot where they'll pop in to do the weekly wash. (Source: [Iconoculture](#)). In the UK the [easyCar Car Club](#) scheme already helps vehicle owners to lend out their car to others when not in use. Now in the US, [FlightCar](#) aims to put vehicles left in airport parking lots to use by offering them up for short-term loans. The customer can expect a 20 to 50% discount compared to traditional rental opportunities, while the car owners receive 65% of the agreed fee. (Source: [Springwise](#)) More moves towards the ownerless economy?

Embracing virtual reality experiences: More brands are jumping on the wagon providing consumers with virtual reality shopping experiences in order to facilitate the decision-making process. Marks & Spencer's [Virtual Manicure](#) is a free online and in-store service which enables customers to test the retailer's nail polish range on their own nails. Shoppers upload an image of their hands and then click on a nail color to see what it would look like before they purchase it. (Source: [Trendwatching](#)). Will frustrations in the fitting-room soon belong to the past? High-tech fitting and sizing machines are popping up in many places. The shopper steps fully clothed into a sizing machine, their body is measured, and then matched with specific styles of clothing brands fitting the person's body type. [Unique Solutions Design](#) operates size-matching stations in 65 shopping malls across the U.S. In Bloomingdale's 59th Street Store in New York it has teamed up with [FaceCake](#), which is the maker of [Swivel virtual fitting room](#) by using [Microsoft's](#) Kinect sensor and camera attached to a TV. The result: Walk into the store, try on the clothes you want without even taking off your clothes. (Source: [abc NEWS](#) and [Los Angeles Times](#))

3. Distributed everything: Mobility in production and consumption

Mobility is entering a new stage, where not only consumption occurs anywhere, anytime but also the tools and resources to create and capture value are more broadly distributed. Work has been becoming more distributed for years. Smart machines now tap the global brain. Small-scale manufacturing, including 3D printing, will reshape production. Renewable technologies are

distributing energy production, while mass teaching platforms are revolutionizing education. Ask what can't be distributed, not what can.

In Action!

Mass teaching: Get used to it because the world of learning is changing in radical ways. Massive Open Online Classes (MOOC) is reinventing education. Ventures like [Udacity](#) and [Skillshare](#) are lowering barriers to higher education, while [Big Picture Learning schools](#) and [Science Leadership Academy](#) are emerging players in primary and secondary education. M-learning is in and you will find an app for everything; it is exploding and the global market for mobile learning products and services could triple from 2010 to 2015 reaching US\$9.1 billion. (Source: [Ambient Insight](#)) The countries with the highest mobile learning growth rates (all over 60%) are China, India, and Indonesia.

Distributed energy: Typically, distributed energy technologies focus on renewables. Projects are often small in scale, closer to the consumer which lowers environmental impacts, improved security of supply and wastage of cost. Distributed energy can also bring low cost power to the 25% of people worldwide who have no access to electricity. In India [Simpa Network](#) sells energy on a pay-to-go basis. The customer must make an initial down payment and then pre-pay for the service. Each payment counts towards the final purchase price. When fully paid, the system produces clean energy, free and clear for the rest of the system's expected 10-year useful life. (Source: [Springwise](#)). In the spring we wrote about the Swedish company [Hexicon](#) building the world's largest floating wind farm. Now California [Makani Power](#) has created an airborne windmill able to produce 50% more energy than windmills on the ground. It generates power by flying aloft in large circles, much the way a kite does. Just in case you are wondering – it does stay well below normal commercial and civilian aviation! (Source: [Springwise](#)). We have seen hotels and cinemas using pedal power. Now add the Santa Rita do Sapucaí prison in Brazil – here prisoners can shave a day off their sentence for every 16 hours pedalling they complete (Source: [Springwise](#))

Look Out For...

Crowd labor: Crowdsourcing opened up the way ideas for innovation are gathered; crowdfunding is opening up new ways to support of a wide variety of new ventures and projects. Now crowd labor is opening up the way work is done. Once technological and organizational barriers to the approach are resolved, there will be benefits to both businesses and professionals. Crowd labor is similar to crowd funding as it connects the buyer and seller in cyber space. For now crowd labor has its limitations because most offerings depend on specific platforms from individual vendors. However according the report [Sector RoadMap: Crowd labor platforms in 2012](#) by Joseph Turian, Ph.D., published by [GigaOm Pro](#): "The promise of crowd labor is that it is inexpensive, on-demand, and elastic outsourced labor." Examples of crowd labor platforms are [Amazon Mechanical Turk \(AMT\)](#), [MobileWorks](#), [CloudFactory](#), [Samasource](#) and [Clickworker](#).

3D printing: 3D printing has the potential to revolutionize manufacturing as well as bringing power into the hands of consumers! It is also launching new businesses that do it for you if you don't want a 3D printer of your own. [Shapeways](#) recently opened a 25,000-square-foot "Factory of the Future" in Long Island City, U.S. Customers will be able to create and print out newly designed products within a matter of days at the facility. According to Kegan Fisher, director of industrial engineering for Shapeways, "When fully up and running our factory will become the largest consumer-facing 3D printing manufacturing facility in the world." It will house 30 to 50 high definition, industrial-sized 3D printers. Each is capable of producing more than 100 products on a daily basis, and three to five million products on annual basis. The factory will support Shapeways' community of nearly 200,000 users. (Source: [Smart Planet](#))

4. The next "industrial" revolution: Robots and smart machines reshaping work

Smart machines and robots will redefine society, by taking on any job that can be reduced to repetitive steps. Robots are now being deployed as receptionists, banking assistants and even

prison guards, while technology allows amateurs to do what professionals once did. The upside: Addressing issues such as caring for ageing populations. The downside: Huge job losses. Yet the next wave of deployment of smart machines will also create new kinds of jobs. The challenge will be to ensure a workforce that is ready and skilled for them.

In Action!

Replacing human workers: [Earthbound Farms](#) in California has robot arms that put organic lettuce into clamshell containers. They are so fast that each robot can replace two to five workers at the company. At [C&S 168](#) “rover” robots the size of go-carts race around a warehouse at 25 miles per hour, manipulated wirelessly by a central computer. They drive right up to their destination, get the item, then move to a central chute where all the items are collected. The central computer can pack items in the exact unpacking order they need to be in to go onto the supermarket shelves. Thanks in part to texting, email and apps like smartphone banking, the [Bureau of Labor Statistics](#) estimates that 181,800 U.S. Postal Service workers will lose their jobs between 2010 and 2020, 28% of the total. (Sources: [Smartplanet](#) and [Money MSN](#)). For an interesting TED talk about how technology and droids are impacting our lives click [here](#).

Positive robotic impact: The report “Positive Impact of Industrial Robots on Employment” from the [International Federation of Robotics](#) states that it is not all about negative impact when firms deploy robots. In 7 industries including robotics, robotics operation, food and drink, chemicals, pharma and plastic, foundries, electrical and electronics, and automotive, the total number of jobs created (direct and indirect employment) due to use of robotics is in the order of 8-10 million. It is estimated that 700,000 – 1 million new jobs will be created by robots in the next five years. Examples of firms where robots have saved jobs are Odense Steel Shipyard, Denmark and [Marlin Steel](#), Baltimore, MD, USA.

Look Out For...

Replacing HR: Firms are increasingly turning to smart machines when hiring new staff. Human bias is being replaced by algorithmic software to achieve precision during the hiring process. Companies large and small are using it, e.g. [Xerox](#) uses it to staff call centers; [Bon-Ton Inc.](#) to screen applicants for hourly wage jobs in stores and distribution centers; waste-disposal firm [Richfield Management LLC](#) in Flint, Mich. to screen out applicants who are likely to get hurt and abuse workers' compensation. Moreover, big tech companies believe in the technology. Recently [IBM](#) paid US\$1.3 billion for [Kenexa Corp.](#) which uses data analysis to help companies recruit and retain workers. [Oracle](#) has acquired the job-applicant tracking system company [Taleo](#) for US\$1.9 billion in February, and [SAP](#) has bought [SuccessFactors](#), which specializes in performance tracking, recruiting and compensation, for US\$3.4 billion. Globally, spending on talent management software rose to US\$3.8 billion in 2011, up 15% from 2010, according to research firm Gartner. (Sources: [Singularity Hub](#) and [WSJ](#))

Meet your new professor/teacher: For the most part we are still teaching kids using a 20th century paradigm. However there is no doubt that advances in computing and technology will change the role of the teacher in the 21st century. Instead of being the teacher we know, the teacher will become a guide, a coach and an educator in the classroom helping students to learn at their own pace. The computer or smart machine becomes the textbook, the research device, the advanced math calculator, the word processor and the portal to a world of information for every class. Check out the impact of new technologies in education in a new visualization by Michell Zappa at [Envisioningtech](#).

5. The new space race: Pushing the frontiers of technology once again?

Scientific advances from national space programs have had a significant impact on how we live and work, from advanced materials to global telecommunications. Now, commercial space travel and exploration is a reality and a new space race is hotting up particularly between the US, China and Europe. New advances will surely result, as will questions over the ownership of space “assets,” and whether advances will be shared for public benefit.

In Action!

The rise of space tourism: [Virgin Galactic](#) has already signed up well over 500 people willing to pay US\$200,000 each to fly into space in 2013 on the SpaceShipTwo's suborbital flights. Another player in the industry is the XTAR space plane that will take a pilot and one passenger/co-pilot up nearly 60 km for about half the price of a Virgin Galactic flight. The [Zero G Corporation](#) offers weightless experiences on flights while it is possible to take cosmonaut training at Star City near Moscow. Hypersonic transport is most likely the new commercial space enterprise where the "big bucks" are. This type of transportation could be flying transcontinental at speed such as Mach 6 or even Mach 10 and could potentially allow executives and high-flying jetsetters to move from one continent to another in a few hours' time. (Source: [The Futurist – The New Age of Space Business](#)). Many players are entering the race so the future of space tourism seems promising!

Adventure capitalists: [Planetary Resources](#), backed by investors including Google's Larry Page and Eric Schmidt, billionaire Ross Perot Jr. and software executive Charles Simonyi, plans to go asteroid mining as asteroids could yield precious metals such as platinum, gold and rare earths – with soaring prices on earth making the venture positive on the hopes of future profitability. (Source: [NBCNEWS](#)) While the U.S. has shut down its space shuttle program, nations countries like China and India are revealing new plans to explore Mars. Other billionaires planning to conquer space include Microsoft co-founder Paul Allen; PayPal billionaire Elon Musk; Amazon.com founder Jeff Bezos; owner of Budget Suites hotel chain Robert T. Bigelow; and computer game developer John Carmack. (Source: [The Futurist – The New Age of Space Business](#)). Who will win?

Look Out For...

Building a space elevator using crowdfunding: Is a dream as old as human civilization itself (not the crowdfunding part though!). In 2000 scientists from NASA had plans for a space elevator but funding was cut. Now a group of companies aiming to build the first space elevator have come together with a [campaign on Kickstarter](#) to fund the project. The [LiftPort Group](#) launched the project in mid-August with an US\$8,000 goal but managed to raise US\$110,353. But why a space elevator instead of just using good old rockets, you could ask yourself? Rockets require an enormous amount of chemical energy to be released and massive quantities of fuel. However, a space elevator provides a mechanical or even an electromagnetic means for ascending into orbit. It could be a safer and cheaper way to launch satellites, probes, and spacecraft into orbit, and also a very successful way for humans to pass to and from a tethered spaceport with ease. (Source: [Singularity Hub](#))

Controlling space: The U.S. and Russia, fierce competitors since the dawn of the space age, have in the last five years seen a major new competitor – China. While it is unclear how much China is spending on its space programs, and it remains many years behind in developing the technology required – according to some, 40 years – the gap is getting narrower. China is seeing huge investments in R&D and have indicated that by 2020 they hope to spend around 2.5% of GDP on R&D, up from 1.8% in 2010. There is no doubt that it could easily make big strides in developing space technology. (Source [Global Post](#)). Success in space will require international collaboration, but geopolitical tensions may get in the way as countries race to capitalize on the job creation potential of this new industry. Another key question is how the advances from space research will be shared – for example nanotechnology advances around making equipment smaller and lighter. NASA's advances offered significant public benefits, but will other countries and the adventure capitalists do the same?

6. Geopolitical wars: The fight to control the future

The BRICS and Beyond (other rapidly growing economies) will be where the fight to control future economic growth and social development will take place. It's a multipolar market landscape, based on dramatically different economic, social and political systems. Politicians, along with companies, are still trying to find and control their place in the new world order, even as trust in governments' falls, nationalism rises, and power shifts towards the people. The potential for radical political shifts at home and between nations is rising.

In Action!

Rising nationalism and protectionism – can we fight it? As we have mentioned before, [Global Trade Alert](#) has found a 36% increase in the number of protectionist measures implemented during 2010 and 2011 and is warning about further increases in the future. The forthcoming 2013 Index of Economic Freedom confirms the conclusions from GTA showing that even though the average trade freedom score (max score 100) has risen steadily since 1995 (the score then was 56.7) it has remained flat since 2011 (score 74.5). However many positive developments in trade policy are taking place around the world, e.g. Canada is unilaterally phasing out tariffs on more than 1,500 materials; many African countries are pursuing a Continental Free Trade Area (CFTA) modeled after other successful continental trade deals; and the U.S. and 10 other countries are engaged in Trans-Pacific Partnership (TPP) talks. (Source: [The Heritage Foundation](#))

Global inequality and unrest: The financial meltdown and aftermath has led to an increase in poverty rates in half of advanced economies and one-third of developing economies. Inequality has also increased, although not in as many countries; inequality is up in less than one-half of advanced economies and one-quarter of emerging and developing economies. These widening inequalities are evident in terms of access to education, food, land and credit. It's a challenging economic and social picture. In 57 of 106 countries, the Social Unrest Index increased in 2011 compared to 2010. Around 50 million jobs are missing relative to the pre-crisis situation and the global employment rate, at 60.3% in 2011, is 0.9% lower than before the crisis. Employment in advanced economies will most likely not reach pre-crisis levels until late 2016. (Source: [ILO, World of Work Report 2012](#))

Look Out For...

Accelerating economies: The BRIC countries are among the largest and most influential economies of the 21st century. Together they are home to 40% of the world's population and produce more than 25% of global GDP. Beyond the BRIC, opportunities also abound. Indonesia is the 16th largest economy in the world with 45 million members of the consuming class and a US\$0.5 trillion market opportunity. [McKinsey Global Institute](#) forecasts that it will be the 7th largest economy in 2030 with 135 million members of the consuming class, offering a US\$1.8 trillion market opportunity. Over the past decade its government debt as a share of GDP has fallen by 70% which means that it is in a better financial position than 85% of OECD countries. Six African countries – Angola, Nigeria, Ethiopia, Chad, Mozambique and Rwanda – have been among the 10 fastest-growing economies in the world over the past decade; and seven African countries are forecast to be among the 10 fastest in future: Ethiopia, Mozambique, Tanzania, Congo, Ghana, Zambia and Nigeria. The 54 countries that make up Africa account for 3% of global GDP, about the same as Russia or Brazil, with the average African economy expected to grow faster than its Asian counterpart in the future. (Sources: Ernst & Young – a [Rapid Growth Markets](#), The Economist – [The hopeful continent](#))

Changing the game of governance? According to [IMF](#) estimates based on the comparative purchasing power of China and the U.S., the “age of America” will end in 2016, when the IMF predicts that China's economy will surpass that of the U.S. In 2010, when the IMF last increased its financial resources, emerging economies agreed to the deal only if their voting share within the IMF was increased by around 6%, with Europe losing around 4%. (Source: [Project Syndicate](#)). According to the [U.S. government's National Intelligence Council](#) the whole international system as constructed following WWII will be revolutionized. Not only will Brazil, Russia, India and China have a seat at the international table, they will bring new stakes and rules of the game. Look out for geopolitical shifts and tensions ahead.

7. Resource wars escalating: From a world of abundance to shortage

As the world's population moves towards 9 billion by 2050, resources are under pressure, exacerbated by climate change. By 2030, we will demand twice as many resources as the planet can supply – risking social unrest and conflicts as people and nations compete for ever scarcer resources. Scarcity is already driving resource price volatility, and cross-border investments.

New technologies and rethinking consumption will be critical in future – with businesses rather than governments likely to be leading the way.

In Action!

Educating consumers: In the quest for resource sustainability, organizations from governments to NGOs are educating consumers to use less – it is a huge challenge to change consumer behaviors, both in the high-consumption developed world and as the emerging global middle class starts to use their growing wealth. To support [World Water Day 2012](#) Levi's challenged employees to wear the same pair of pants five days in a row without washing them. (Source: [Ecosalon](#)). Levi Strauss also recommends that eco-minded consumers wash their jeans "rarely," and instead put their jeans in the freezer to kill the germs that cause them to smell. (Source: [Huffington Post](#)). [Duke Energy](#) is using web-videos to promote lower energy use by, for example using a clothesline to dry clothes instead of a dryer. (Source: [New York Times](#))

Eat or drink your wrapping: As mentioned in an earlier [brief](#), a team from [Harvard University](#) has developed the edible packaging technology WikiCells to hold for instance pumpkin soup in a spinach membrane, lemon juice in a lemon membrane and melted chocolate in a cherry membrane. (Source: [FoodProductionDaily.com](#)). Now [MonoSol](#) has developed an edible film that is soluble, biodegradable and can even be flavored. The firm is developing oatmeal where the package would add the brown sugar, maple syrup, or apples-and-cinnamon taste instead of being pre-flavored. Coffee/hot chocolate packets that could be cream- or marshmallow-flavored, eliminating the single-serve packaging and reducing waste on the landfill. Drink sticks, instead of the narrow pouch, which slides easily into water bottles are an easy way to make powdered drinks. (Source: [Fast Company](#))

Look Out For...

Building our own resources: Toyota Motor Corp has developed a way to make hybrid and electric vehicles without using expensive rare earths in which China has close to a monopoly, and which have been subject to export reductions in recent years. According to the company it continues to research new ways to reduce rare earth usage but has yet no time frame for commercialization. (Source: [Reuters](#)). In Singapore, a country short of arable land, the company Sky Green has built aluminum towers, up to nine meters high, with 38 tiers of troughs in which vegetables are grown. The result: It produces and sells vegetables from its first vertical farm. If proven sustainable – both technologically and economically – it could provide a much desired supplement to Singapore's locally grown food and serve as a model for farming in other land-challenged areas. The company claims that the artificial system is 5 to 10 times more productive than traditional farms. (Source: [Singularity Hub](#))

From trash to energy: Wouldn't it be great if landfills were a thing of the past, and we could become a zero waste society by reusing or transforming trash into new products? [Waste Management](#), the biggest trash collection company in the U.S., is investing heavily in companies doing exactly that. Recently it has invested in [Agnion Energy](#), a company that turns trash (or "solid biomass feedstock") into synthetic gas used in heating. That idea is not new but Agnion has developed a small-scale device that allows users to perform on-site gasification for a low upfront cost. In practical terms, this means that hospitals, shopping malls, and every other building or institution that collects large amounts of waste – like Waste Management – can get high-quality gas out of garbage. Waste Management has also invested in startups like [Enerkem](#), which turns trash into transportation fuel; and [Agilyx](#), a company that is attempting to turn plastics into crude oil. If any of these solutions are commercially viable Waste Management will have the ability to turn trash to power – and be in the enviable position of having already cornered the market. (Source: [Fast Company](#))

8. Business stepping up: From profit to purpose

Many businesses are stepping up to a new role, often with partners, to tackle societal and economic challenges. In many areas, corporations are seeking to build legitimacy – and the license to operate – in the eyes of demanding consumers, employees and stakeholders who

care about the impact and motivations of companies with whom they associate. But it's also good business as companies realize mutual benefits with society. Look for more businesses redefining their corporate purpose as they step up to this new role. Are you ready to take your business to the next step?

In Action!

Healthymagination: In May 2009 [GE](#) announced its "[Healthymagination](#)" initiative, committing to spending US\$3 billion over six years on healthcare innovation to help deliver better care to more people at lower cost. In addition, the company committed US\$2 billion of financing and US\$1 billion in related GE technology and content to drive healthcare information technology and health in rural and underserved areas. Two years into GE's six-year commitment the company had 43 validated products and services supporting their mission and they have touched more than 234,000,000 lives. (Source: Healthymagination 2010 Annual Report) A key to the success of this initiative is involving as many people as possible in innovation and sharing knowledge – whether through Facebook campaigns or by establishing [challenges](#) to find breakthrough ideas to tackle breast cancer.

The purpose-led business: Mahindra & Mahindra has over the past 10 years demonstrated high growth, enjoying leadership positions in utility vehicles, IT, tractors, and vacation ownership. Today they have growing presence in many different industries. What guides both investment decisions and the company's operations on a daily basis is its core purpose. Outstanding financial results suggest that being purpose-led and achieving high growth is compatible. *"Our motivation to give our best every day comes from our core purpose: we will challenge conventional thinking and innovatively use all our resources to drive positive change in the lives of our stakeholders and communities across the world, to enable them to Rise."* *"Companies that don't engage in projects that also create value for society are quickly eroding their brand, and they are losing the trust of the public."* *"If I had gone out and said, you must be purpose driven, others would likely to say, go preach to somebody else. But now, they are curious and want to know, why are they doing so well?"* Anand Mahindra, Vice Chairman and Managing Director. (Source: [Mahindra](#))

Look Out For...

The B Corp certification: Is to sustainable business what LEED certification is to green building or Fair Trade certification is to coffee. B Corporations are for-profit organizations that wish to "redefine success in business" by "not just being the best in the world, but being the best *for* the world." About 650 companies have embraced the status so far, including [Patagonia](#) and [Etsy](#). [Ben & Jerry's](#), one of the original socially driven companies, now owned by [Unilever](#), has obtained B Corp certification, making it the first wholly owned subsidiary of a publicly traded company to receive the status. Today, there is a growing community of more than 600 Certified B Corps from 15 countries and 60 industries working together towards the goal of redefining success in business. [B Lab](#), the non-profit American organization that certifies B Corporations has promised to certify 100 businesses outside the U.S. in 2013. (Source: [Urban Times](#)).

Taking responsibility: South African insurance firm Dial Direct has launched the Pothole Brigade, a road maintenance initiative that has repaired over 50,000 potholes in and around Johannesburg, as drivers reported them. (Source: [dialdirect](#)). In Russia, Martini brand vodka partners with a taxi firm to promote responsible drinking by addressing concerns over getting home safely. It has installed "TakeMeHome" machines in bars: When a customer buys a cocktail with Martini, he or she receives a straw that connects to a Breathalyzer. Blood alcohol too high? Get 30% off taxi services. (Source: [JWT Anxiety Index](#)). [McDonald's](#) has worked with [Conservation International](#) for years to develop environmentally and socially responsible food-sourcing guidelines for agriculture and fish products. In 2012 an undercover video from a Californian slaughterhouse showing bad treatment of cows led McDonald's (and other companies) to sever ties with the meat producer. (Source: [Yahoo News](#))

9. Information is power: The security challenge

Cyberspace is the new frontline for security. Knowledge and information is a source of competitive advantage, for organizations, nations and individuals. But it's a growing challenge to retain control as mobility and the democratization of everything (commerce, politics, and societies) increases – along with cyber crime and cyber war. Look for a rising tide of litigation, policies and regulation. Digital freedom or a “big brother” society?

In Action!

Global threats – did you know: That less than 1/3 of the information in the digital universe can be said to have at least minimal security or protection and only 1/2 the information that should be protected is protected. (Source: [IDC Digital Universe 2011 sponsored by EMC](#)). While no one really knows the correct number [McAfee](#) has estimated the annual cost of cyber crime worldwide at US\$1 trillion (Source: [Computerworld](#)). [Symantec's Norton group](#) has released another cyber crime study finding cyber crime has cost consumers about US\$110 billion in the last 12 months, affecting more than 556 million people. There is no doubt that cyber crime, cyber espionage and acts of cyber war is happening every day but the exact scale is unclear and the financial costs are difficult to calculate as solid data is hard to get! Are you and your business ready for the world of cyber crime?

Are we prepared at all? According to the report “[Cyber-security: The vexed question of global rules](#)” from the security and defense think-tank [SDA](#) with the support of [McAfee](#) 57% of global experts believe that an arms race is taking place in cyber space; 36% believe cyber-security is more important than missile defense; 43% identify damage or disruption to critical infrastructure as the greatest single threat posed by cyber-attacks with wide economic consequences. 45% of respondents believe that cyber-security is as important as border security. The state of cyber-readiness of the United States, Australia, UK, China and Germany all ranked behind smaller countries such as Israel, Sweden and Finland (23 countries ranked in report).

Look Out For...

Risking free speech: In the Philippines a controversial cyber crime law has been suspended after a public outcry. It was initially put in place to protect against Internet crimes like hacking, identity theft, spamming, and online child pornography. In January 2012 a similar public outcry swept the Internet and shook the power structure of Washington, D.C aiming to stop PIPA (Protect IP Act) and SOPA (Stop Online Piracy Act). According to Freedom House recent revisions to the United Arab Emirates' cyber crime law will not only restrict internet freedom but are in violation of citizens' rights to freedom of expression. (Sources: [Global Post](#) and [Freedom House](#)). The need for cyber crime laws are rising. In most countries cyber laws are meant to protect people but many believe a proliferation of regulation could stifle free expression and speech?

Getting more malicious and targeted: Cyber crime is increasingly dangerous for governments, businesses and ordinary people alike. As the malware Flame was discovered, the UN urged co-operation and peaceful resolutions among countries to prevent a global cyber war. [Symantec](#) is predicting that 2013 will be a year where cyber conflicts become the norm with nations, organizations, and individuals involved. Also expect more targeted attacks on individuals and non-government organizations. Ransomware will be the new scareware. Mobile adware, or “madware,” will be a nuisance that disrupts the user experience and can potentially expose location details, contact information, and device identifiers to cybercriminals.

10. Who needs banks anyway? Reshaping the financial system

The financial system is broken. Regulators want change, businesses want new means of financing and consumers want alternatives. The “banks” of the future will include state-owned entities, and firms that simply don't use cash: Think bartering and community currencies. Digital wallets and mobile banking are opening the door for telcos and software players, while trust is

the entry point for retailers and crowdfunding communities. In an increasingly crowded and cashless financial system, banks may no longer be key players.

In Action!

Alternatives to cash: Loyalty point, coupons, community currency, time banks, social network currencies, gamer currencies plus many, many more. Many of these alternatives to cash have existed for years, while others are relatively new. [Bitcoins](#) are an experimental new (2009) digital currency that enables instant payments to anyone, anywhere in the world. It is a currency that is not issued by any government, bank or organization, relying instead on cryptographic protocols and a distributed network of users to mint, store, and transfer the currency, using peer-to-peer technology. It is the most widely used alternative currency and has a total market value of more than 100 million US dollars according to [Block Chain](#).

Bartering: It has been around for centuries, but is seeing new life as a medium of exchange. According to the [International Reciprocal Trade Association](#) over 400,000 companies worldwide used bartering to earn an estimated \$12 billion on unwanted or underused assets in 2011. [Honda](#), [Kia](#) and [Subaru](#) have bartered cars for media trade credits. [Haymarket Exhibitions](#) made part payment for advertising using tickets to their exhibitions. Leading electronics firms have bartered discontinued stock, placing it in leading hotels in exchange for media and trade credits — gaining a potential new client in the hotel group in the process. Food manufacturers have bartered excess inventory in exchange for media credits or trade certificates allowing them to purchase other services such as hospitality and cleaning. [Lufthansa](#) has bartered real estate for media credits and aviation fuel. What could your firm barter?

Look Out For...

Mobile wallets: The age of mobile payments is well and truly here and picking up steam. Many companies are developing mobile wallet solutions, although no single mobile-wallet standard or technology has yet emerged, suggesting there will be standards/technology wars ahead. So retailers are naturally being cautious about investing in the technology required to upgrade terminals as they may end up with the wrong one (i.e. needs replacing) if they jump in too early. In August a group of American leading merchants announced they had formed Merchant Customer Exchange (MCX), a company dedicated to offering consumers a versatile mobile-commerce experience that will combine the convenience of paying at the register with customizable offers. It is still under development but will be available through virtually any smartphone. The MCX includes merchants such as: [7-Eleven](#); [Alon Brands](#); [Best Buy](#); [CVS/pharmacy](#); [Darden Restaurants](#); [HMSHost](#); [Hy-Vee](#); [Lowe's](#); [Publix Super Markets](#); [Sears Holdings](#); [Shell Oil Products US](#); [Sunoco](#); [Target](#) and [Wal-Mart](#). Combined, these initial members serve nearly every smartphone-enabled American and account for approximately \$1 trillion in annual sales. (Source: [MCX](#) and [Mobile Wallet Media](#)). Expect more companies to join!

Crowdfunding: Is a growing industry controlled by the masses and having the potential to disrupt established financial systems. It does not have the advantage of being “too big to fail” but it has come with a set of challenges that policy makers cannot afford to ignore. In the U.S. crowdfunding has technically always been legal, but in the spring President Obama signed the JOBS Act into law ushering in what will likely become a new paradigm for investment opportunities and alternate avenues for start-up funding. The act allows business owners and entrepreneurs to raise up to US\$1 million from small investors online. Since then many players have jumped in to launch new crowdfunding sites. Regulations are also needed in Europe, which raised around €300 million in crowdfunding or one third of the world market, across all types of crowdfunding. At the end of 2011, there were around 200 crowdfunding platforms active in Europe. Their number is expected to increase by 50% by the end of 2012. (Sources: [Inc.](#) and [A Framework for European Crowdfunding](#))

In January: Look out for the best of 2013 Trends!

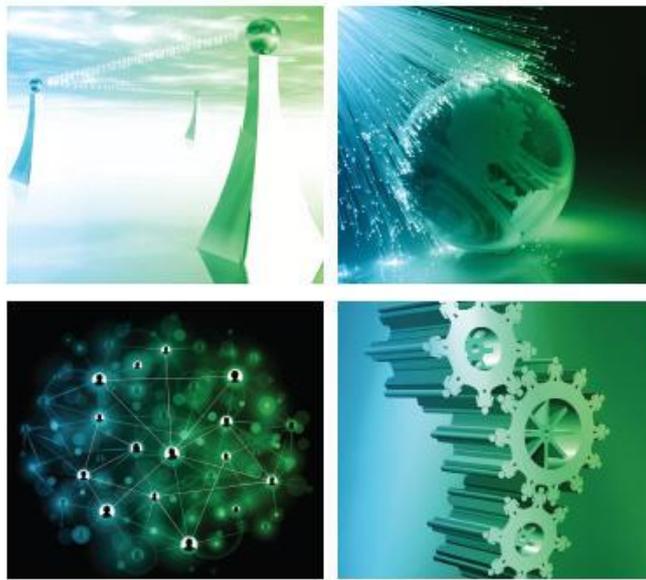
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*With best wishes for a peaceful and prosperous New Year
from The Global Trends Team!*