

## Circular business advantage: what organisations need to know

By Mickey Howard and Ken Webster



“gray wire lot” by [Daniel Fazio](#) on [Unsplash](#)

The circular economy and how it can be implemented is now the topic of considerable debate in corporations, universities and parliaments across UK, Europe and beyond. Given rising concerns around the realities of resource availability, price volatility, pollution and an increasingly fragmented, often poorly rewarded workforce, hopes are being pinned on looking again at the question ‘how do we produce?’

Adopting a circular economy approach might enable organisations to transition away from take-make-waste linear production, towards business models that allow goods to be designed and produced for extended use, disassembly, reuse and recycling from the outset. The potential for such a change is high, due to the mushrooming use of digital technologies such as sensors for tracking, for feedback on operational parameters and running experience. In addition, digital security can enable access to services, and the bundling of products and services as performance-based contracts. It is widely thought that this is just the beginning of the integration of products, data, users and contracts. Given the digital impetus and the rise in popularity of the term, circular economy is now no longer the preserve of the multi-national corporation, but one which all organisations including the small-medium enterprise must consider essential for future resilience and competitive advantage.

Circular business advantage is where organisations use the idea of the circular economy to create value. Beyond resource efficiency alone, businesses can also create economically-important outputs, not waste therefore, but as ‘food’ for other players in the economy or as deliberately-designed flows for their own business. The notion goes beyond waste minimisation to designing out the concept of waste altogether. Such a concept, based on decades of experience by innovators such as McDonough and Braungart’s cradle to cradle, Amory Lovin’s natural capitalism and Janine Benyus’s biomimicry, leaves behind 20<sup>th</sup> century thinking around linear production methods and sustainability thinking based on ‘doing less harm’, and instead embraces the concept of clean, net positive, production through circular business model design. It is regenerative and restorative by design. This may seem at present a rather distant goal, but with the recent launch of the EU’s Circular Economy Package, and the 2017 release of [British Standard 8001 Framework](#) for Implementing Circular Economy Principles in organisations, it may soon become common practice.

Introducing circularity is important because the typical nation’s resource usage is inefficient and wasteful, with only around 15% of Europe’s plastics currently being recycled, and China consuming more aluminium, steel and cement than the whole of the OECD put together. This crisis in natural resources and the knock-on effect of waste on polluting the land, air and sea requires a more radical approach towards resource effectiveness. Adopting a circular approach certainly offers a solution, but the degree of out-of-the-box thinking and regulation required overturns any sense of business as usual. Amid the negotiations in the UK for transparent trade agreements over Brexit, a clear set of rules are also needed to help kick-start cooperation around circular implementation across organisations both large and small, as well as measures which protect basic human rights from exploitation and zero hours contracts.

Brussels claims its recent Circular Economy Package will stimulate the EU’s transition towards a more resource-oriented economy and will ‘*boost global competitiveness, foster sustainable economic growth and generate new jobs*’. Even China, with its patchy track record in the past on environmental protection and waste management, has recognised the potential of circular production with its Circular Economy Promotion Law, adopted in 2008. But details of exactly how the circular economy will work in practice have not been considered carefully enough for trading organisations. For example, EU company law and corporate governance are not included in this new world of resource management and material reuse. And how, for example, will pricing of second-hand materials operate alongside virgin material? Will it involve removing the effective subsidies on the extraction of raw materials, or will it mean shifting them to subsidies for recovered materials, and for how long would they receive such support? Creating new markets which potentially undermine old ones has been shown to be difficult to implement. See, for instance, how carbon tax policies designed and implemented in the United States distorted consumer and market behaviour, ultimately backfiring on the legislator and having little or no net impact on slowing climate change.

Something has to be done however to reclaim the value lost when materials are incinerated, discarded as waste in already overflowing landfill sites, or exported for low grade reclamation in developing areas of the world such as south-east Asia. The UK and EU legislation that bans the export of used electrical equipment for recycling in developing countries that often employ underage labour is a step in the right direction, but more action is required from organisations to redesign their products, service offerings and supply chains to stem the one-way flow of products. While the language of circular economy has begun to be used in boardrooms and parliaments, the status quo around business regulation is less responsive to change. Here then are six predictions for aspirant, clean production and circular design driven organisations striving to understand what it means to engage with the idea of circular business advantage:

## **1. Product ownership will become a thing of the past**

Traditional price-based models are under pressure from many sides, from the changing customer, from lack of demand and from technology. Large scale production requires a guess at a 20+ year payoff for fixed investment, it means finding a market when in developed nations economic growth has been slow and markets are, anyway, saturated in durable goods and credit is nearly maxed out. The emphasis in the thinking now is on more agile, technology-aware smaller scale production, selling access rather than ownership and capturing customer loyalty in new ways. It's a perfect fit for a circular economy. Stagnant demand means finding a bigger share of the pie, and if new business models can work assets harder, lower costs and capture some of the benefits, then both sides can win. No wonder there is intense investigation of digitally boosted product-service systems. A vital aspect in the transition from traditional linear business practices is to understand what the [Ellen MacArthur Foundation](#) means by the 'power of circling longer'. Products in the near future will be designed to last longer and will be suitable for repair and eventually recycling at the end of useful life because the benefits of manufacturers or their business contractors retaining ownership become visible. The pursuit of extended lifecycle strategies involve substantial investment in product redesign, maintenance and upgraded support services. Many businesses will struggle to see this radical shift as positive, because it demands so much, but although it is an advanced option to adopt, not doing so opens the door to competitors.

## **2. Future trading will be dominated by incentives to use more recycled and fewer raw materials**

Any proposed major changes to trading structure are likely to require a stick and carrot approach by governments seeking to nudge business into action through a combination of legislation, subsidies and tax breaks. There are already first movers into the circular economy space accompanied by an impressive line-up of advisers, academics and consultants, all of whom exhibit various degrees of legitimacy and vested interest. Yet the role of government is crucial both in raising the profile and importance of the circular economy, and in encouraging the private sector to take the initiative in the conception and further development of material and product reuse schemes. In the US for example, new legislation requiring a substantial percentage of reused polymers to be used in commercial carpet production changed the rules of the game for carpet makers overnight. However, it is unlikely that the [UK's BS 8001 recommendations](#) will have a similar effect and will require more direct legislation in place before widespread uptake occurs. Yet taking 10 years to start implementing the circular economy is not an option. Savvy organisations will be already re-orientating their existing sustainability strategy towards one of circular implementation with trusted trading partners of a similar persuasion, and not waiting to act until new legislation or spikes in commodity prices hit home.

## **3. Servitisation and sharing will be core to business value**

Going downstream has been the call for decades by organisations adopting servitisation as a strategy that extends value, by shifting the emphasis away from product sales towards aftersales customer care. Some companies have already adopted servitised elements of circular business, where selling a service means customers pay only for what they receive, while the firm retains ownership and meets maintenance and repair costs. This has the added benefit of customers paying a fee only for the duration the service is actually needed and upgrading requirements if desired. But greater levels of information sharing will be required by both producer and consumer. Examples of such service-based strategies covering maintenance and repair include car sharing clubs, leasing washing machines, floor coverings, lighting systems, and aerospace engines, short-term bicycle hire, and vehicle tyre services: all require close monitoring and feedback on a

range of performance and usage parameters. How effectively such models incorporate digital technology will also play a major role in the accessibility to consumers of these new circular business services. Who controls the end-of-life process is also an issue affecting, for example, high street mobile phone retailers, where consumers expect a seamless recycling service in conjunction with appropriate reimbursement provided directly at point-of-sale.

#### **4. Business relationships will be more flexible, based around transparency and collaboration**

The need for closer relationships between suppliers and buyers seeking to detoxify their supply chains in the interests of environmental sustainability is not new. However the circular economy requires a different type of relationship which recognises the significance of creating not only closed loop material flow (e.g. take back schemes) but also integrated knowledge flow. Often key knowledge around reprocessing technology is held by suppliers, with buyers understanding post-production consumer behaviour and channels to market. Hence new forms of governance are required based around knowledge sharing, with collaborative supply partnerships based around the value of material reuse. This may mean adopting an open innovation approach where stakeholders create a knowledge network capable of learning from a wide range of external sources and disciplines. It may also mean acceptance by business leaders of changes to the current status quo, with some suppliers offering new technology services shifting their position in the current hierarchy.

#### **5. Customers will increasingly try to bypass traditional trading channels**

Big brand manufacturers need to be aware that increasing customer sophistication, market awareness and increasing information transparency via the web are creating scenarios where customers bypass traditional trading channels and develop direct supplier relationships. Does this mean the destruction of existing markets? Look at the disruption caused to traditional taxi firms and hotel chains by Uber and Airbnb. Whilst some countries are introducing legislation in a post-hoc attempt to protect consumer interests, others are just learning the lessons of disintermediation and the effects of new sharing-based business models caused by an increasingly frictionless ability of customers to switch service provider. The freedom of choice over goods and services to the consumer today is driven by a complex range of concerns (e.g. the environment, social responsibility, past experience, brand awareness, peer pressure) with the manufacturer having control over only some of them. Prudent business managers therefore will adopt a proactive and flexible approach towards their circular business development, seeking to address not just product life extension but also projected shifts in customer service needs. A point to note here: both steps four and five here hint at the increasing dominance of business by those who control the networks and platforms, not those who produce the goods. The top ten US businesses in 2017 included only one that made or sold goods, the rest were tech giants like Facebook, Amazon and Google.

#### **6. Whether global or local, the issues of resources, pollution and workers are interlocked**

There is a sense that circular economy is symbiotic with the changes being wrought by the digital revolution in an era of low economic and productivity growth. The employment situation (according to MIT professor Peter Temin) looks increasingly like the operation of a dual economy: around 15-20% of the workforce in full time and well paid employment and very large numbers of 'gig' workers, contract workers and part time workers operate outside this. It seems most of the trends are away from full time employment, especially as the challenges of rapid, general purpose artificial intelligence begin to be felt. It might be ironic, to say the least, to see a better approach to resource use, product design and waste providing overall health and

quality of life benefits, in the form for example of lower pollution, against a backdrop of precarious work and income. A circular economy is also a monetary economy (all economies are) and the challenge is to ensure that income and expenditure circulate as effectively as products, components and materials. It's good business sense, as business needs customers as much as customers need business.

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So, circular business advantage offers a pathway for both large and small organisations to identify, capture and retain additional revenues or reduce costs while meeting customer demands in new ways. This can lead to relative decoupling of resource use and through lowered costs of access and ownership which benefits economic growth. It's a systems perspective, however, and in Michael Braungart's words 'we always have to talk about the forest as well as the trees'. The combination of requirement for public-private partnerships, inter-business collaboration as well as competition may not always sit well together. Establishing some ground rules or agreements is important therefore, not just for organisations seeking more resource effective implementation strategies, but for governments and other third party agencies to know how, when or where to introduce appropriate levels of support or legislation in future.

Lastly, managers should remember that the circular economy leverages business models that offer a route towards achieving broad sustainability objectives, but it does not replace the idea of sustainability. Using the tools of a circular economy offers all organisations a lasting advantage by combining more productive ways of doing things, while engaging in more system wide activity: 'feeding the forest' and not just 'doing less harm'.

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