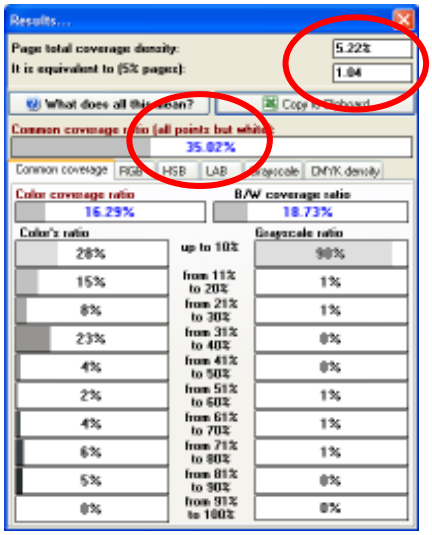
This Case Study involves a Borough Council with several medium sized buildings and a variety of satellite offices/locations across the Borough

Objectives



A northern based council were looking to optimise their Copier and Printer equipment across their organisation and develop a document handling strategy to help deliver the following:

- Reduction in Paper Usage
- Reduction in Support Costs
- Have the right number of devices
- Least Cost Printing

Manual Audit

The Council requested a Print Audit of one of its 4 story buildings to be undertaken within 10 days from start to Finish. During the Manual Audit, observations from the site have been included in the report and these consist of general observations made during the visits and comments from users. Workflow and processes were studied at the same time and specific individual and department needs were noted. Data was gathered and correlated from various sources. Typical Print runs were analysed using the PUROSolutions Toner density software to determine actual Toner usage on a couple of case study devices during the audit. To support the research the purchase orders were analysed over 4 years and the running cost was established and confirmed for the 2 devices within the Chief Executives Office.

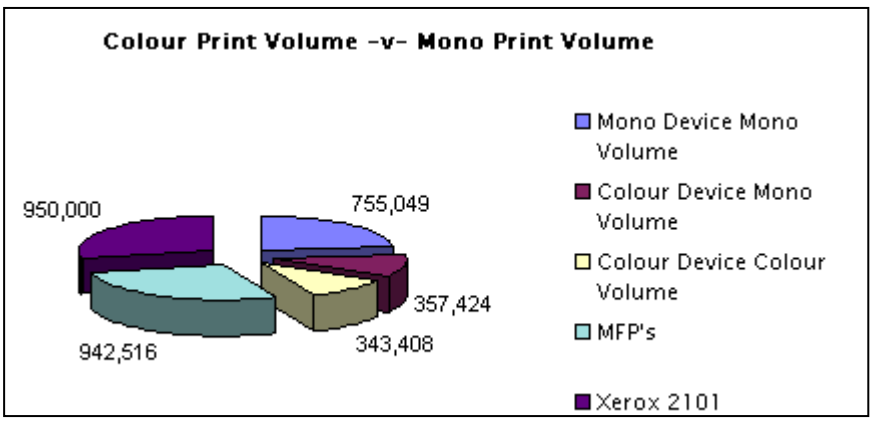
PUROSolutions Manual Audit Results

The Council Database showed that 76 devices were housed in the 4 story building serving 200 staff.

The Manual Audit identified that fewer devices were actually installed and the revised data was shown as follows:

- Total number of Print Devices including MFP's **66**
- Printers located and showing on Database **56**
- Printers located but not showing on Database **2**
- Total number of MFP's **8**
- Total number of different Devices **43**
- **23** of the **66** devices across the Council Site are colour devices.
- **24%** of the total printed output from desktop devices is Colour.
- **51%** of the total printed output from Colour desktop devices is Mono.

- The most common Mono Printer is the HP 2200 with 7 Units or 12% of the MIF.
- The most common Colour Printers are the HP 4650, 3800 and the Inkjet 990CXi with 3 Units each.
- There are 23 One-Off type devices.



The volumes across all devices were identified and the Total cost of Ownership of the MFP's was calculated along with the running costs average running costs of the print devices. .

The total volume across the one building is 3.3M images per annum.

Calculating the Current Cost of Print

In order to calculate the current cost of print on a number of devices a calculation matrix was produced utilising the council purchasing costs. Costs where calculated against the individual models using actual data stretching back to the device installation over 4 years ago. The data was correlated and the Toner density was identified to produce an average toner yield over 4 years usage.

	Counter	Colour	Mono	Percentage Colour output	Cost per Colour Page	Cost per Mono Page
Location A	115956	51370	64586	44.30%		
Location B	511687	332445	179242	64.97%		
Total	627643	383815	243828	61.15%	£0.049373	£0.013499

Excluding hardware and Support

The analysis on these 2 specific devices showed that the toner yield for colour was in line with the manufacturer's specification of 5% coverage. The black toner usage was 20% higher than the manufacturer specification at 6% coverage.

Cost per Colour Page	Cost per Mono Page
£0.059373	£0.023499

The cost of the Hardware and the HP next day Care Pack equates to £0.01 pence per print. Therefore the total cost of ownership is as shown.

Device Locations and Usage

In order to picture the device locations, all machines are graphically displayed on a floor plan within specific zones, in order to address each zone with a solution. This analysis allows us to identify volumes and product utilisation as well as identifying the areas where colour is predominant.

In this case the strategy could involve as few as 3 Colour enabled MFP's and 3 Mono printers. Which in turn would eliminate 10 printers and 6 scanners.

Savings would be made on the total cost of ownership, space and footprint cost would be greatly reduced and fewer devices would also deliver a reduction in energy and have a much lower environmental impact.

Mono Printer	Colour Printer	MFP	Facsimile	Scanner	Plan Printer
10	6	1	2	4	3

The PUROSolutions USB Print Analyser

The USB Print Analyser was used to check volumes of all network devices since installation and a subsequent check showed the usage of each device over a period of time. As well as delivering specific information on the number of Colour and Mono prints produced, the Key also provided data on the device status and the toner levels on many of the colour devices.

Estimated Print and Copy Volumes from the Manual Audit Data

The average annual volume for Mono Printers is approximately 20,400 prints per unit per annum.

The total annual volume for Mono Printers is approximately 755,000 (20,400 prints per device per annum x 37 devices).

The total annual volume for Colour Printers is estimated at 701,000 (Estimate based on 33,372 prints per machine per annum, 21 devices).

The total Colour volume is 343,408, almost 24% of the total printed output.

The total annual volume for the Copiers/MFP's is approximately 942,500 clicks per annum.

The total annual volume for the Fax Machines is negligible although the space required is considerable.

The annual Mono Copy Volume produced on the Xerox 2101 is approximately 950,000 copies per annum.

Total estimated annual volume for Mono images is 2.974,000
Total estimated annual volume for Colour images is 374,000

Report Conclusions

The Audit identified the total volume of prints and copies produced on each range of equipment.
Despite one Business Area undergoing Printer Optimisation 3 years ago a number of areas have been identified where immediate savings can be achieved.

The Manual Audit undertaken was extensive and from the data collected indicates that the average volume per black and white printer is around 20,400 per annum (less than 79 prints per day per device), whilst the volume of the colour devices indicates that the average volume per colour printer is around 34,000 per annum (around 130 prints per day per device).

Only 49% of output on the colour devices was colour print and all devices are under-utilised with regards to volume output.

The 8 MFP devices are not fully utilised and a number of options are available to utilise the MFP's to drive down the cost of print.

Immediate action could be taken to reduce costs significantly without any investment necessary.

The savings on an annual basis would be substantial if it was decided to invest in new equipment.

Following a presentation of the final report it was agreed that the recommended Full Software Audit would prove beneficial to the Council.