Are sustainable innovation and disruptive innovation mutually exclusive?

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Are sustainable innovation and disruptive innovation mutually exclusive?

Reading time 10 mins

Key Points

- Sustainable innovation considers environmental, social, and governance factors in product design: balancing the needs of today's consumers against the impact on future generations
- Disruptive innovation originates by targeting overlooked/neglected low-end market segments: entrants offer product/service alternatives that are 'good enough' at a lower price
- As entrants gain a foothold, they start moving upmarket – improving quality and performance, but without compromising on their advantages to the low-end market
- Disruption occurs when mainstream customers start adopting the entrant's products in volume – thereby creating a new market (e.g. Netflix, Airbnb)
- Although sustainable products are gaining popularity and are highly innovative, most cannot be classified as disruptive due to cost and quality, which position them in the high-end segment
- However, for sustainability to gain a mainstream foothold, disruption is needed
- This could open the way for **disruptive sustainability**

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While sustainability in the tech sector comes with a unique set of product design challenges (e.g. electronic waste pollution) and opportunities (e.g. plastic eating robots), there's no doubt that technology has a crucial role in achieving a sustainable future. However, with many startups focusing on being disruptors (developing new products that radically change an existing industry), what impact will that have on sustainability (improving existing products)? Both sustainable innovation and disruptive innovation are needed to ensure the future prosperity of people and planet, but are they inherently compatible or mutually exclusive?

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What is disruptive innovation?

The concept of 'disruptive innovation' was first introduced in 1997 by Harvard Business School professor Clayton Christensen to describe how new technology can transform a company and revolutionise an industry. Commonly cited examples include Uber's transformation of the taxi industry and Netflix for video content.

Since its introduction, the term has become so trendy and buzz-worthy that it's being used to describe any situation in which an industry is shaken up, and incumbents (i.e. those dominating the market) stumble. The problem with using the term too broadly is that it undermines the theory's usefulness by ignoring the basic tenets and key concepts of disruptive innovation:

- Incumbents focus on improving products and services for their most demanding and most profitable customers – exceeding the needs of some market segments and ignoring the needs of others
- Aspiring disruptors enter by successfully targeting overlooked segments (i.e. the low-end customers) and gaining a foothold by delivering a 'good enough product/service with less quality at a lower price
- Incumbents tend not to respond vigorously as their focus is on the high-end, more profitable market
- Entrants start moving upmarket – delivering the performance that the incumbent's upmarket/mainstream customers require (e.g. better quality) without neglecting the low-end customers responsible for their early success (e.g. low cost)
- When mainstream customers start adopting the entrant's offerings in volume, disruption occurs as a completely new market is established

The Harvard Business Review argues that while Uber is undoubtedly an innovative company that transformed the taxi industry and has become very successful worldwide, it doesn't count as a disruptive one: it didn't originate in the low-end market, nor did it create a market where none existed by turning non-consumers into consumers. Rather than disrupting an industry, Uber was able to differentiate by offering a quick, convenient, safe, and competitive option for a service that mainstream customers were already using.

Netflix, on the other hand, did. It launched in 1997 as a DVD rental-by-mail company targeting movie buffs and online shoppers who didn't care about watching the latest release or waiting a few days for their DVDs to arrive. They gained a foothold by targeting a low-end segment that the dominant market competitor, Blockbusters, was ignoring by offering a low-cost service and 'good enough' – albeit inferior product. They slowly and relentlessly started moving upmarket – improving quality, adding services (while keeping the advantages it had at the beginning), and pivoting to adapt their business model to become the online video content streaming and creator that put Blockbuster out of business and revolutionised how we consume content.

The distinction between what makes one company disruptive and another innovative might seem irrelevant – especially when they all enjoy similar levels of success and impact. However, regarding sustainability, this distinction might make all the difference in compatibility.

The difference between sustaining innovation and disruptive innovation

Sustainable innovation differs from traditional and disruptive innovation because it factors environmental and social sustainability into product development. By seeking economic success that doesn't compromise ethical best practices for the environment, people, and societies, companies can:

- Have a long-term impact that balances the needs of today's consumers against its impact on future generations
- Think bigger and consider how their actions or products impact the natural environment and their stakeholders – often inspiring solutions they might not have considered before
- Embed sustainability into company culture and positively influence how employees engage with issues affecting environmental, social, and governance (ESG) impact, for example, reducing waste, promoting workplace diversity, and supporting transparency.

Which is not to be confused with 'sustaining innovation'. Whereas disruptors serve either a low-end or new market (or both), sustaining innovation refers to enhancing existing products or services as the value network and market already exist – as was the case with Uber. Other key differentiators between disruptive and sustaining innovation:

- Product quality and performance: sustaining innovation creates products that perform better and are of higher quality than existing ones. Disruptive makes products that are 'good enough for an under-serviced market segment, gradually improving quality as their foothold gets stronger

- Target audience: disruptive innovation targets a low-end customer base but becomes attractive to mainstream or high-end customers once their product quality and performance become more appealing
- Business model: disruptive companies rely on a low-cost, low-profit business model
- Time frame: sustaining innovation happens incrementally in response to customer or market demands (e.g. AirBnB 'experiences') or technology improvements (e.g. how Netflix uses artificial intelligence). Disruptors tend to rise to the top quickly as their competitors overlook them.

What's interesting to note when comparing sustaining and disruptive innovation is that besides making a profit, neither have any of the other pillars of sustainability (people, planet, and purpose) – as a central focus. In addition, once disruptive innovators such as Netflix and AirBnB succeed, they become the incumbents and sustaining innovators of the new markets they've created: driven by high profits, better performance, improved quality, and more service offerings. Sustainability and disruption aren't 'either-or' strategies but fluid ones.

Sustainable innovation needs disruption to succeed

The pace at which the tech industry is advancing, coupled with the speed that new products, devices, and gadgets enter the market, is one of sustainability's most significant challenges: a constantly expanding and demanding consumer market built on finite resources, complex and easily disrupted supply chains doesn't bode well for a sustainable future.

Although companies across all sectors are placing increasing importance on sustainability, many prefer to carry on with business as usual – offsetting their negative environmental impact by paying third parties to plant trees and investing in carbon-capture-and-storage technologies. Others that have placed sustainability on their mandate don't have transparent sustainability reporting mechanisms in place – often misleading consumers into thinking that products they're buying are more environmentally friendly than they really are.

At the same time, few entrants in the 'genuinely sustainable' product design arena can be considered disruptors in the true sense of the word: innovative products leading the way on sustainability, such as fossil-free steel, carbon tiles, and solar glass, are generally more expensive and of a higher quality than their conventional counterparts. Research conducted by Deloitte found that 52% of consumers are yet to switch to a more sustainable lifestyle due to the higher cost of eco-friendly alternatives. So while sustainability is gaining popularity, importance, and investment opportunities, it isn't disrupting any markets as it hasn't yet achieved a mainstream foothold or created new markets.

This is where creating opportunities for sustainable disruption innovation is imperative.

- Products that are of lower quality but 'good enough' to serve a low-end market segment

- Create new resource flows that systematically reduce waste and cost
- Rethink current sustaining innovation vs disruptive innovation business models
- Use recent advancements in robotics and autonomous technologies to create a new vision and force that has a real and lasting impact

Final thoughts on disruptive sustainability

The conventional approach to innovation as a choice between sustainability and disruption is misleading as the two aren't mutually exclusive. Indeed, we must break away from convention and create new markets for products with a purpose that serve people and the planet, that can cater to the demands of quality-driven consumers without compromising on the needs of low-end audiences. This is a big ask, but one that we think is doable!

The last – and arguably most important – pillar of sustainability is partnership. Finding solutions to complex dilemmas posed by disruptive sustainability requires collaboration, and we're here to do just that. If you're as passionate about ensuring a sustainable future as we are and looking for a partner for your next project, contact us.

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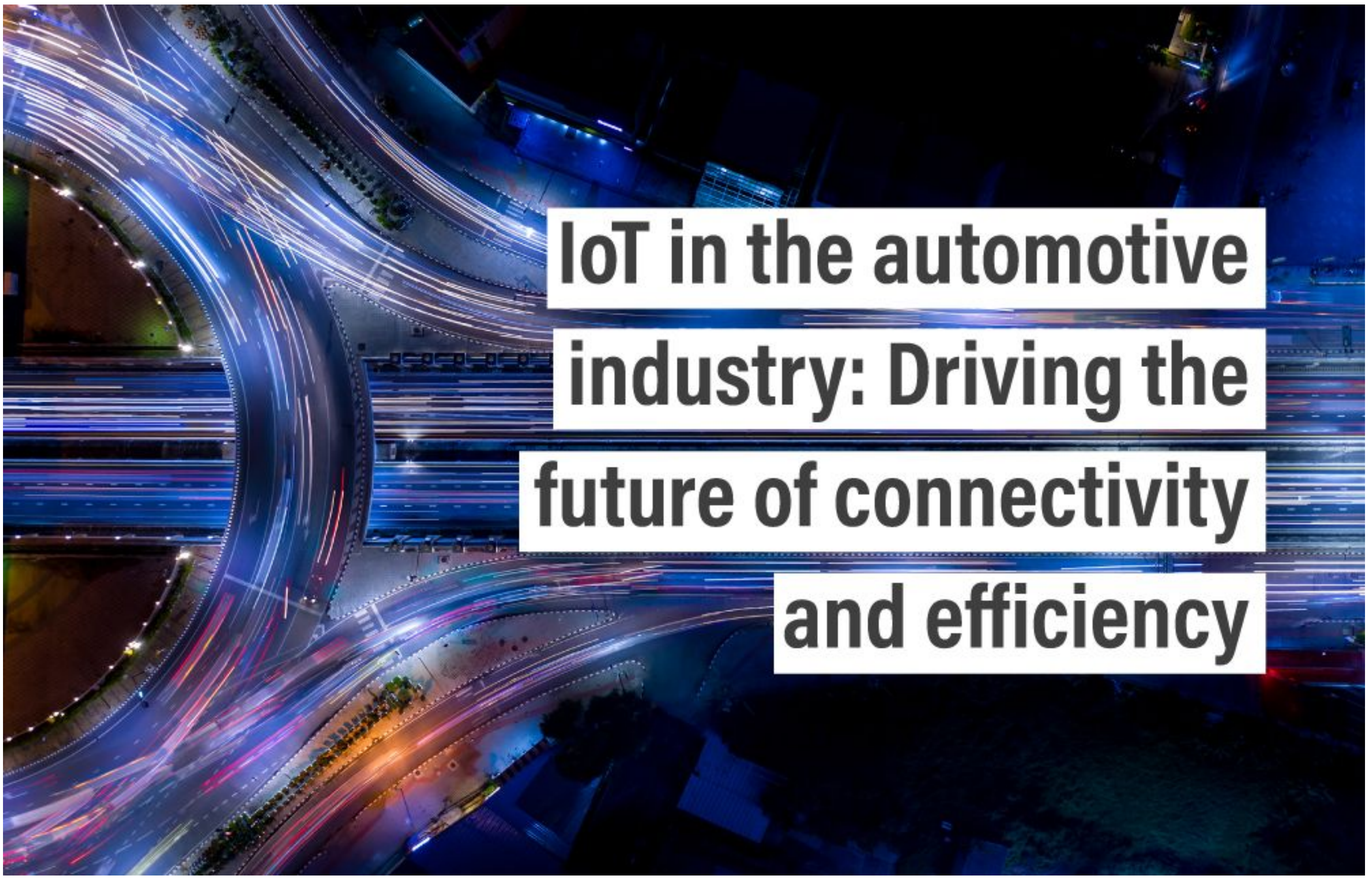

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