The rise of Green E-Commerce

Trends, Best Practice,Innovation Technologies and Forecasts

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Executive Summary

This C-Suite report analyzes the sustainability trends and best practices of green e-commerce while also identifying the different retail innovation technologies that have a positive impact on e-commerce sustainability for both consumers and businesses. All future projections and action plans of businesses regarding the viability of business and the world are presented. The purpose of the report is to provide business decision makers, company owners and investors with strategic information on the benefits and importance of environmental sustainability in e-commerce for both business operations and consumers' perceptions of the brand.

The paper also, analyzes all the best practices that a company should follow and incorporate into its marketing policy in order to achieve a successful sustainable marketing mix and fulfill corporate sustainability goals.

Green business is growing massively.

Consumer spending worldwide, overpassed the USD 8 billion on reusable water bottles in 2018, whereas the Global Sustainable Fabrics Market (including materials such as bamboo fibre and organic cotton) was valued at USD 58.3 billion in 2018 and is expected to be worth around USD 93 billion by 2025. By the same token, the green packaging market is set to reach the amount of USD 242 billion by 2021. A number of global surveys reveal that over 2 out of 10 consumers are examining the sustainability track record of a company and almost the same percentage strongly believe that firms should help to improve the environment.

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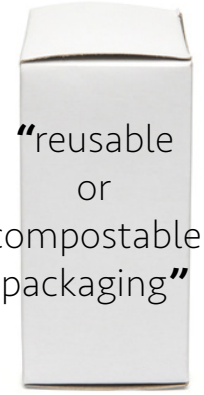
Additional survey shows that 63% of consumers prefer to buy goods and services from businesses that stand for a purpose that reflects their personal values and beliefs, and avoiding the products of their counterparts who do not. Millennials (85%), followed by the Generation Z (80%), are the spearhead of sustainability initiatives saying that it was "extremely" or "very" important that companies act toward this direction. However, it does not only concern their present-time pattern of behaviour, 72% of consumers asserted that they are currently buying more environmentally friendly products than they did five years ago, and 81% said they are planning to buy more over the next five years. According to global surveys, consumers around the world are very aware of the environmental issues and thus, 73% of them said that they would considerably change their consumption habits and behavior to reduce their environmental negative impact.



More specifically, 66% of consumers around the world said they would be "happy" to pay extra for products from a business which is considered as environmentally friendly, and also 41% of consumers consider organic products (such as paraben-free or preservative-free) as very important and therefore, they are willing to pay extra for it. Additionally, 38% are willing to buy in a higher price product made with sustainable materials (such as reusable or compostable packaging) and 30% are keen to purchase products delivered on socially responsible claims (such as free range).
Businesses are also making significant efforts to meet customer needs and trends setting sustainability targets and applying various tactics and strategies to implement them. To be more precise , 65% of managers of companies from a variety of industries around the world, believe that climate-related actions to are very important and 53% consider that equally important are actions related to the promotion of a responsible consumption.

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Although companies are aware that being eco-friendly is very important for customers and operations, they try different approaches that often prove unsuccessful. For example, about 70% of businesses are supposed to recycle paper, in fact only 7.5% end up in some recycling facilities and sites, resulting in 25% (80.6 million tonnes of paper) of normal waste being actually recyclable. But it does not end here, although 40% of packages consist air, companies use standard boxes for their products, no matter the size, for cost-saving reasons even though it proved failure financial-wise. E-commerce sales has a return rate of 30% and due to the lower price compared to the original, over 50% of the return products are sold, retailers may end up losing 10% of their sales. Brands though, are feeling more optimistic since new technology advancements have proved that sustainability goals can be accomplished.

Electric cars, the evolution of GPS and the rise of internet and social media and increasingly larger adoption of new technologies such as Artificial Intelligence, Augmented Reality, Virtual Reality and Internet of Things can fulfil customer expectations and bring companies one step closer to their goals.

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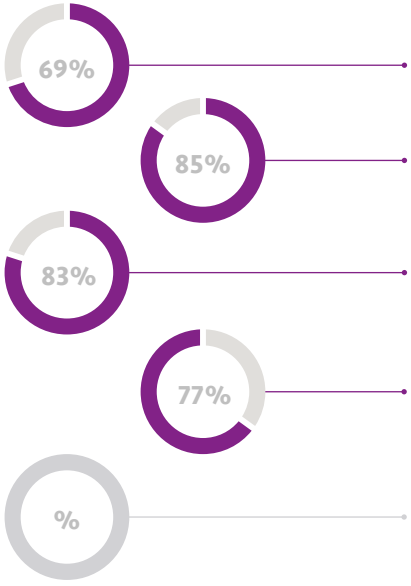

Other Key Findings

of the customers said that it is an extra motivation for them to proceed in a purchase if a retailer follows sustainable practices

of consumers maintained that they would opt for slower delivery, if it was clearly communicated within the website

of consumers believe that it is “important” or “extremely important” for companies to design products that are meant to be reused or recycled, eventhough price and quality are still a focus.

of responders perceive plastics to be the least environmentally friendly packaging material

Consumers in the age range of 18-24 years old adopt more environmental habits, with over half of them (53%) planning to use alternative delivery methods than the direct home delivery, compared to the 29% of the consumers in the age range of over 45-year-old.

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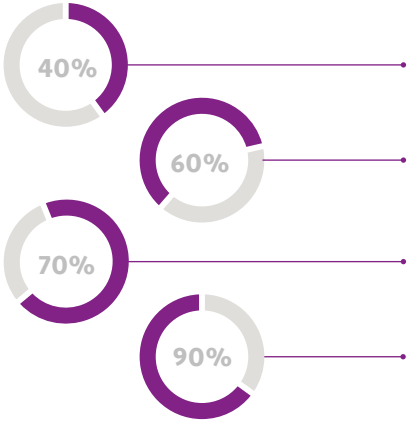

of shoppers are buying multiple items online with the intent to return all except their favorite items

of customers miss the first delivery attempt and have to ask for a re-arrangement

of consumes responded positively on receiving a financial incentive to choose a slower delivery option

of Americans are more likely to buy from brands that support social causes

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While shoppers continue to become more environmentally conscious and more aware of the negative effects of pollution on their bodies, put more pressure is put towards governments and businesses to do extra actions and offer more sustainability initiatives to prevent and eliminate the destruction of the environment. These efforts are powered by technology and scientific innovations that are providing companies all the necessary tools and knowledge and enabling them to better manage their production and design sustainable buildings, farms and products, with less time and cost. Here are a few predictions for the future of sustainability:

Local sustainable brands will benefit from their popularity and gain an advantage for cross-border sales. In emerging markets, where consumers have the economic power to expect more from companies, there will be a huge increase in demand for sustainable products and sellers. Forward-thinking and fast-acting local brands that take an advantage of this trend will be in a good position to use their popular and favorable, among consumers, products to jump across borders and expand in similar nearby markets. These consumers and companies will quickly catch up with and perhaps even leap over more developed sustainable markets.

Specific sustainability will transform into personalized sustainability. Specific sustainability will continue to rise and as technology is developing and find more applications in this field, the world will witness its transformation into personalized sustainability. Technology will enable consumers to meet their needs. Companies will need to clearly pass the message and have the data to prove how their new sustainable actions and contribution will help consumers.

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Brands will raise with socially-charged advertising. Challenger brands will increase in number and seek to target consumer sentiment through socially-charged advertising. These companies must be very careful to not cross the line and be seen as capitalizing on human tragedy. Before making their bold statement, they must evaluate and understand the consumer reaction.

Successful sustainable companies will increase their influence of power. Companies that undertake on sustainability challenges and prove success will be able to exert more political and cultural influence than ever. Consumers will reward brands that keep them, their families and the world safe by continue shopping from their online stores. Governments, on the other side does not stay idle, will recognize corporations that are driving major environmental change, improving the way of living of their constituents.[203]

Big part of the energy sector will be electricity from renewable resources. If everything flows according to the plan have set by governments and companies, by 2030 the global carbon concentration will fall down to 350 parts per million from 407 parts today. By then, the energy sector will be dominated by electricity, from which, over the half will be from renewable resources. In addition to this, energy will be democratized and people will be empowered to make decisions and they will choose energy sources that sustain life. Power generations will also move from centralized system to more widely distributed renewable generations. The power infrastructure will be further digitized, enabling the concept of sharing economy in the energy space. Finally, there will be better exploitation of excess solar electricity and more widespread use of electric vehicles which will lead to a more sustainable living.

203. Nielsen. (2018). Finding Success Through Sustainability.

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Temporary interventions focus on shifting people's perception about transportation. To ensure sustainable cities around the globe, people should find alternative ways of transporting from one place to another moving away from the over-dependency on the automobile. Temporary interventions such as car-free days, work with existing assets and focus on shifting people's perception.

Naturally responsive buildings with super low energy intelligent systems. By 2030 buildings and cities will be naturally responsive to the environment, culture and residents social, psychological and economic needs and preferences. This will be achieved with super low energy intelligent systems that is adaptive and resilient.[204]

Biodiversity loss will continue unabated. Biodiversity is anticipated to decline by at over 10%, with the largest declines in Asia, Europe and Southern Africa, and the threat from invasive alien species is expected to increase. Primary forests will continue to decline until few are left, even if the net loss of forest after 2020 is zero. Eutrophication of surface water and coastal areas will increase almost everywhere by 2030. It may then improve in developed countries, but will continue to worsen in developing countries. In a global level, the amount of lakes with harmful algal blooms will increase by at least 20% by 2050. Phosphorus discharges will increase faster than those of nitrogen and silicon (increased by a dramatic rise in the number of dams). [205]

Eco-friendly supply chains. Businesses are increasingly switching to innovative and intelligent technologies to reduce waste and become more efficient. Smart order routing combined with a great number of smaller warehouses, and automated rule-based order routing will match orders with

204. Parker, C. (2019). 30 visions for a better world by 2030.

205. Sustainable Development Goals. (2014). Prototype Global Sustainable Development Report.

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the available inventory in warehouses that are nearest to the consumers while saving time and reducing shipping costs. Likewise, consumer demand to be aware of a product's entire lifecycle also requires the ethical supplying of sustainable goods and materials. Big powerful retailers started demanding from brands, and penalize them if they do not comply, to set sustainable goals and measure their progress toward reducing corporate greenhouse gas emissions, create zero waste, use 100% renewable energy and sell sustainable products.

Sustainable manufacturing.
Energy-efficient and resource-saving manufacturing is just the beginning. Since customers are more aware about sustainability issues, the way brands manufacture their goods impacts the level of their satisfaction, instead of caring only about pricing and quality. To realize the environmental benefits of sustainable production distributed manufacturing systems (DMS) are being considered. There is a plan of creating flexible mini-factories closer to the end consumer which will reduces emissions by cutting transportation requirements. It will also rejuvenate and empower local economies from the generation of new jobs while it will improve identification and flexibility in terms of consumer demands.

Zero Waste Packaging. Zero waste packaging is a packaging system where all materials are either used, reused, or recycled so there is no waste product. Driven by consumer needs and preferences, it means that brands should go above and beyond the sustainable packaging. No packaging resources should be burned or buried, smaller packaged sizes needed and redesigned shipping cases required and these factors are shaping the future of a sustainable e-commerce. [206]

206. Winkler, N. (2020). What Is the Future of Ecommerce? 10 Insights on the Evolution of an Industry.

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The current consumer mindset values sustainability and this forces companies to adopt and communicate a more sustainable behavior. Now, reality encourages brands to create awareness amongst online consumers for more conscious shopping decisions and to produce and offer smarter products as well as more sustainable delivery options.[207]
As the quality of life improves, consumers are looking for better, healthier and more sustainable products and companies; this eco-friendly attitude creates a great opportunity for businesses to further cross-border expansion. Big multinational companies should work at a faster pace to seize this opportunity and utilize their existing benefits in scale, distribution and marketing.[208]

But it's not just the giant companies like Apple and Walmart that are getting into the act. In fact, many small businesses and start-ups are also showing their commitment to environmental change. This can be seen by the number of retailers on Etsy, but also in other marketplaces that are putting extra efforts and applying technology innovations to become greener. Green e-commerce is more than just marketing, it is a series of tangible operational benefits that will remake the industry and our world.[209]

It is important for both consumers and businesses to think about how their choices and strategies affect the environment. Because of e-commerce, product purchases and returns are made easy, anytime, from anywhere, so that consumers are not aware of the environmental consequences of over-consumption or their shopping behaviour and decisions.

207. Kamst, A. (2019). Sustainability sells, but how environmentally friendly is our e-commerce?

208. Nielsen. (2018). Unpacking the Sustainability Landscape

209. Business Blog Shub. (2018). The State of Green Ecommerce in 2018.

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Although, consumers can choose to be greener by choosing companies that promote sustainability awareness. But also shop from companies that offer sustainable products and services such as sustainable packaging, delivering and shipping options. Another practice they should follow is to choose a delivery method, if there is an option available, for multiple purchases to be shipped together and avoid same day or next day delivery. But it is not only this, consumers very often buy products that they do not really need or it is not exactly what they expected and return them as a result. Checking reviews and the product dimensions could be very effective behavior to avoid returns which is consider one of the most common unsustainable practices.[210]

Some other things consumers can to do to protect environment is to order several items at a time, instead of buying items piecemeal, so they end up in the same package, which means the mail truck is only making a stop at one house once, rather than several stops.[211]
But also, if the product will be returned, to be ready for sale soon. This means that the product should be returned to the seller as soon as possible in order to be more likely to be sold again. Additionally, to take items to a collection center for returns, like UPS offers, instead of mailing it off in order to avoid extra delivery journeys.[212]
On the other hand, businesses aim to come closer to the needs and demands of their consumer by providing convenience, speed and exceptional customer service, as well as a variety of products in low prices, adopting practices that compensate environmental sustainability. Instead, the company should create more sustainable collaborations with partners that adopt eco-friendly practices. Businesses also should careful with paying massive attention to their packaging.

210. TruleSolutions. (2017). Environmental Impacts on Product Returns.

211. Segran, E. (2019). Your online shopping has a startling hidden cost.

212. Calma, J. (2019). Free returns come with an environmental cost.

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Apart from developing sustainable materials and no matter how big is the size of the product, in order to reduce waste, packaging should also well protect the product. A common reason for returns is when the product arrived damaged. As a result, the product cannot be resold and thus ends up in the landfill. Literarally, that means a company deliver a product, which hurts the environment, and then the customer sends back the broken product, so they are essentially mailing trash.[213]
Eco-friendly delivery options are equally vital to maintain sustainability. Firms should partner with delivery service providers that apply green practices, including green delivery options and methods such as consolidated deliveries, click and collect, delivery points and more, sustainable vehicles such as bikes, electric vehicles and so on. Spreading awareness is another best practice for companies to be considered sustainable, either by organizing educational events in collaboration with organizations or via their website by informing customers about the environmental benefits of ***"green"*** decisions.

For example, they can motivate consumers to pick the ***"green delivery"*** option, so they can contribute to the company save an X amount of CO2 emissions. Other suggestions on the policies that e-retailers and vendors can adopt include the utilization of the latest technology, so that consumers will enjoy an exceptional online shopping experience or they can enhance the customer journey by boosting trust and customer loyalty levels.[214]

If companies can limit the inefficiencies and consumers adopt a more conscientious shopping behavior, the environment will become more people-friendly, and businesses will reap the economic, social and environmental benefits that a sustainable culture will bring them.

213. TruleSolutions. (2017). Environmental Impacts on Product Returns.

214. Oláh, J., Kitukutha, N., Haddad, H., Pakurár, M., Máté, D., & Popp, J. (2018). Achieving Sustainable E-Commerce in Environmental, Social and Economic Dimensions by Taking Possible Trade-Offs.

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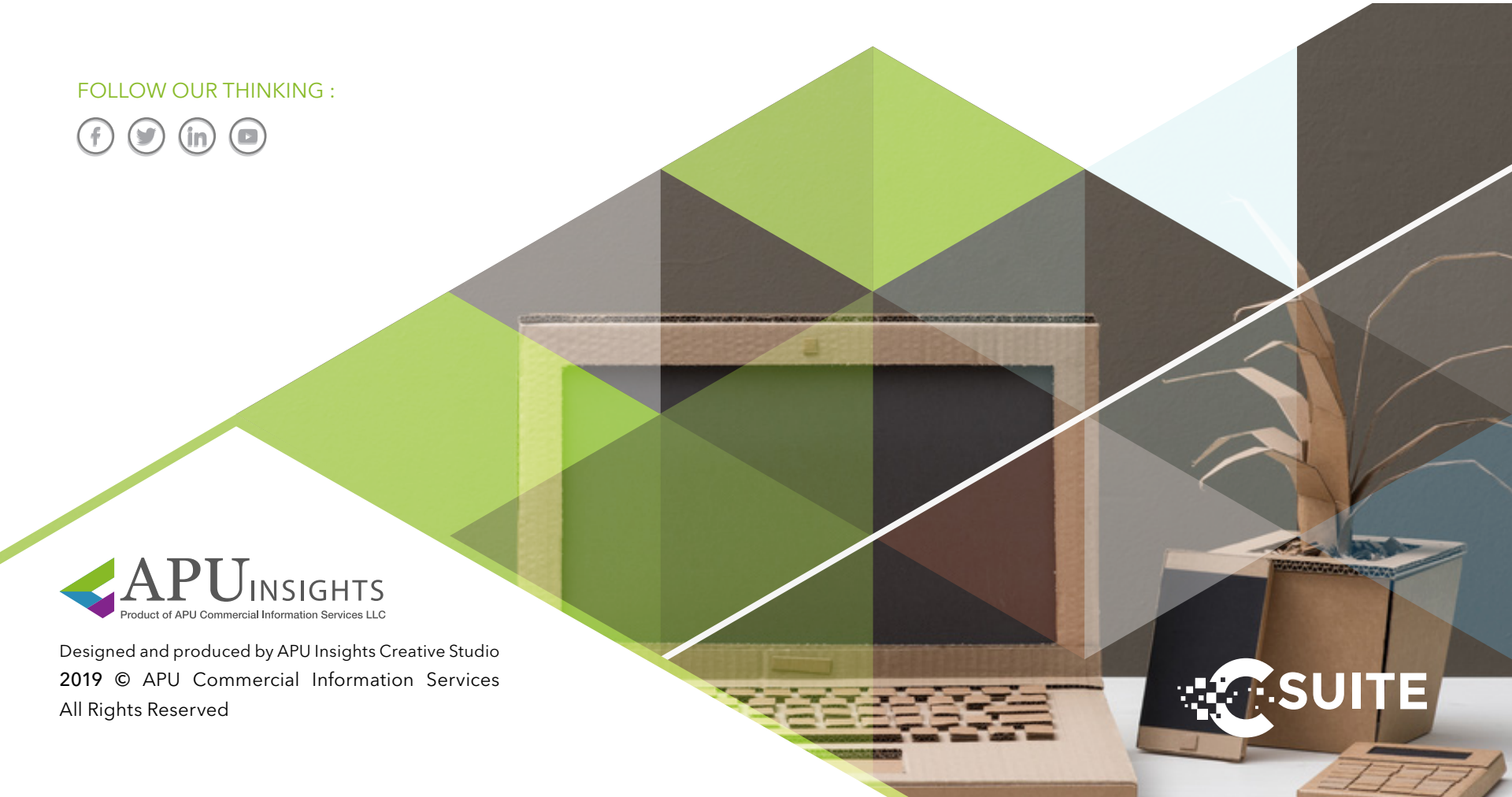

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