PAPERLESS ORGANIZATION

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ABSTRACT
During the itinerary of evolution, man started to think in a dissimilar way other than the animal by observing the nature. According to Adam Smith “it is the invisible hand that carries the human action towards the progress”. This has led to the concept of specialization, industrialization industrial revolution and so on and so forth. The negative side of industrial revolution is global warming. There are many man-made causes for the impact of global warming. The impact of global warming is tremendously hazardous than just mounting temperatures. Warming modifies rainfall patterns, amplifies coastal erosion, lengthens the growing season in some regions, melts ice caps and glaciers, and alters the ranges of some infectious diseases. A paperless office is a work environment in which the use of paper is eliminated or significantly abridged. This is done by converting documents and other papers into digital form. Proponents claim that "going paperless" can save money, boost productivity, save space, make documentation and information sharing easier, keep personal information more secure, reduce global warming and help the environment also. The information professional can play an important role as project manager for the projects and phases towards electronic transformation. This will include identifying the most suitable software packages, managing the digitization (capturing) of existing paper records and managing ancillary costs for implementation such as training for end-users. The effect of the paperless office on the publishing industry as a whole is proposed as further research topics. I owe a great deal for many Masters of the subject and Researchers and their publishers whose endeavor have been cherished, appreciated and drawn upon in the course of discussion in this paper. It is said that all the noble thoughts are to be circulated. Here is a small attempt to spread the noble thoughts of the experts to the common man. This paper is written not to earn but to enlighten the awareness among the inhabitants to preserve the earth within our constraint.

KEY WORDS: industrial revolution, global warming, digitization

The background
During the itinerary of evolution, man started to think in a dissimilar way other than the animal by observing the nature. According to Adam Smith “it is the invisible hand that carries the human action towards the progress”. This has led to the concept of specialization, industrialization industrial revolution and so on and so forth. The negative side of industrial revolution is global warming. There are many man-made causes for the impact of global warming. The impact of global warming is tremendously hazardous than just mounting temperatures. Warming modifies rainfall patterns, amplifies coastal erosion, lengthens the growing season in some regions, melts ice caps and glaciers, and alters the ranges of some infectious diseases. In Earth’s history before the Industrial Revolution, Earth’s climate changed...
due to natural causes, unrelated to human activity. These natural causes are still in play today, but their influence is too small or they occur too slowly to explain the rapid warming seen in recent decades. Pollution is one of the biggest man-made problems. Pollution comes in many shapes and sizes. Also, the trees that convert our CO$_2$ to oxygen are being demolished because we're using the land that we cut the trees down to structure as property for our homes and buildings. We are not replacing the trees (an important part of our eco system), so we are constantly taking advantage of our natural resources and giving nothing back in return. Paper industry is also responsible for global warming. A document management system is an important part of a paperless home office, like paper, digital or electronic documents need to be stored so they can be retrieved and used as needed. To have an effective paperless office, you need a system to manage these necessary documents. However, no office can be completely paperless. Some documents must remain on paper meaning that your home office can only be paper-less. Many of us simply remain more comfortable using paper to do some of our work. So any document management system you put together has to manage the mix of electronic and paper for a "paperless" office. "Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage change that is inevitable." William Pollard. In this background the glimpse on the subject of paperless organization is significant.

**Definition**

The Information Technology Association of America (ITAA) has defined information technology (IT) in the electronic era as "the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware." IT entails processes involving the use of computers and software to create, convert, store, process, transmit, and retrieve information securely. The term has recently been broadened to ICT (Information and Communications Technology), so as to include the idea of electronic communication.

According to Wikipedia A paperless office is a work environment in which the use of paper is eliminated or significantly abridged. This is done by converting documents and other papers into digital form. 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 also. The concept can also be extended to communications outside the office.

The Chambers Thesaurus (Seaton *et al*. 1990:453) proposes alternative words for paper as 'certificate, document, file, gazette, journal, newspaper, letter, record, script, thesis, etc.' These terms all refer to products containing information. Lund (1994:24) makes the distinction between desktop publishing and electronic publishing where the final product of the former refers to a typeset document (hard copy) and the latter to a document on the screen (soft copy). Keary (2000:1) refers to the compound document that combines text, digital, video and digital audio to create the virtual document. An electronic document would thus be synonymous with any form of digital document, file or folder.

**Meaning**

The terms "paperless," "electronic," and "digital" are often used interchangeably to describe work which previously was done with paper, but which now has been adapted to information & communication technology (ICT) devices and software. For purposes of this article an updated
definition of the paperless office refers to a working environment where the creation, modification, storage and retrieval of documents (electronic, graphical and practical) happen electronically. It supports the business/work Processes-oriented management of documents. It entails a move from paper to electronic medium where employees work with electronic (e) documents, e-forms, and documents distributed via e-workflow and e-distribution. The aim is to discharge paper documents as the carrier of information and work only with electronic documents. Alternative terms for the paperless office are the paper-free or digital office. Once an unbalanced swell of paper topples or client notes take too long to find during a phone meeting, the concept of going paperless becomes more than an ephemeral thought. Paper has crept into your office, made a home and plans to stay -- until you develop the paperless systems to chase it out. That means you will need to take control, look into electronic systems like data management, document management and paperless software -- and in general, figure out how paperless home offices work, and how you can make one work for you. Take it one step at a time, and that process is easier than you might think. This article will show you steps to get started, technology that can help and ideas for managing paperless documents.

Origin
It appears in the early 80s that the genuine paperless office was just around the corner. Incongruously, just the opposite has transpired. During the 1980s the paperless office simply meant that all forms of paper (documentation) within an organization should be converted to digital format. Since then, the introduction of Internet technologies has changed the description of an organization to move beyond traditional, locality bound clusters to comprise distributed (globally spread) branches and supply chains. Application of computers into commerce areas is widespread now a days as assorted as accounting, desktop publishing, billing, mail, and scheduling. In the idealized office, paper is deficient because all information is stored and transferred electronically. At present an office would therefore refer to a virtual working environment. Some analysts consider that the paperless office is still an achievable and praiseworthy goal, but that certain key technologies such as Ocular Character Recognition (OCR) must be enhanced. Others, however, argue that the tangibleness of paper documents results certain benefits that will never disappear. The Paperless Age has arrived for more and more Certified Public Accountants (CPA) and corporate finance professionals. Regardless of whether you work in a small local firm or large public company, the effectiveness recompense of a paperless work environment is enormous. The 'paperless office' in the strictest sagacity of the word as propagated during the 1980s is still not an authenticity. 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 accomplished that the paperless office is more than just an effective output stratagem. An organizational information management stratagem is obligatory to ensure the systems and expertise in place at each stage of the information lifecycle and 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 is key ingredients for success (Mullin- 2001).

Global Trends
Numerous global trends compel us towards paperless work styles and lifestyles: The ready accessibility of electronic information and communication technologies (ICT) have prepared it possible to travel from a paper-based to a paperless way of working and living. A reallocation
towards a knowledge-based economy centered on the generation, trade, and exchange of knowledge and information services and products. The ever-growing urban centers, overcrowded highways, and mounting housing and office breathing space costs induce us. Telecommuting is significantly facilitated by going paperless. Time-consuming and extensive substitutes and escalating energy and fuel prices do compel us. The negative environmental collision of commuting via automobile and maintaining office facilities are also responsible. The growing itinerant global workforces are also compelling us. The worldwide number of movable workers is predicted to reach 2 billion by 2020. A need to get superiority of life for millions of people worldwide are also obliges us.

**Fundamental issue**

Start working in a home office, and before you know it, paper heaps are building in every corner -- unless you are committed to having a paperless office from the beginning. Unfortunately for most of us, a paperless home-office is more an idea than a reality. Before jumping onboard the paperless wave, you want to make sure you do the conversion the right way the first time, with the right solution provider along to help you from Day One. To really understand the need, not to mention the value, of going paperless organizations should start by quantifying their business operations and production processes. Only then will they understand the costly labor of production. Furthermore, they should determine if there have been customer service issues due to lost or unreadable credentials, which undoubtedly cause them to incur additional costs and time.

**The process**

Transitioning to a Paperless Office involved a cipher of processes. If you are considering the changeover to a paperless office -- or at least a more paperless office, you may be wondering where to start and what you will need. Many companies offer document management systems, hardware, software and consulting services to help improve electronic communication on the road to having no paper. Following are some assessments for you to consider before you start revolutionize to an additional paperless administrative center:

- How will you clench the paper that still comes in from vendors, partners or customers? Or, that you can't renovate, like legal or tax-related documents?
- How aristocratic is new software and how does that fit your resources?
- How far back do you want to go in converting paper files?
- What's your proposed process for going paperless and your time frame?
- How will you inform staff and get them to buy into the process so they accept the changes you want and don't slide back into heavy paper use?
- How much of your paper that you do want to convert?
- How much help do you need from outside? (This could be a consultant to manage the conversion process, a vendor for new equipment and software, and a firm to do actual data conversion, a hosting service to move electronic files off site, security experts, or employee trainers.)
The Steps

- Obligate to going to a paperless office, and induce staff to go along with it by explaining the recompense for each of them individually, and as a group, and involving them in the procedure.
- Guarantee your existing computer hardware to make sure it's vigorous enough to clench added applications and file storage space.
- Make sure you have a trustworthy support system for the entire the files you will be adding up.
- Investigate what you need and plan to accomplish. Imagine about what you're likely to need in the future with a growing business, as well as now. Consider about which credentials need to be accessed often or rapidly, which need additional precautions, and which could be weeded out after an assured time.
- Build up transition homework and a schedule.
- Establish small with just a single department or area of our business so you can address any problems before broadening your scope.
- Research the accessible tools to help you (document management systems, electronic faxing, scanners, and data backup systems, security systems, document conversion companies, process consultants).
- Choose and organize to purchase the tools you plan to exercise. For software, consider fit with your needs, ease of use and implementation, expenditure, and assimilation with your presented systems. And don't neglect backup needs to keep electronic data from being misplaced.
- Do a small pilot study; make any needed changes; and then shift to the transition in your primary division.
- Expand a diagram for ongoing company-wide use. Incorporate a manuscript storage plan for employees with specific guidelines.
- Steadily acquire paperless transition throughout the business.

Functionality of the paperless office

The information era concepts of electronic document management, work-process automation (workflow), optical character recognition and imaging are essential elements of the paperless office.

1. Document management

Document management software allows the user to accumulate electronic documents in a database for subsequent retrieval and sharing, and it can assign viewing and editing privileges to consumer. It helps to manage the creation, distribution maintenance, organizing and storage of documents. It often includes scanning (converting paper documents to electronic format) and high performance storage. By going paperless you'll be able to get rid of those distracting paper piles and instead store all your documents safely on a hard drive. Keary points out that 'the weakest links in electronic document management are indexing, searching and retrieving'. This underpins that, although the selection of software is important in this regard, the application of appropriate expertise during the indexing phase is critical for finding electronic documents at a later stage. Several document management packages now provide full-text indexing and searching (Falk -1999). The addition of metadata (data about data) to documents is becoming
important to enable the user to verify the general quality of the document, for example the reliability, accuracy and currency.

2. Workflow
Versatile commerce processes typically consist of numerous operations, different levels of authority and documents or folders of information (Brunwin 1994). Workflow software provides tools to automate the electronic workflow of documents and business procedures. It ensures that the correct document enters the database, routes each document to the appropriate person and ensures that approval is obtained at the right stages within the business process, monitoring each step of the process. Electronic workflow automates process control because it co-ordinates activities, role players, data/information and monitoring. Tracking and tracing of dynamic content and feedback are possible at any point in a document's life cycle. When applied correctly, and not just automating inherently inefficient paper procedures, workflow is a catalyst for business process improvement (reengineering), defining new business rules.

3. Intranet
In the interior of the institute an intranet creates a Web-enabled digital environment for the entire organization, providing services such as electronic mail, GroupWare and search engines. Via a standard Web browser the intranet enables cross-platform information access, sharing and communication across traditional organizational boundaries (Ives 2001). According to Auditore (2001:33), the Enterprise Information Portal (EIP) is the next natural step in the evolution of the organizational intranet. It acts as a single point of access to internal and external information, enabling users to access disparate information sources throughout the organization. In larger organizations with distributed offices (e.g. the City of Johannesburg), an EIP can function as a unified corporate desktop that provides a personalized view of organizational information. The ultimate EIP integrates structured information (databases) and unstructured information (documents, items) with knowledge into a single, personalized top environment.

4. Enabling technologies
Documents have to be placed into a computer-readable set-up before they can be accumulated electronically. Enabling technologies that support in the electronic administration of documents consist of scanners that use image technology. Information in paper medium is converted to digital information and can be stored in multiple media such as microfilm, tape, disk, etc. Flat platen (bed) scanners are usually used for smaller documents (up to A3), while drum scanners are used for large (A0) sized documents. Multiple feed scanners are useful when working with multiple page documents and large volumes. The digital camera is another image-entry alternative especially useful for capturing images in delicate materials, although it is less effective for large volumes. Optical Character Recognition (OCR) technology electronically recognizes characters or text automatically and can be used to convert scanned documents (images) to full text documents. Neural Network Recognology Systems are particularly interesting developments because they develop their own rules and can learn and relearn to provide solutions in the areas of data analysis, pattern recognition, data processing and electronic imaging. The integration of recognologies and Electronic Document Management Systems (EDMS) are predicted to include all the technology functions related to scanning, indexing, modifying, processing, storing and retrieving of documents. Distributed printing is facilitated by high volume network fax solutions, network printers, network PCs or network printer devices.
(Tarsus Technologies 2001). Unnecessary printing (desktop publishing) of documents is thus avoided and occurs only when you need it. This reflects a move from a 'print and distribute' to a 'distribute and print' scenario of the Internet and intranet environment. **Multi-channel delivery** or transmission (Internet, wireless, mobile and e-mail) furthermore extends digital communication beyond the organization's boundaries. **Other technologies** providing digital office solutions worth mentioning are: digital copiers, multi-functional units (printer, copier and fax), automated electronic faxing facilities (digital senders), e-mail or GroupWare, voice-recording systems, video-conferencing and Raster Image Processing (RIP) technologies etc.

**Few Tips to paperless office**

- Send electronic invoices and encourage your suppliers to send you electronic invoices only.
- Investigate whether your suppliers and your financial institutions will allow you to download online statements, and ask them to mail you.
- Stay up to date by reading news online and subscribing to e-newsletters.
- Download cute PDF freeware that will allow you to print to PDF and store the document electronically.
- For about $15 annually you can purchase a Digital Signature which will ensure your emails are secure and encrypted.
- Sign up to an electronic fax services like Outbox which allows you to both receive and send faxes via email.
- If your business is quite complicated you may want to consider a document management system like Information Organizer which uses a database to catalogue all your records, and wait for it, you can link your source document directly to the transaction within your business management software, and retrieve it at the click of a button.
- It is vitally important that you store the documents securely and in a searchable and retrievable format.
- Customers to pay their accounts electronically, as an alternative to cheques. While the amount of paper is not significant (cheques are only small physically), the energy, carbon-emissions and time taken to bank the cheque is really a sustainable in the long-run.
- Supply in a larger personal computer (PC) monitor. This way you can do more reading / reviewing of documents on-screen (carp up the zoom for your own comfort) and avoid having to print.
- Trench the Post-its and use an electronic to-do list. Use an electronic password program to store all your important usernames, passwords and access codes. There are dozens of ways of cutting out paper usage in the home and office. Be innovative. Even though recycling systems take care of your used paper, it is better to reduce your consumption in the first place.
- The digitizing of the mentioned substances was part of larger processes, which needed to be converted to automated electronic workflow procedures. Such an automated workflow ensured that digitizing was integrated into the business process with consequent continuous maintenance and built-in control mechanisms. In future access from the intranet will improve efficiency.
Benefits
"The advantages of going paperless are countless and obvious, both for individuals and organizations. The main reason why most people still use paper is because of a life-long conditioning; paper has become an intimate part of how we generate, access and store information. By recognizing the paperless advantages it will be easier to implement it." George Dimopoulos. The paperless office has several advantages to that of paper, of which 'saving the trees' is only one. Similarly verities of Benefits of are also found when we use the paperless office. You will never have a completely paperless office, because some papers -- like deeds, notarized documents or receipts -- need to be saved for legal, financial or tax reasons. But you can clear out just about everything else. Beyond freeing space and clearing clutter, you will find plenty of other benefits to making your office more paperless:

- **More efficient** -- Save those 10 minutes you spent fumbling through paper while on the phone by clicking on a computer file. Converting to an electronic system provides the opportunity of analyzing and identifying flaws in manual processes in order to implement improved electronic business processes and new business rules.

- **More accessible information** -- Do not worry about taking 10 pounds of reports and notes on an out-of-town trip or across town to a client meeting. You can pull up the information you need from your computer and share materials with collaborators or clients via e-mail or electronic fax.

- **More environmentally friendly** -- Help reduce the amount of paper generated every year. The American Forest and Paper Association estimates that the typical business generates 1.7 pounds of material per person per day, most of it high-grade recyclable paper. The paperless office reduces the amount of paper produced and used, saving money for the organization as well as making a tangible contribution towards protecting the environment. Large storage rooms filled with files can be eliminated, provided legal obligations are adhered to.

- **Process management**--Electronic workflow has built-in control mechanisms like the triggering of activities, automated notifications and escalation as well as an audit trail to measure processing time and the quality of process output. The automated process allows tracking against predefined rules. The control over document updating and circulation ensures more accurate information, as employees will be using the most up-to-date version available. This culminates in improved efficiency and better quality (Baines 1997).

- **Resource efficiency**--Automated workflow sends the work to the employees and efficiency is achieved by assigning tasks according to, for example, workload. Electronic templates furthermore eliminate repetitive administrative tasks, improving productivity by allowing the employee to concentrate on the more intellectual tasks at hand. Increases in productivity and efficiency culminate in profitability and cost savings, while managing an increased workload.

- **More secure information** -- Keep confidential material securely locked away in electronic files that only you can access. You also won't have to worry about paper becoming damaged.

- **More economical and Standardization**-- Save money on files, file cabinets, printer ink and paper itself. It also consolidated electronic forms, working documents, templates and procedures ensure standardization.
Sharing and collaboration--A central database or repository of documents and information on the network, such as provided by intranets or extranets ensures the sharing of information from distributed locations, which encourages collaborative business processes and functional integration (process chains).

Market efficiency--A single customer service representative can access all the different areas of the (distributed) organization and has immediate access to the most current electronic information. This allows for quicker response times to customer inquiries. The automated procedures furthermore enable transparent communication with customers (uniform interface), the prediction of delivery times and adherence to deadlines. Automated acknowledgement letters, for instance, demonstrate a customer focus. Better service delivery improves customer's perceptions of the organization and provides a competitive advantage.

Information delivery--Electronic documents can be stored and delivered in various forms and formats, and delivered as a package to the user as, when and how required.

Unlocking information--Information sources previously 'locked' away and unknown might become available to the end-user in electronic format. Examples are fragile documents or those of which only a single copy exists. The information professional has applied his/her expertise in Identifying and organizing (indexing) documents or records better retrieval results will be obtained.

A decreased use of paper will furthermore save trees and reduce the waste products created by paper production and the disposal of used paper. Paperlessness enables customization and adaptation of work task performance schedules to the most optimal work style for each individual. Paperless processes are also many times faster than paper-based processes, because searches, retrieval, editing, communication and archiving of documents can be done more efficiently and quickly.

Paperless office digitization is cost saving. In addition to the cost savings and the gains that results from enhanced productivity, office digitization also cuts costs by decreasing the need for paper, printing, photocopying, fax, distribution, mail and courier services, office and storage space and commuting.

Several studies have shown dramatic increases in productivity when companies implement distributed work and telecommuting strategies which are facilitated and partly dependent on paperless work styles. The time and location flexibility will also stimulate employees to be more motivated, creative and productive.

A paperless work style is environmentally responsible, and allows the hiring of homebound individuals such as the disabled or at-home parents; this can only improve a company’s public image.

Conclusion

Even though document management and workflow automate processes for the paperless office, the information professional still has an important, notwithstanding much broader, role to play. The information manager understands the internal and external environments of the organization, works across organizational boundaries and is part of the alliance between domain experts, information experts and IT experts. Before capturing or publishing, a judgment needs to be made on each item to evaluate the cost and benefit of storing or archiving and to determine what needs to be preserved or to be destroyed. Furthermore documents need to be appraised to assure reliability, the understanding or anticipating of user requirements and the tracking document
utilization. The only difference is that in an automated document management system this will have to be addressed during the design or evaluation phase. As mentioned before, the indexing, searching and retrieval phases can become the weakest connection in electronic document management if indexing does not receive the required professional attention. The information professional can play an important role as project manager for the projects and phases towards electronic transformation. This will include identifying the most suitable software packages, managing the digitization (capturing) of existing paper records and managing ancillary costs for implementation such as training for end-users. The effect of the paperless office on the publishing industry as a whole is proposed as further research topics. Antagonism between firms has comprehensive from the local to the international level. Adaptableness, intellectual property, and know-how have become more significant than they were in the precedent, back when traditional economic resources such as natural resources, land, and manpower were the primary assets. Today's constant transform and unpredictability anticipates for an increasing organizational and individual capability to acclimatize to new conditions, to learn innovative ways of operation. A paperless business can enjoy many advantages in the financial climate and preserving the earth as well as the modern economy both from an employer's point of view and from an employee's perspective.

Reference
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Dr. Narasimha Murthy M.S. is a postgraduate in Economics and Business Administration from Mysore University. He is a Sanskrit scholar. He has obtained M. Phil, Degree from Madurai Kamaraj University, Madurai. At present, He is working as a Professor and Head of the Department of Economics at BMS Government College Konanur, Hassan Karnataka state. He has conducted several National level and State level seminars. He is also working as a visiting Subject Expert in Economics to Educational Multi Media Research centre (EMMRC) Mysore, sponsored by UGC Higher Education Programmes. He has initiated more than 30 compact discs for students of Economics, some of them are; Conceptual Law of Demand, Monopoly, Demand forecasting and so on. He has also contributed to produce E-content Programmes for Door Darshan, Vyas, Gyan Gangothri, and other T.V. Channels for Country Wide Classroom Lecture Series.
He has received his Ph.D. on the topic entitled “Mahatma Gandhiji’s perspective on the development of rural women through entrepreneurship – with special reference to Mysore district” in the department of Gandhian studies, Mysore University, Mysore. In his credit, he has enough international articles and many national articles. He has written more than 10 books in the field of Economics and Management, to name a few are; ‘Almanac for Managerial Economics’, ‘Principles of Management’ Business Economics, Pragmatic Economics etc. Earlier he worked as a Faculty in the Department of Management, TTL College, Mysore University, and the Dept. of Management sciences, GSSSIMS, Mysore (affiliated to Vishweshwaraya Technical University) and in the Department of Management Studies, Srinivas Institute of Technology, Valachill, Mangalore (Karnataka).

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