GOING

PAPERLESS IN

GOVERNMENT

DEPARTMENTS

The term **"The Paperless Office"** was first used in commerce by Micronet, Inc., an automated office equipment company, in 1978.

○ INTRODUCTION :

A paperless office (or paper-free office) is a work environment in which the use of paper is eliminated or greatly reduced. This is done by converting documents and other papers into digital form, a process known as digitization. Proponents claim that "going paperless" can save money, boost productivity, save space, make documentation and information sharing easier, keep personal information more secure, and help the environment. The concept can be extended to communications outside the office as well.

The paperless world was a publicist's slogan, intended to describe the office of the future. It was facilitated by the popularization of video display computer terminals like the 1964 IBM 2260. An early prediction of the paperless office was made in a 1975 Business Week article. The idea was that office automation would make paper redundant for routine tasks such as record-keeping and bookkeeping, and it came to prominence with the introduction of the personal computer. While the prediction of a PC on every desk was remarkably prophetic, the "paperless office" was not. Improvements in printers and photocopiers made it much easier to reproduce documents in bulk, causing the worldwide use of office paper to more than double from 1980 to 2000. This was attributed to the increased ease of document production and widespread use of electronic

communication, which resulted in users receiving large numbers of documents that were often printed out. However, since about 2000, at least in the US, the use of office paper has leveled off and is now decreasing, which has been attributed to a generation shift, younger people are believed to be less inclined to print out documents, and more inclined to read them on a full-color interactive display screen. According to the United States Environmental Protection Agency, the average office worker generates approximately two pounds of paper and paperboard products each day.

Running a government agency is hard work. Not only because of the paperwork, but it's because their line of work directly impacts the lives of their constituents. That's why it's important for government agencies to always explore new options to improve their workflow and provide better services for the people. Case in point: migrating workflows into a paperless system. Here are just some of the benefits of providing government services the paperless way.

Traditional offices have paper-based filing systems, which may include filing cabinets, folders, shelves, microfiche systems, and drawing cabinets, all of which require maintenance, equipment, considerable space, and are resource-intensive. In contrast, a paperless office could simply have a desk, chair, and computer (with a modest amount of local or network storage), and all of the information would be stored in digital form. Speech recognition and speech synthesis could also be used to facilitate the storage of information digitally.

Once computer data is printed on paper, it becomes out-of-sync with computer database updates. Paper is difficult to search and arrange in multiple sort arrangements, and similar paper data stored in multiple locations is often difficult and costly to track and update. A

paperless office would have a single-source collection point for distributed database updates, and a publish-subscribe system. Modern computer screens make reading less exhausting for the eyes; a laptop computer can be used on a couch or in bed. With tablet computers and smartphones, with many other low-cost value-added features like video animation, video clips, and full-length movies, many argue that paper is now obsolete to all but those who are resistant to technological change. eBooks are often free or low cost compared to hard-copy books.

Others argue that paper will always have a place because it affords different uses than screens.

○REVIEW OF LITERATURE

•Save on government resources :

Government agencies are the leading consumer of paper worldwide. With all the documents they print and sign on a daily basis, they eat up a lot of resources that mostly came from taxes. Once everything is digital, government agencies can save a lot of time and resources that they can then allocate for more projects that will benefit the general public.

•Reduce the amount of paper used :

Joining the green revolution should be a mandatory initiative for every government agency out there. Going paperless is a great step in saving millions of trees from getting cut down. Every digital signature produced to secure digital documents is a vote in support of keeping the forests safe. It'll be really hard to function when everyone breathing polluted air.

•Preserve important documents :

Most agencies have these crusty old documents stored somewhere in their premises that they can't throw out because of their importance. It's best to make these documents digital and preserve them properly by storing them in computers for easy access and added security. Don't let time wither these poor documents to dust.

•Make multiple copies of documents easily :

Aside from printers, copiers are also hard to maintain and operate. Copying a digital document and signing it digitally is a more efficient way of making authentic copies than physically producing documents and stamping them on by one.

•Give certificates and permits a lot faster :

The usual complaint about government agencies is their slow processing of documents. Some agencies take days, even weeks, just to produce permits that people need on their professions. By digitizing these documents and signing them with GlobalSign's Digital Signing Service, it'll be easy to prepare these documents and send them to applicants.

And the good thing about this is that government agencies are starting to realize the benefits of digital signing. In the US, Florida county offices have started going paperless by using GlobalSign's digital signing solutions in providing certified online copies of court documents.

Nearly 150 certified documents are being purchased each day on these counties, so Florida made the process easier by digitizing these documents and signing them using legally- binding and tamper-proof Digital Signing Services from GlobalSign. The documents are provided by ClerkE-Certify, a service operated by GlobalSign partner Triedata Inc.

e-Estonia refers to a movement by the government of Estonia to facilitate citizen interactions with the state through the use of electronic solutions. E-services created under this initiative include i-Voting, e-Tax Board, e-Business, e-Banking, e-Ticket, e-School, University via internet, the e-Governance Academy , as well as the release of several mobile applications.

In 1991, Estonia restored its independence as a sovereign nation, defeating the Soviet occupation. Prior to this, there was little in the way of technology. Under half of its population had a phone line. Following independence, the first Prime Minister Mart Laar helped push the country through a period of modernization, establishing the foundation needed to bring the country into the digital age.

Digital reform followed through to the present. Early during the reform Estonia refused an offer from Finland to give it its old analogue telephone exchange for free, electing instead to build its own digital phone system. An initiative to provide schools with computers succeeded in granting every school in the country with internet access by 1998. In 2000, the government declared internet access to be a human right, causing its spread into rural areas.

In late 2014 Estonia became the first country to offer electronic residency to people from outside the country, a step that the Estonian government terms as "moving towards the idea of a country without borders." Under this program, non-residents can apply to have a smart ID card issued to them by the state, providing the same access to Estonia's various electronic services that a physical resident would be given. Use of the card for authentication with these services requires a four digit pin code. The card, in conjunction with a separate pin code, also allows e-residents to digitally sign documents over the internet, a practice that is legally binding anywhere in the EU.

While e-residency provides access to these services, it does not grant physical residency, the right to enter the country, or the ability to use the smart ID card as physical identification or as a travel document.

○ METHODOLOGY

The **Intranet** is a term used to describe an organisations collection of private computer networks, and network technologies that are used to help facilitate collaboration and communication between work groups or people. Intranets help improve the ability to share data. Standard software technologies and network hardware is used by Intranets, including web servers, web browsers, Wi-Fi, and Ethernet. In most cases, an Intranet does provide internet access, but it is firewalled, ensuring that the computers on the Intranet can't be accessed directly from outside sources.

The Intranet is generally used as a productivity tool within companies. While a simple Intranet may only include a message board service and an internal email system, more complex Intranets may include databases and websites with company information, forms, and news, as well as personnel information. Intranet often incorporates databases, documents, and internal websites as well.

The paper office is not efficient. By creating redundant layers of content management confusion, the paper office slows down all business processes that require some form of content to operate. However, most organizations still employ a workflow that goes something like: stare at a digital document dump, take multiple trips to the copier/scanner, upload files into folders, create multiple layers of subfolders, and try to create a content hierarchy that makes sense to shareholders, decision makers, and employees. That's not a paperless process, but it sure is a wasteful one. **SharePoint** Microsoft Office SharePoint Server (MOSS) enables offices to truly go paperless by automating content management tasks in seconds.

A particularly robust and feature-rich CMS application is **Microsoft Office SharePoint Server (MOSS).** It allows you to take all

your organization's information and maintain it in one, centralized location. It is accessed by members of your organization through a web browser.

It supports all intranet, extranet, and web applications in one platform, thus eliminating fragmented and piecemeal systems. Further, it allows you to improve overall productivity by simplifying everyday tasks. In this section, we'll talk a little about MOSS and how it can benefit your company's intranet. We'll also discuss it from the standpoint of paperless document management. MOSS not only allows you to store, manage, and view documentation, it also helps with overall, day-to-day business operations. For instance, MOSS allows you to create your own portals that access and display the information you specify. Other features include:

Search features The Enterprise Search feature searches people, business data, documents, and web pages. This allows more comprehensive search results and allows decisions to be made based on the latest information.

Security-minded sharing You can get very precise with the information you want to share. For example, Excel Services running on MOSS allows you to share data in real time, but you don't have to share everything. That is, interactive Excel spreadsheets can be viewed in a browser and they can be set up to show just the information you want to share and not any proprietary data.

It's a digital world, and every business owner is inundated with finding another solution to streamline work, and to take things "to the cloud." Going paperless has many advantages for business owners. Even so, there are risks that some business owners are wondering exactly what they should keep in a digital space, and what should they relegate to old-fashioned paper methods.

Here are some ADVANTAGES AND DISADVANTAGES OF GOING PAPERLESS includes, but not limited to.

Advantage:

1. Significant Cost Savings :

Keeping everything stored in a digital format, whether on computer drives, flash drives or in cloud-based systems, is cheaper than printing and storing it on paper. This eliminates the cost of shredding services for paperwork with sensitive information. Some businesses have entire rooms and storage units devoted to archiving paper. Paperless systems eliminate this cost.

2. Speed of Information :

When everything is stored digitally, versus on paper in files, accessibility becomes quick and easy. Employees, consumers and business owners have access to all data, contracts and consumer files with just a few mouse clicks. This eliminates having to locate the file or form, which saves every one time.

3. Mobile Workforce :

Moving from paper to digital storage, particularly through cloud-based technology, keeping information based on the internet has made it easier to have mobil employees. There is more flexibility to meet with clients outside the office or to spend a day working from home. Employees can access all information online, quickly and easily. Often, remote workers don't even work in the same city as the business owner, which means a new pool of talent is available to employers, as well.

Disadvantage:

1. Consumer Habits :

Many businesses have point-of-sale systems that do everything on a tablet. Although this is quick and efficient for the business owner and his team to conduct transactions, it can leave customers feeling concerned about walking out without a paper receipt. Some consumers like to review things on paper and don't want to print their transactions later.

2. Hardware or Software Issues :

When everything is stored digitally, there is the potential that a system may crash and all information then becomes lost. Make sure to back up information regularly to ease the recovery process. However, this still creates an interruption in service to businesses, the same way that a power outage or an internet server issue would halt operations. Business owners should have contingency plans, in the event of a failure in digital information accessibility.

3. Potential Hackers

When information is stored on paper and locked in file cabinets, someone would need to physically have access to the papers to steal information. Hackers don't need to worry about this when everything is stored digitally. Business owners often get too busy to update software and virus protections, making it easier for hackers to install spyware, steal information or hijack company data.

Going 100% paperless is not possible Some documents must be signed in ink, with one copy given to the consumer and one kept on file. This is common in the financial services industries. In cases like this, going completely paperless is not an option, because of the legal ramifications involved with noncompliance.

○ **FINDINGS**

5 DISADVANTAGES OF A PAPERLESS OFFICE

1. Security, Security, Security

Data security: It's the No. 1 concern for offices going paperless. Paperless offices share data via wireless or wired networks, which increases the risk for data breaches and security hacks. Increasingly, data is shared via the cloud which adds another layer of security risk. Security is especially important for medical & law offices because the documents and information being shared is often confidential and highly sensitive (HIPAA).The costs of data security are two-fold. First, software must be installed that properly encrypts and secures the data. Secondly, the cost of backing up data plus ensuring that it is safely stored and accessible represents a major cost. Data security and storage platforms tend to bill monthly based on the volume of data that is being shared. For large offices, these costs can add up quickly.

2. Software and Data Storage Costs

Reducing paper within your office can represent real savings and free up storage space that was used for paper. Going paperless might also save on ink, toner, and paper, but there are costs associated with storing files digitally. Digital filing requires a variety of tools and hardware to manage effectively and securely.

For example, software management tools are often required for establishing an effective filing system, with one-time and recurring payment options available. Additionally, data storage and security is another cost consideration. Security platforms and data storage are necessary to keep documents readily available and protected from breaches and often these solutions are priced with monthly, recurring fees. Finally, if your office utilizes dated hardware and networking solutions, the costs of upgrading the network to enable high-bandwidth data transfer are another disadvantage.

3. IT Expertise Required

Integrating data platforms into an existing operation requires in-depth IT knowledge. Although there are plug-and-play options, the majority of enterprise data management solutions aren't DIY installation projects. Plus, the data system must be protected, and often, encryption and data security technology integration isn't a project for non-tech-savvy employees.

If your office employs an IT professional, this might be less of a concern. For smaller operations without a dedicated IT staff, hiring a systems integrator or IT consultant to design, deploy, and integrate a data management platform can be costly.

4. Training Costs

Rolling out new technology requires an investment of time and resources; not only to install, but to properly train employees. Training is critical for the success of paperless filing, as each employee will likely need to utilize the system. This can be costly to undertake.

Whether your office uses an IT consulting firm to train employees, or if your IT department must find time to train staff, resources must be invested upfront to get everyone on the same page. Additionally, as technology evolves, additional training is required to help employees understand new processes and features. Plus, your office will need to train employees on data safety protocols and the new filing framework.

5. Health Concerns

Although this is not a dollars-and-cents cost, digital file sharing means employees will be required to stare at computer screens for longer. Studies have shown that eye-strain can develop and vision can deteriorate.

Going paperless and integrating cutting-edge technology into your law office can help streamline workflows and improve your efficiency. Yet, although going paperless looks good on paper, rolling out a secure, robust, and reliable data platform can be costly and time-consuming. Before going paperless, it's important to consider the costs and develop a plan for integrating a digital platform into your operation.

4 ADVANTAGES OF A PAPERLESS OFFICE

1. A paperless office is more efficient in document management

Digital document management systems are faster and more agile than managing files on paper. When using a digital document management system, you save time in searching for documents.Information is more accessible to all employees.At the same time, it is easier to restrict

access to confidential documents.Digital documents can be accessed remotely, from anywhere, allowing your employees to **work remotely**.Having digital files improves documents' history: it is easier to trace the origin of digital documents, and to know when and who changed them the last time.

2. Greater document security

The security of the information stored in digital format is much greater than the security of the documents that are filed in paper.

In addition to the fact that it's easier to restrict the access to confidential information stored in digital format, it is also easier and less expensive to make backups, so that if files get lost or a data theft occurs, it's possible (and much easier) to retrieve the information.

Meanwhile, documents on paper are much more exposed to accidents – leaks, floods, fires – and is much more easily accessible to third parties.

3. Less overhead costs

Digitizing documents has a direct impact on cost reduction. Not only because companies don't need to buy as much paper as before, but because it also saves on maintaining printers and purchasing spare parts. On the other hand, if all of a company's documents are digitized and can be sent by email, there is no need to spend on mailings anymore

4. Less space dedicated to file storage

Freeing the space dedicated to filing physical documents is also one of the main advantages of a paperless office. A digital document management system allows companies to archive everything in the cloud or on private company servers. The space that is saved can be dedicated to

expanding offices or other uses that bring more value to employees, such as a rest area to socialize with colleagues

All of these advantages are driving more and more companies to eliminate the use of paper in all its business processes.

○ DISCUSSION

With the launch of the Digital India programme in 2015, the government of India set forth its vision to transform India into a digitally empowered society. The government aims to empower every Indian denizen and enable businesses to transact easily and efficiently. Digital applications are replacing paper base processes, freeing up time and resources that otherwise would be spent towards filing and organising. While we've been quick to dive into the digital world, the financial and Government institutions have been slightly slower to adopt new technologies.

Paperless systems have existed for a couple of decades, but have we begun eliminating printing, scanning and copying? We waste countless dollars pushing paper around in an outdated and inefficient manner. Organizations are constantly facing pressure to improve efficiencies, optimize business processes, and reduce costs.

■ The scenario today

Adobe first released its Portable Document Format (pdf) nearly 20 years ago, but many private companies, NPOs, Libraries, Law Firms, Courts and major city governments are yet to embrace a world devoid of paper records. Advances in ERP systems, integration with content management systems, digital signatures, KYC verifications, etc. are all tools that can help us go paperless. But as much as we talk about it, we office-dwellers like our paper. We like to feel the weight of a file in our hands or see the pile of paper on our desk that means we are busy.

■ But why look towards a paperless economy?

Aside from the obvious environmental benefits, research has shown that productivity within the organization improves by 39% when

paper forms are replaced by electronic versions and workflows are digitized. By eliminating paper, businesses can improve staff productivity and customer response time. Despite this knowledge, both companies and governments have been dragging their feet when it comes to digital. Digital workflows are more efficient for government employees. Cloud computing and the cost effectiveness of mobile devices means that documents can be accessed and updated anytime, anywhere.

It's not just companies and government who benefit here. With digitization and therefore going paperless, more citizens have access to the internet either at home or through their mobile devices, becoming more accustomed to e-commerce in all aspects of their lives. As the constituent's access to technology grows, paperless on-demand services will not only be expected from their governments, they will be a necessity.

■ Some realities to take into consideration.

I think that letting go our paper filled ways and taking on the electronic route means that everything is connected, and policies are always followed, government and organizations can save time, money and reduce potential human error. When public data is made available digitally in searchable databases, it saves the government time and money spent on complying with request and making the information available.

By automating the entire documenting process, multiple mundane steps and tasks are eliminated along the way. With digital workflows in place, we can track projects, create automatic notifications and streamline tasks without bottlenecking them within the organization. Going paperless is advantageous from the stance of both service providers and customers. It addresses the complexities involved in documentation. With digital forms being filled out, we can eliminate the need for manual entry.

Central government ministries and departments have now begun rewarding the successful implementation of e-Office or 'paperless offices'. Initiatives like these aimed to aid the change in governance and administrative processes. With the Digital India initiatives in place various bodies like the Employee Provident Fund Organisation (EPFO) plan to go completely paperless in the coming years. As confidence in digital processes improves, companies are slowly beginning to replace legacy systems or overlay them with virtual accounts that expose the data electronically. The system isn't perfect yet, but digital transformation is the mantra of the moment, and it starts with going paperless.

⊙CONCLUSION

All in all, through the study and research, we have learnt a lot about the paperless concept. We have learnt about the development of paperless concept through trends mapping, as well as the advantages of going paperless. For example, going paperless helps reduce cost and confer efficiency to a business. Besides, we have learnt about how paperless is going around the world. We realized that many schools around the world have started implementing this paperless concept. We think that we should take them as our examples. And, we never forget it can safeguard and protect our Mother Nature, which is the creation of God. Imagine, pristine forests are destroyed and so do the habitats of flora and fauna. We will not want that to happen as we cannot deny that our environment has a strong correlation with our quality of living. And, after researching into the paperless matter in USM, we have identified some hindrances that prevent us from going paperless and think of solutions to solve them, using the tool of process mapping which we learnt through the subject of operations management. We do hope that USM will be the pioneer in adopting the paperless concept, and be the shining example among the universities in Malaysia. And we believe that, there is a will, there is a way! Let us hold our hands together and save our planet.

Document management and automated workflow are paving the way for electronic transformation and a paperless working environment. The focus on business processes and their automation is preparing organizations for e-commerce in the new economy. It forces organizations to be customer orientated and to operate across organizational boundaries in cross-functional teams, ensuring competitive advantage. Real business integration remains a major challenge that needs to address the seamless integration of existing applications, documents, items, paper, voice and data

into the electronic workplace, addressing electronic mail, fax and telephone. The role of the enterprise information portal in this regard should

make for interesting research.

The 'paperless office' in the strictest sense of the word as propagated during the 1980s is still not a reality. A mindset of producing paper output still prevails, although Internet technologies have made distributed printing or printing-on-demand a more desirable option. It is concluded that the paperless office is more than just an effective output strategy. An organizational information management strategy is required to ensure that systems and expertise are in place at each stage of the information lifecycle to ensure effective utilization and availability of information. Finding a solution that manages the physical (paper) as well as the electronic distribution, storage, archiving and retrieving of electronic items are key ingredients for success

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