

Green Practices for Sustainable Development in Office and Information Management

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Abstract:

Office management in developing countries is vastly paper-based and involves practices that might be considered not eco-friendly. The increasing emphasis on environmental sustainability is thus posing a challenge to office management. The paper explores green practices as eco-friendly initiative that can be applied to office management in order to achieve economic and environmental sustainability. A number of relevant literature were reviewed on green practices in office management, technologies required, and ways of achieving sustainable development through green practices. The paper reveals digital technologies such as iPads, e-mail technology, energy efficiency technologies, cloud storage and teleconferencing, among others are necessary technologies to transform office operations and assure green practices. The review showed that engaging in green practices such as electronic document/file management, virtual office operations, and electronic meeting management would positively impact environmental and economic sustainability. Issues limiting green practices were discussed and it was concluded that equipping offices with necessary eco-friendly technologies will ensure green practices leading to the achievement of the much-desired sustainable development. Based on this, it was recommended that management of contemporary business offices in developing countries should ensure adequate provision of eco-friendly digital technologies for office use, provide adequate training and encourage employees to adopt green practices for economic and environmental sustainability.

Keywords: *Green practice, digital technologies, office management, sustainable development.*

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1.0 Introduction

Office management encompasses varieties of activities ranging from planning, directing, and controlling activities of employees to communicating internally and externally. These involve quite a volume of document production and heavy paper consumption with the attending

negative impact on environmental and economic sustainability. Shah et al (2019) opined that as paper consumption continue to increase, it is having a significant impact on the environment and human health. Its environmental impact could be felt in overconsumption of resources, deforestation, air, water and land pollution,

among others. Office management activities also involve conducting meeting at various levels which requires mobility and energy consumption in most cases, also having similar impact on the environment. Mitigating these impacts may require employing strategies that will greatly reduce paper consumption and minimize office workers' mobility.

Sopha (2013) reported factors contributing to overconsumption of paper to include habit, intention, attitude, personal norms and situational influence. It is, however assumed that technological changes in the business world today, if rightly applied, would drastically reduce paper consumption and would provide opportunities for employees to work remotely (Jagga, 2020). Applying modern methods of information dissemination available through digital technologies and embracing green practices in office management, it is assumed, would guarantee paperless office operations and thus, will boost environmental and economic sustainability. This paper contributes to the body of existing knowledge by identifying available green practices in office management and digital technologies involved as well as analyzing the possible impact on economic and environmental sustainability.

1.1 Statement of the Problem

Economic and environmental sustainability are becoming issues of universal concern, and negative impact of energy and paper consumption on the environment is occupying the front burner of global discourse. Policies focusing environmental protection are constantly being developed. Observations have shown that most business organisations focus business development and success, but lacking in green innovation with less attention being paid to operational impact on the environment. This lack of required green innovations and practices in business and office management directly impact

the environment through pollution and natural damages. There are still arguable relationship between employees' belief in and adoption of green practices, and sustainable developments. It is assumed that when business organisations embrace green innovations and practices, decline in environmental pollution and damages will be achieved, leading to environmental and economic sustainable development. Based on this background, the study sought to identify possible green practices in office management and to ascertain how such green practices can impact the office operations and consequently contribute to sustainability of global ecosystem. As a result, this study explored the possibility of green practices in office management, and how such, especially paperless operations, impact economic and environmental sustainability.

1.2 Objectives of the Study

The study sought to explore:

1. possible green practices in office management and technologies involved; and
2. how green practices contribute to economic and environmental sustainability in the society.

2.0 LITERATURE REVIEW

Green Practices in Office and Information Management

Green practices, according to Yousaf (2020) refer to those procedures and processes that organisations employed in order to minimize their operational effect on the environment, with the aim of preserving the environment. There are different types of green practices: green construction, green building, green business, green innovation, etc. They include all practices that are eco-friendly. Green practices are about reduction in environmental pollution and consumption of natural resources (Mahmud-Dzaki, 2015). Green practice is a way of

preserving the nature and also to create awareness among the people about the benefit of environmental preservation.

Management of business offices involves document production, records and meeting management through which planning, directing, and controlling activities of the office are carried out. The increasing demand for and consumption of paper in office management has given a substantial pressure on forest ecosystems (Sopha, 2013). In the author's view, paper consumption, from an environmental impact point of view, leads to a significant impact on material use, as papers, which are usually made of wood fiber, put a substantial pressure on natural forests, threatening environmental sustainability.

Green practices in office management involve employing strategies to control overuse and overconsumption of papers (Putintseva, 2023). In their view, Shah et al (2019) suggested printing and/or copying on both sides of a paper, duplex printing, and N-Up printing multiple pages per sheet can set office on the path of less-paper operations. Use of print preview and on-screen proofreading can be another green practice that can reduce paper consumptions. Similarly, creation of PDF (Portable Document Format) as a means of archiving and sharing documents is an effective alternative to printing, thus reducing paper consumption (Shah et al, 2019). Electronic meeting management involves employing digital tools for conducting meetings. This comprises of strategies for reduction in transportation and mobility of office workers through the use of technologies such as Skype, video conferencing, email and other forms of internet communications are green practices capable of reducing travel expenses as well as reducing carbon emission (Aroonsrimorakot, et al, 2019). Electronic meeting management practice involves applying technologies for online meetings, which would go a long way in reducing

workers' mobility. Reduction in workers' mobility directly impact environmental sustainability through carbon emission control as members of office workforce can work remotely from different location in the virtual office environment. .

Employing electronic document management for disseminating information and record management is a green practice that ensures paperless office management. Putintseva (2023) opined that the use of modern information technologies in office management, such as personal computer, e-filing system, electronic file transfer, and the likes, reduces paper consumption, cost of office operations, and speeds up operational processes, thereby boosting productivity.

2.1 Technologies for Green Practices in Office Management

Achieving paperless office management, which was foreseen some decades ago is yet to become a reality despite growing ubiquity of personal computers (King, 2014). The author, however, opined that the introduction and utilization of iPad and similar tablet devices have the potential to enable paperless office operations and thus easing the high pressure on the ecosystem. By implication, iPad is a digital technology that ensures green practices as it enables paperless office management.

Eco-friendly office technologies, according to Pasharibu et al (2019), include the E-office technology. This e-office is defined as eco-office. E-office technologies are associated with electronics, which is then interpreted as an all office administration service activities system conducted electronically, with the help of communication tools and information systems (Pasharibu et al, 2019). E-office system is the use of technology and information systems for office administration activities accompanied by environmental-friendly management. The green

office concept being implemented by government offices seems to be by reducing paper usage, or the paperless application, especially for correspondence and reporting activities. This also includes Electronic Document Management (EDM) as identified by Putintseva (2023) and e-reader which is capable of minimizing paper usage (Shah, et al, 2019).

The need for energy and resource efficiency, according to Ohueri, et al., (2018) has led to the adoption of green office building in some developed countries. Green practices in office building provide what Ohueri, et al., call triple-bottom-line benefits of sustainable development in terms of environmental, economic and social aspects. These sustainable benefits include air and water quality improvement, waste reduction, reduction of operation and maintenance costs, increased productivity and healthy living, among others.

2.2 Issues Limiting Green Practices and Paperless Office Management

King (2014) reported that utilizing digital technologies for green practices, such as iPad devices to their full potentials to achieve paperless office operation is being limited by lack of adequate training. The author further reported that limited storage and file management features, as well as battery life and eyestrain, among others, are limitation of iPad and most digital technologies. Also, affordability of paper in terms of weight, power consumption, portability, tangibility and flexibility makes paper usage the best choice for many tasks despite its limitations and impact on the environment. Contemporary business organisations are also often confronted with the legal necessity of paper-supported information (Oliveira, et al. 2021).

Fear of change is another issue limiting adoption of digital technologies and green practices. Some office workers are still dependent on paper usage due to their old habits, preference for hard copy documents, physical signature, and phobia for and

discomfort with electronic signatures. Not only fear of change, low awareness of the green office concept among professionals is also considered a limiting factor for adoption of green practices in office management (Pasharibu, et al, 2019).

2.3 Achieving Sustainable Development through Green Office Management

Record management functions of the office that are hitherto being performed with heavy paper usage, thereby creating archive problems can now be performed electronically through an electronic filing system (Lestari & Aulia, 2018). The conventional archive management that is heavily paper-based can thus be replaced with electronic archive management, saving paper usage and saving storage space (Oliveira, et al, 2021). Since the cost of using paper is becoming higher and higher by the day for organisations, going paperless and embracing green practices help organisations to save cost and thus contributing to economic sustainability.

Shah et al (2019) opined that application of electronic file transfer and electronic record management provides economic impact in terms of elimination/reduction in heavy cost of paper usage, printer toner, and electricity consumption. Reduction in paper usage also reduces environmental footprint of organisations through reduction in carbon emission of printers. Also, optimal utilization of iPad technology by office workers for information management reduces carbon footprint of business organisations on the environment (King, 2014).

Green practices reduce energy and paper consumption in office management, and consequently relieve the pressure overconsumption of paper has on forest ecosystems. As viewed by Oliveira, et al (2021), paper consumption, from an environmental impact point of view, leads to a significant impact on the environment as volumes of trees go into the

production of papers on daily basis. Green practices thus relieve pressure on natural forests, ensuring environmental sustainability.

Paper recycling and application of digital technologies can reduce the negative environmental impact and economic costs of paper consumption (Shah et al, 2019). Electronic document management (EDM) results in cost reduction: “no costs of courier services, less office space for document storage, less expenditures arriving premises for archives” (Putintseva, 2023).

Virtual office management and electronic meeting management impact on economic and environmental sustainability. Employees movement are reduced as they work remotely from different locations. Carbon emissions and costs associated with employees’ movement are reduced optimally.

3.0 Conclusion

Contemporary business organisations consumes heavy volumes of paper on daily basis thereby overstressing economic resources and putting pressure on environmental sustainability through deforestation and environmental pollution. Green practices that can be applied to office management include electronic document management, virtual office operations, and electronic meeting management. Technologies such as iPads, energy efficiency technologies, and e-conferencing technologies are common examples of technologies for green practices in the office. When these technologies are applied, pressures on the ecosystem through over-consumption of papers are relieved; carbon emissions from office printers and cars are reduced, and both economic and environmental sustainability can be achieved. It could,

however, be concluded that lack of adequate training and fear change are issues limiting adoption green practices in contemporary office management.

4.0 Suggestions

In view of the above, the paper suggests that:

1. Management of business organisations should procure relevant eco-friendly technologies such as iPads, electronic file management system, e-conferencing technologies, and internet access for office workers to work remotely as well as minimize paper consumption;
2. Management of business organisations should provide adequate training for all office employees involve in information management to equip them with necessary skills and confidence for embracing green practices; and
3. Office workers should embrace the change presented by technological innovations and avail themselves of opportunity for training and development to keep abreast of green practices for sustainable development.

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