SUSTAINABLE DIGITALIZATION

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ABSTRACT-The Current paper intensely magnifies the need of sustainable digitalization in today's acquisitive era.Truly speaking gratifying the countless humane needs, nature has paid immense cost. Giving ovation to the colossal sacrifice of nature and recognising the looming menace interestingly astute mankind has come up with an amazing solution. Very interestingly man had clubbed both the concepts in a single roof sustainability and digitalization; which can be named as Sustainable Digitalization. This fabulous concept was conceived by Born Green Technology (BGT) a private company of Switzerland which was born in 2012. Within a short span of time i.e. 2017 February it proudly publicize the commencement of digital building enterprises IOT platform at Alpiq in Tec. Sustainable digitalization provides a new look to the technology era. As it is both sustainable and digital in nature, it focuses on wide variety of outcomes and adjunct an organisation to attain its objectives. Connecting the dots between the sustainability & digitalization it caters an exclusive track binding environment, economy and social outcomes in a single thread.

Environmental dilemma turned into a nightmare for every government. As a result of which government had imposed green policy on various business enterprises in order to trim down the hulking carbon based energy sources. Government has also introduced tax rebates and other incentives to entice the companies to meet the green requisites. Now-a-days in order to control energy consumption and gain long term benefits companies are eagerly investing their time & resources in finding a concrete solution for this problem. Current paper highlights the benefits of sustainability with digitalization which not only gives a ray of hope to government and general public to challenge the climatic catastrophe or environmental dilemma but also help to face health hazards. Honestly speaking it gives a new face to the business in creating its distinctive picture and long term profit.

Key words: **Sustainability, Digitalization, Sustainable Digitalization, Business, Government policies**

INTRODUCTION

The consumption of natural resources are in a leap and the bullying effect terror our present and imperil our future. Still we fail in meeting the sustainable conditions in spite of several efforts and experiments. Some experts have rightly pointed the imperative cause of "Sustainability gap" (Lubin and Esty, 2004). Indeed it is pity to note that individuals and organisation keep on adding unsustainable conduct in their escalation ladder without having any idea about its fuming consequences.

Sustainability is a well versed topic since its incarnationin 1972. Sustainability can be defined as a socio-ecological process categorized by the quest of a common principles. "Sustainability development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundland Report, WCED 1987; 43).Globescan/ Sustainability Survey (GSS), focus on the progress made on the Sustainability Development Goals or Global Goals approved by the United Nation member state together with civil society and business in 2015. The advancement of the goals is assessed by 500 experienced sustainability professionals. Environmental Protection Agency (EPA) says "Sustainability is not a part of our work – it's a guideline influencing all of our work". Honestly saying sustainability is a priority for today & tomorrow.

While talking about digitalization it is the need of time. **Digitalization** is nothing but a process of making everything digital which can ultimately make our day to day job easy, accurate, better and accessible. Digital revolution marks the beginning of information age. Since 1950 till today every moment digital technology elevates its magnitude. At about 1990's digitalization has changed the way we work, shop, bank, travel, play, govern, educate, manage our health and lead our life. Now it turned into a habit of almost every individual, without which life seems impossible. Ones and zeros are as if commanding the world. Today creating, keeping, communicating and consuming of information all depends on digital technology. All types of enterprise whether big or small, government or non-government are digitally processed. Today digitalization turned from opulence to necessity.

Digitalization arrests somewhere when environment is considered. In front of sheer volume of publication, events and perks of digitalization sometime environment moves out of site.But as per various paper industries electronic products also leave a carbon footprint and energy needed to operate them is an added hunk. According to the 2009 United Nations Report e-waste is on raise. About 40 m tons of e-waste per year has been recorded in the countries like India and South Africa. As per the research by Harvard University physicist on computers, desktop computer generates about 7 grams of carbon dioxide. If we only consider Google we can surprisingly note that Google itself handles about 200 million searches daily, which is not at all a negligible amount.Andrew Ellis, professor at Aston University stated that internet consumes about 8% of UK generated energy and if it continues in same paceby 2035it could consume allUK power.

After a keen survey on both sustainability & digitalization we found that they are unevenly matched pair. Rather than finding the priority between them let us think how to use it together. On one hand sustainability is for visionary purpose which many companies opt for and other hand digitalization is a technological gift to the mankind without which mankind can't imagine their life. Very interestingly some specialists have come up with a precise solution binding both sustainability & digitalization in a single thread. This is named as **Sustainable Digitalization** it can also be uttered as eco-digitalization, green-digitalization, etc. This remarkable idea was comprehend by Born Green Technology (BGT) a private company of Switzerlandwhich wasborn in 2012. Within a short span of time i.e. 2017 February it proudly publicize the commencement of digital building enterprises IOT

platform at Alpiq In Tec. Sustainable digitalization caters an sophisticated picture of technology which is both sustainable and digital. It spotlights on extensive range of upshot and appendage an institution to meet its objectives. Relating both the concepts of sustainability & digitalization it gives new face to economic & social scenario, which further shape the business and give a boost to the economic progress of a nation.So, it's right time to buzzer the alarm to create awareness regarding environmental safety practices with technological advancement.

OBJECTIVES

- To know the effect of sustainable digitalization on business.
- To know whether sustainable digitalization put any impact on a product and brand value.
- To know whether green digitalization in responsible for positioning of a company.
- To know the factors responsible for attracting consumers towards sustainable digital purchase and giving a new face to business.

ENVIRONMENT SUSTAINABILITY THROUGH DIGITALIZATION

ICT and Big data may serve as the catalyst to promote sustainability (Gijzen 2013, Hampton et al 2013). By the use of a Big data driven "transnational sustainability agency" (Seele 2015) or digital "global participatory platform", digitalization can help to increase strong sustainability in the environmental, social and economic sphere (Helbing, 2012).

3D printers helped to solve much of the problem by rendering transition from digital to tangible plastic objects. It gives greater scope for light weight digital construction. Simple products no longer need to be manufacture in the far located factories. This process reduces global transportation and warehouse costs.

Now-a-days replacement parts are produced quickly by which the whole system or machine need not be replaced; instead small part replacement can solve the problem. Today services have raisin their head and lead a crucial role. The industry dominates the market who provided better and timely service. This helps to increase the durability and reliability of product.

SUSTAINABLE DIGITALIZATION IN VARIOUS FIELDS

From the global exploration on mobility it is found that transportation accounts for over 50% of world consumption of fossil fuels. Forecast says that it may increase to 60% in 2035.

Railway seems to be one of the best transportation medium. It accounts for mere 2% of CO_2 emission and a very safety mode of transportation. In UK railway carries twice as many passengers carries just two decays ago. It shows the fuel consumption is reduced to half for the same numbers of passengers. The European railway are in the process of becoming green with the conception of "Railsponsible" a new programme initiated by six of the biggest rail operators and manufacturers on the continent. Railsponsible aims at encouraging sustainable procurement and setting a common ground for climate friendly business procedures. Today there is no need of carrying a printout of the ticket a message on your mobile is enough while travelling. This is another step by digital technology towards sustainability.

Banking sector is considered as one of the clean sector which has minimum negative effect on environment and society. Direct impact of the banks energy waste and papers are comparatively less than other sectors. Whereas banking sector is a large sector, so its impact on environment cannot be ignored.

According to a report by Rajesh Nair in economic times online payment in India accounted for 14% of total transaction amount in 2015. The main reason behind this spike in cashless transactions is the growth of ecommerce industry in India, which allowed consumers to purchase products at discounted rates at the realm of their homes. The new-fangled age group are reliant on hi-tech gadgets and technology to make funds transfer as it's easier, hassle-free and instant transaction compared to paying by cash or cheque. With online funds transfer or virtual payment system, people can send or receive payments instantly at the touch of a button rather than visiting banks to withdraw or deposit money. Now-days manycashless payments about 71% comes from retail electronic clearing which adds overall cashless transactions in 2015. Deputy Managing Director (corporate strategy and new businesses) at State Bank of India, Sunil Srivastava says that, "At SBI, about 69% of daily transactions happen through alternative channels, including internet, ATM and mobile banking. We see it rising every year with more young people becoming our customers."

Samsung as one of the electronic & telecom giant has been winning awards as world leading organisation in reducing material use and energy. Samsung eco-print professional solution provides IT proprietor an exciting energy saving option.

METHODOLOGY

Data was collected from both Primary and Secondary sources. For the purpose of the study, the primary data was collected by questionnaires, discussions and interviews.The researcher selected a convenience sample of 50 consumers and 20 marketers. These data was primarily collected from Berhampur, Odisha. Various references was used to cover the theoretical part of the research such as books, periodicals, researches, published articles and studies published on the websites. The researcher used thepre-defined set of questions as a tool for information collection.

DATA ANALYSIS AND INTERPRETATION

EFFECT OF SUSTAINABLE DIGITALIZATION ON BRAND VALUE

Effect of Green Digitalization on Brands & Products

No 42%

Yes 58%
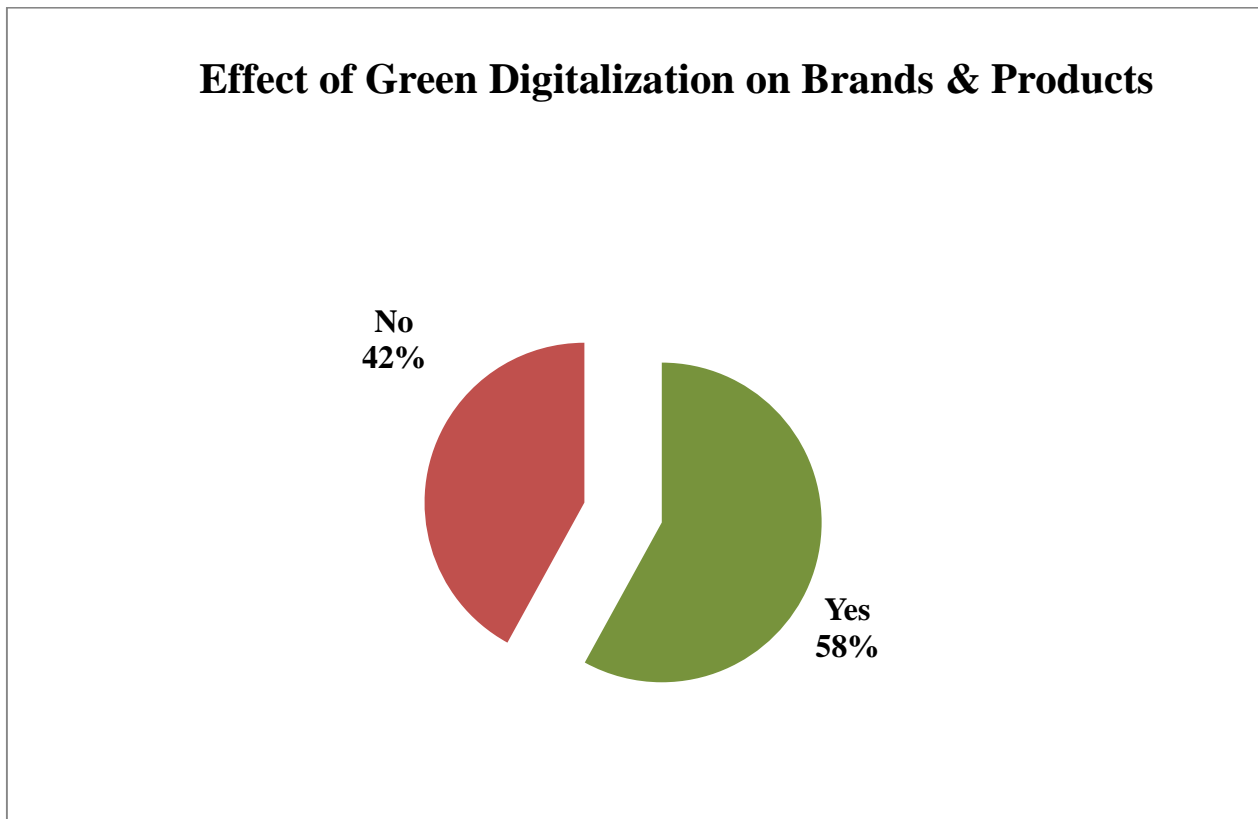
Survey shows a positive effect of green digitalization on product or brand value.

Effect of Sustainable digitalization on Brand Positioning

No 30%

Yes 70%
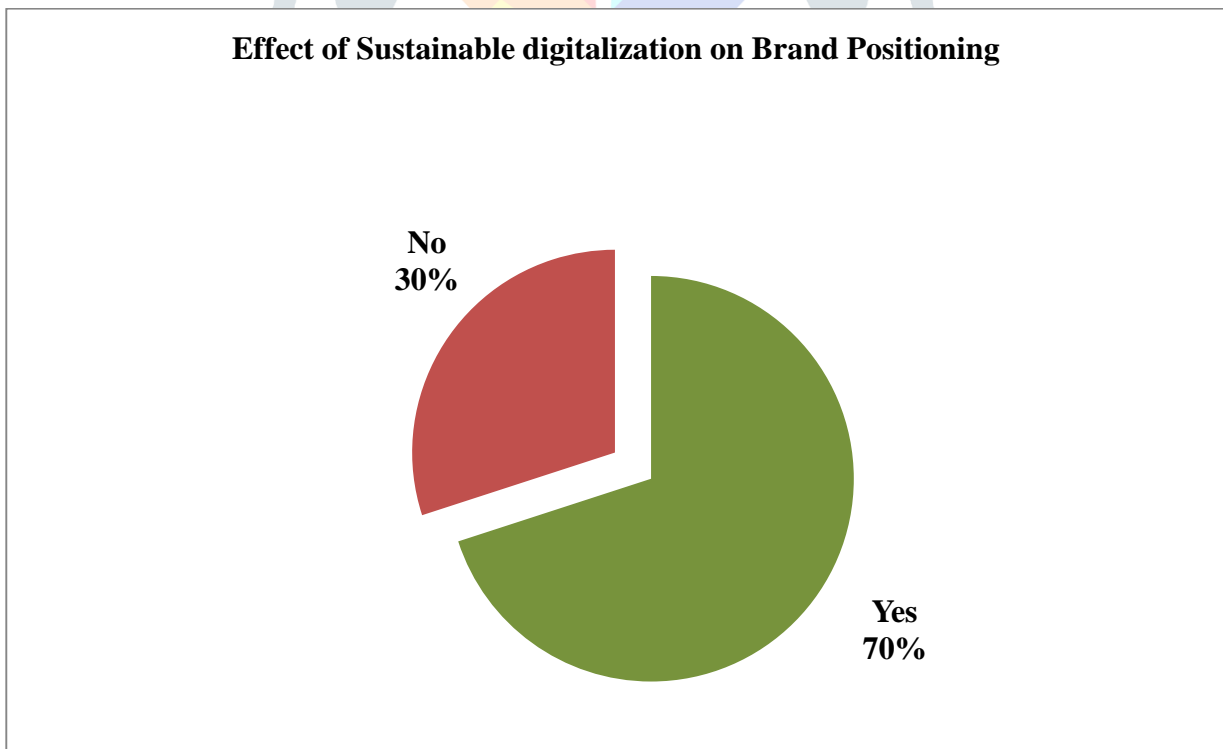
Survey shows sustainable digitalization is responsible for brand positioning of products or brands.

Interpretation: Study shows 58% of respondents believe some added advantage for green digitalization when attached to a product and 70% of respondents think sustainable digitalization is responsible for brand positioning of a product or business. Finding shows that Sustainable digitalization puts impact on brand value of a product.

EFFECT OF SUSTAINABLE DIGITALIZATION ON PRODUCT IMAGE AND PERFORMANCE OF A COMPANY OR A BUSINESS.

Eco- friendly digitalization helps to magnify the company performance

No
32%

Yes
68%

Survey shows that eco-friendly Digitalization helps to magnify the performance of a company.

Green Branding with digital technology is responsible for additional image building and promotes branding

No
22%

Yes
78%
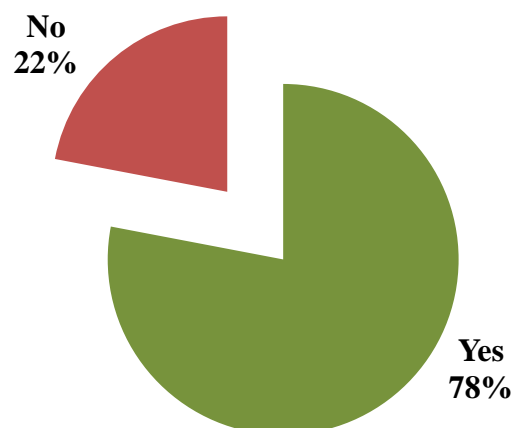
Survey shows that green branding with digital technology build image and promotes branding.

Interpretation: Current survey shows that about 68% of respondents believe company can show its unique performance by introducing eco-friendly digitalized technology and 78% of respondents assume green branding with digital technology is responsible for additional image building and promotes branding.

Researcher had considered various factors to study the influence of consumers towards brands or products, positioning of business. For which some questionnaires are developed.

As the data collected from primary source is too large. So researcher used factor analysis to reduce the factors. By use of SPSS we have done the factor analysis and found the following factors are responsible for attracting consumers towards sustainable digital purchase and giving a new face to the business.

FACTOR 1:   Green Promotion, Labelling & Packaging
FACTOR 2:   Green Attribute, feature and usage
FACTOR 3:   Green pricing
FACTOR 4:   Environmental concern,Self- Image & Interest
FACTOR 5:   Availability & Awareness

CONCLUSION-

Present study intends to create a green society without compromising the digital annuity. Because researcher visualize a green digital tomorrow can only be possible with a serious change in grass root level which is ultimately not possible without the voluntary effort of common mass.

Survey shows a satisfactory result. Talking about awareness and preference researcher found an impressive figure. Researcher got to know that green digitalization is responsible for building product image and enhancing the values of various brands. Researcher found factors responsible for attracting consumers towards sustainable digital purchase and giving a new face to business are Green Promotion, Labelling& Packaging, Green Attribute, feature and usage, Green pricing, Environmental concern,Self- Image & Interest , Availability & Awareness.

In spite of growing awareness in contemporary market economics, it is recognized that there are considerable barriers in diffusion of ecologically oriented consumption styles (Prothero and McDonagh, 1992). Researcher treasures various facts and figures from various literatures and open discussions that consumers simply shows positive sign towards the green digital change, whereas talking about its adoption in business & society it is far behind. Necessary care must be taken by Government, NGO's, Researchers, Business and conscious mass to uplift the sustainable digitalization. So, that we can hope for a clean green and advanced tomorrow.

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