

# White Paper

A recognized existence of Secondary Paper Activities  
within the Office Environment

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## **1.0 Abstract**

The sociability of the Paperless Office is still a question that has not been answered and identifying that one of the problems is the secondary paper aspect which research clearly indicates that this area is still a major concern when discussing the concept of the Paperless office, Efficiency Management Workflow System and Electronic Paper Document Distribution.

Could recognition of Secondary Paper Activities within the office environment help to create and push forward a more practical approach to the concept of the Paperless office, Efficiency Management Workflow System and Electronic Paper Document Distribution?

## **2.0 Acknowledgements**

A complete Acknowledgement has to be addressed to Bradford University for the help and assistance of this Facility Study.

My final acknowledgement is to the Authors Sellen and Harper who wrote the book “Myths of the Paperless Office”, who professional academic insight to the real and pressing idealistic views, that has been far reaching then an other material that has been published to date.

### **3.0 Aims and Objectives**

#### **Aims**

The main aim is to make awareness and to identify that Secondary Paper Activities exist within an Office Environment.

There will be a strong investigation in the area of Secondary Paper Activities to try and establish why these have been ignored and not been classed as a part of the Concept of the Paperless Office, Efficiency Management Workflow System and Electronic Paper Document Distribution?

#### **Objectives**

The objective of the Facility study is to establish what paper activities exist within an office environment with an emphasis on the Secondary Paper Activities and to establish that they exist and to what extent they are present within an office environment.

## **4.0 Introduction**

### **Cultural and Sociability of Secondary Paper**

The Author will identify problematic areas that are associated within the sociable, cultural technological advances and a recognise undiscovered new area of Secondary Paper Activities which looks at hand written paper notes which are used as part of every day activity within the office environment.

To understand the Cultural and Sociability aspect of the paperless office, the Author has started with what he believes is the most important factor concerning the potential growth of the paperless concept.

The Author has had to introduce a new meaning, to an area that plays a big part to the understanding of the Paperless Office. The author of the report has only found one other meaning, Harper and Sellen, (2002); and this was more an associated meaning regarding an overall area covering various factors.

Throughout the research there was only one found associated meaning this meaning was called avoidance (avoidness) Harper and Sellen, (2002); This covers various factors such as how we read a piece of paper to how we interact and behave to paper as a communication device between ourselves and others.

Secondary Paper covers the area of paper activities which you would class as small notetary, small notes, small messages, written notes, communication that is not in paragraph form or long sentenced to together.

In the modern office today a large amount of secondary paper activities exists probably even without knowing that you do this activity. A large percentage of these activities are common practice but unfortunately the existing paperless office systems do not cover this activity.

This new possible aspect to the paperless office may have an underling effect on why the paperless office has not grown to its full potential. The secondary paper is an issue that has to address if the concept want to become an acceptable system.

## **5.0 Facility Study**

The author of the report believes that one of the main areas that the Paperless Office has not developed to a level where it is totally acceptable and why there are many ambiguous areas is that of the secondary paper aspect.

The facility study Intention is to concentrate on this area of secondary activities with regards to a piece of paper as a communication tool for the purpose as a written medium in the context of written communication between persons within a work office environment.

The reason for this is to establish how many times a secondary paper activity will be used over a given period of time within a standard office layout and how the secondary paper aspect of the facility study interact with the communication devices.

The facility study is to design a template tool that can be used as a guideline to achieve a practical reduction in the non E flow system within a typical office environment complete with a confidence Interval within Hypothesis Test frame work.

Once the reduction has been established it will be able to offer a confidence interval by the method of the overall means and standard deviation calculation this will be set to 95% or 99% to state that the findings are confidence in achieving this reduction

After the study period has finished the information will be gathered together and collated and the conclusions and results will be shown in the report.

## **6.0 Calculations and Findings**

### **General Findings**

The general findings is a indication only which is not apart of the Hypotheses Testing Framework this will give the reader of the report a clear view of the findings and in the following chapters a more engineering statistical performance can be viewed.

The findings where carried our within four different departments within Bradford University

Each department where given a Survey Sheet and marked down each time they performed that activity the survey was taken over a period of 5 Working day.

The main purpose of the report is to identify what secondary paper activities took place within an office environment

No 1: Secondary Paper Activities	34.40%
No 2: Non Paper Activities	65.60%

Above is the total individual percentage figures given to the facility study with regards to the Secondary Paper section of all the offices combined.

The most active was is the Short reminder notes placed in to file with 10.2% and then it is the Post it notes with 6.9%.

The findings also conclude that out of the four Departments only three of the departments only used secondary Paper Activates This is not a hinder or scare to the findings this informs use that some offices have a pre set administrative systems.

To make the percentage equal the author has calculated the percentage figure form each individual activity not calculating the total percentage from each department, as you can

see from the above information the two of the departments have not used secondary paper activities.

So there the percentage figure has not been calculated from a base figure of 75% but a total figure of 100% and deducting the secondary percentage figures, accordingly to the individual percentage.

## **7.0 Hypotheses Test** **Confidence Interval**

A Confidence Interval is what it means it's a figure that is calculated to give the confidence that the information and conclusions is correct and you are confident of that finding; this is normally set to percentage figure, of 99% confident or 95% confident.

Below is the Confidence level with the design frame work calculated form the facility study.

### **State**

$$U = 34.40$$

$$1. H_0 = U = 34.40 \text{ ( one sided )}$$

### **Test Statistic's**

$$t = \frac{x - U}{S / \sqrt{n}} = \frac{3.12 - 34.40}{1.76 / \sqrt{11}} = -2.17$$

### **Critical region**

Appropriate significance level  $\alpha$ ; = 0.05. (95% Confidence)

$$H_{a1} = t \frac{x - U}{S / \sqrt{n}} = \frac{x - 34.40}{S / \sqrt{n}} \quad t_{11-1; 0.05} = 1.812$$

$$H_{a2} = t \frac{x - U}{S / \sqrt{n}} = \frac{x - 34.40}{S / \sqrt{n}} \quad t_{11-1; 0.025} = 2.228$$

### **Calculations of the Test statistic**

$X_B = 33.40$ ;  $s_B = 1.76$  ( $X =$  estimated  $33.40$ )

$$= \frac{33.40 - 34.40}{1.76 / \sqrt{11}} = -1.88$$

### **Conclusions**

Ha1:  $t (-1.88) > -t_{\alpha} (-1.812)$ , hence we have to reject Ha1, at 5%, this will bring it within the critical region by 0.072, so we must reject.

Ha2:  $|t| (1.88) < t_{\alpha} (2.228)$ , hence we cannot reject H0 (Ha2)

Ha2 does not fall within the critical region, so we can accept this at 0.025 (confidence interval)

The above information indicates that the first test was not accepted and the second test was, with a figure 1.182 was in the critical region of 1.88 and the second test was not with a figure of 2.228 both figures where based from the test statistic of 1.88.

Ha2:  $|t| (1.88) < t_{\alpha} (2.228)$ , hence we cannot reject H0 (Ha2)

Ha2 does not fall within the critical region, so we can accept this at 0.025 (confidence interval)

Conclusion = this can not be rejected

## **8.0 Facility Study Conclusion**

The main purpose for the facility study was to establish if secondary paper activities were present in an office type environment.

The Study findings were based on a Hypothesis Testing Frame Work that included the following; Confidence Interval for Population Mean, Hypotheses Confidence Interval Test, Probability Testing and a Hypotheses Confidence Interval Test, (Product Device), which were calculated from the facility study.

For the purpose of the white paper the main calculation of Hypotheses Confidence Interval has been included.

The Hypothesis Testing Frame Work, was to establish a confidence interval based at 95% confidence, this used the individual activities percentage figure and used the mean, the author conducted the test from the t table distribution figures due to not knowing the standard deviation this form of calculation is totally acceptable within the test calculations and does not hinder the finding in any way, the  $XB = 33.40$ ; was estimated to approximately 1.00 of the original figure.

The main purpose of the project was successful to point that it has acknowledged that there was a strong secondary paper activity within a typical office environment and calculations could be proven up to 34.40 in some cases this would have transferred over to 100% eradication of secondary paper activities if the divided percentage figures were below 50.13% of the total secondary paper activities.

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