



INNOVATION AND SUSTAINABLE DEVELOPMENT: “NURTURING SUSTAINABLE ENTREPRENEURSHIP AND STARTUPS FOR A BETTER TOMORROW”

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Abstract

Innovation have been considered very important factor in every field of life. Now it becomes the inseparable part of our day to day life. Traditionally innovations were associated with the companies or business in the sense to increase their profits and improve their products. But now a day as per the demand of the society and environment the meaning of innovation is changed. It is taken as the making business operations and the products more efficient and safe. Sustainable innovation is known as the act of continuously improving the products, processes and workplace to create a brighter and more sustainable future-for customers, employees and the environment. Our environment needs relaxation from all the negative business operations which are harming it adversely. This is the biggest challenge to the world to develop entrepreneurship eco-friendly. So different innovations are taken place like Incremental innovation, Architectural innovation, Disrupted innovation and Radical innovation. The sustainable innovations reduce burden from the environment and make environment friendly for present and future generation. Some characteristics of sustainable innovation are it has environmental responsibility; it aims to reduce resource consumption, minimize waste and pollution and mitigate negative impact on ecosystem. It has social impact. It needs collaboration and partnership and has economic visibility. A business entrepreneur should pay attention to the product innovation, service innovation, process innovation, business model innovation, technological innovation and marketing innovation. For implementing sustainable innovation in a business, it should change their psychology towards environmental safety. They should give training and rewards for best efforts. They should work to remove barriers in the way of sustainable development. They should collaborate with research workers and encourage them for innovative and sustainable development efforts. So all we need to make our environment green to use our resources with new ideas of using them in a new way with collaborative efforts of all human beings.

INTRODUCTION:

We are moving towards the new era of growth with environmental preservation and other important considerations. This is possible with the combine efforts of the present and future generation. Innovations play very crucial role in protecting the nature. Innovation is the process of bringing about new ideas, methods, products, services or solution that has a significant positive impact and value. It involves generating creative



concepts into realistic outcomes that improve capacities and efficiencies or address the unmet needs. Basically innovation is the new idea that makes the present task more easy and appropriate than before. Innovation works for value creation and enhancing efficiency. But now sustainability is added with the innovation which means the use of new ideas and concepts in such a way that no harmful impact would be on our surroundings i.e. nature, society and economy. In other words sustainability refers to the ability to maintain and support a process continuously over time. In business process sustainability seeks to prevent the depletion of natural and physical resources, so that they will remain available for the long term. Sustainable innovation is known as the act of continuously improving the products, processes and workplace to create a brighter and more sustainable future-for customers, employees and the environment. The core features of sustainable innovation are sustainable business, corporate culture, and system thinking.

DIFFERENT TYPES OF INNOVATION:

Different innovations are taken place like Incremental innovation, Architectural innovation, Disrupted innovation and Radical innovation.

- 1) **Disruptive Innovation:** disruptive innovation involves reinventing technology and business models, or creating entirely new concepts. This innovation type generates novel products, markets, and values, intending to disrupt existing norms. Example of disruptive innovation pioneers include Waze, Uber, Netflix etc.. This innovation goes beyond improving existing products. It introduces product or service in an unexpected ways. It involves uncovering new customer's categories, lowering costs, and enhancing quality. It also explore to the area which is unreachable.
- 2) **Incremental innovation:** sustaining innovation focusing on improving the existing product or service or processes in the established market. It do not focus o creating new market rather it enhance the current ones with improved value. These types of innovations are made with the feedback of customers, market demand or technological advancement. For example the market of Smartphone or applications there are always up gradation in such a way that meets the demand of the market. Open channels to get feedback are maintained in this innovation to gather the customer's satisfaction with improved product. This innovation helps to improve the product to perform same functions but more effectively and without changing the original idea.
- 3) **Architectural innovation:** architectural innovation occurs when new product or services use existing technology to create new market and new consumers that didn't purchase that item before. For example, the smart watch replace



Smartphone by using existing cell phone technology. It is a process of changing the way the components of a product or service are configured together to improve outcomes. This process involves analyzing the design, structure, layout, and how various parts in a system combine-then using this to make improvements. For example: a manufacturing business configures assembly lines by introducing robotics or automation technology, it helps in increasing efficiency.

- 4) **Radical innovation:** radical innovation is that type of innovation that destroys or supplants an existing business model. Unlike other innovations it completely blows up the existing systems and processes to replace them with something new. Radical innovations are highly-risked and highly-rewarded too. Amazon is the example of radical innovation that firstly offers the online shopping and capture new market.

WHY SUSTAINABLE INNOVATION IS NECESSARY IN ENTREPRENEURSHIP?

A sustainable innovation process play a pivotal role in maintaining market relevance and achieving long term goals of success. When a business implement sustainable innovation strategies, it allows a business to adapt to evolving customers needs, technological advancement, and market demands according to the trend. Here are some key points which explain the above question's answer in detail:

- 1) **Knowledge about customers needs:** If a business applies sustainable innovative policies, it stays tuned with customers and make product accordingly with the satisfaction of the market needs and get positive feedback. This leads to the foster loyalty in product or service and satisfaction of consumers.
- 2) **Involvement of Advanced technology:** Sustainable innovation is now become the inseparable part of this technological era. A business should focus on the use of its resources efficiently without harming natural resources, which may attract customers positively. Because everyone is now wants to move towards organic products.
- 3) **Competition and trends in market:** The existing competition between different business entrepreneurs is very tough. And the trends of product and service have a life cycle which attracts different innovative ideas to remain in market and to grasp the trends which is famous among customers.
- 4) **Innovative business operations:** An incremental improvement in internal processes contributes to the operational efficiencies. It makes easy workflow, reduce cost and enhance productivity of machines as well as human beings. It is important to do operations in such a way that will provide relaxation from competitive environment.



5) **Customer Retention and obtaining new clients:** The sustainable innovation keeps current customers and draws the new one. The perception of a business enterprise as ahead thinking and responsive to client desires may be powerful force for brand new consumer acquisition.

6) **Risk Minimization:** sustainable innovation involves new business models and with those models hazard is managed in right way and it's also minimized by the usage of new environment friendly technologies, and in fee effective manner. This manner is called risk mitigation.

7) **Long term balance:** sustainable innovation fosters a culture of non-stop improvement, make successful to address demanding situations, invest in possibilities, and stay energetic to fife the uncertainties.

8) **Building goodwill with key stakeholders:** the goodwill of a enterprise will increase with the development of the product or service and stakeholders display their religion in this kind of products or services.

EXAMPLES OF SUSTAINABLE INNOVATION:

Sustainable innovation have some appropriate examples which trade the way to look out the world definitely like-renewable energy resources, inexperienced era, social entrepreneurship, agriculture improvements and so forth. Via integrating sustainable era into their business techniques, a business can deal with the demanding situations and grasp new opportunities for growth and development. Some successful examples of sustainable innovation are:

1) **Renewable Energy Innovations:** the instance of renewable strength is Tesla a leading electric powered vehicle agency also smooth electricity organization. It through the example of a success power renewable innovation in transportation discipline.

2) **Circular answers in commercial enterprise:** this focus on reducing waste, maximizing resource performance, and promoting the reuse and recycling the precise material. "Mission 0" has implemented in a few organizations to recycle the waste products.

3) **Vertical Farming:** Vertical farming is considered the pretty efficient and sustainable way of manufacturing food. Nordic Harvests say that it uses 250 instances much less water than the conventional farm could need. It creates gold standard developing conditions. It also removes the need of insecticides.

4) **Green Innovation:** Green innovation involves all the techniques and strategies by which the herbal resources could be used successfully. It also makes efforts to recycle, renew, and reduce wastage with obligation.

5) **Transparent sun spray:** Enrol developed a exquisite new spray on solar film which includes steel neon particles embedded in a obvious composite matrix that lets in you to turn normal windows into solar panel.

6) **3D printers:** Every year masses of plastic is utilized by humans and after using it's far thrown in water, on streets and so forth. Waste pickers convert excessive density



polyethylene (used for plastic bottles basically) into 3-d printing filament to in the end to be bought to 3-d printing organizations.

7) **Sea bin for the sea:** American inventors Peter and Andrew advanced sea bin- a type of submersible rubbish can that captures floating trash. A bag filters out, made of herbal cloth, collects the trash and permits the water to bypass through.

8) **Edible Cutlery:** Instead plastic utensils, Bakeries are making edible cutlery that is vegan-pleasant and made with rice, wheat, and an historic grain referred to as sorghum, which become picked as it does no longer move soggy while have interaction with liquid. These cutlery comes in three flavours-salt and cumin, candy (sugar), and simple.

9) **Science metropolis:** Science town is an installing system so that it will permit it to harness herbal heat all through the summer time days, pump it underground and shop it till the winter, after which driven returned into constructing and paintings as a heating machine.

10) **Bio Trans:** Bio Trans are hooked up in restaurants and special canteens, wherein it collects leftover meals and turn it into biogas, a renewable strength resource. The meals waste is pumped inner a closed, door unfastened device to a tank in which it's far stored.

11) **Retro performance:** This is software program which fights with power losses in a building.

12) **View Intelligent window glass:** it automatically regulates the temperature and mild in room resulting in excessive power saving. It is designed for business homes.

13) **Radiant cooling generation:** In this generation, a temperature managed floor cools indoor temperature by putting off sensible warmth and half of warmth is transfer thru thermal radiation.

14) **Siddhartha village:** It is a community or organization of a few villages situated eastern states of Orissa, who are promoting indigenous subculture, natural farming strategies, and farmers training. Under this a federation of fifty four tribal girls's self help group is created.

15) **Dharma lifestyles:** Dharma life is a social employer which creates sustainable livelihoods by education marketers to provide rural clients with existence improving merchandise. It has offered easy cooking products and sun lamps to rural vicinity clients.

KEY CONSIDERATION/PRINCIPLES FOR SUSTAINABLE INNOVATION AND DEVELOPMENT:

Now a day's greater efforts are done within the area of sustainability in progressive ideas by means of marketers. Everyone is dashing toward renewable resources and efficient use of present assets because of social responsibility worries. There are some factors which might be required for sustainable improvement and innovation:

1) **Start-up Leadership:** each innovation requires leaders to start some thing new. A larder is the individual that communicates the vision and inspires others to work towards modern and sustainable trends.



- 2) **Risk bearing capability:** the term no risk no advantage is very true inside the business field. No innovation might be there if leaders fear from risk. As failure is the high-quality trainer and gives improve to restart, so risk tackling capacity is have to within the discipline of sustainable developments.
- 3) **Creation of value:** if there may be a modern concept, except it isn't utilized in fixing any trouble, it is going to be taken into consideration valueless. It'll creates values only than whilst it solves clients troubles without difficulty and correctly.
- 4) **Accountability:** Accountability is likewise very crucial precept of improvements and sustainable developments. Leaders who are hesitate to take complete duty, drops many innovations at the back of. Accountability includes speaking with crew about the making plans, necessities, procedure etc.
- 5) **Application of generated concept:** innovation is working on random concept. It starts off evolved with a vision and gives consequences fast from a system of concept technology.
- 6) **Ownership with uncertainty:** whilst a inventor invent new concept manner or method, there's one ownership is wanted to stand all uncertainties of market, business model, clients acquisition, growth method and many others.
- 7) **Training for positive mind-set development:** innovation needs hiring human beings with natural interest, open mindedness and potential to appearance out the arena in a different way and full of possibilities. Training to these is essential to hold the high quality mind-set towards objectives.
- 8) **Proper control:** A nicely designed managerial competencies are wished in making innovation. Coordination among all sports and people should guess there to implement thoughts properly.
- 9) **Regular remark and measurement:** Product lifestyles cycles maintain shorter and shorter and at the moment each commercial enterprise wants to study and degree the consequences often, this method offers start to new concept earlier than product lifestyles ends, and ROI might be maintained.
- 10) **Reward to associated humans:** Innovations are the end result of hard work and willpower of the related people. And those humans must be rewarded to motivate innovations in future. People are the great source of innovation.

CONCLUSION:

Survival in nowadays world of fast commercial enterprise change requires that you preserve one step ahead of you. Competitions, innovations give lifestyles to a commercial enterprise at starting, and make it stay for long term. But it far ought to that an enterprise innovates with sustainable development manner. Sustainable innovations are now an afternoon's only key thing which facilitates to develop commercial enterprise with social duty, fulfil economic responsibility with safety of environment via using natural assets efficiently and other sources with recycling and different energy renewable strategies.



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