About MFDs

Almost 3300 staff and research postgraduates use over 700 printers throughout the University, printing out over 6.5million pages every year.

At a time of shrinking budgets we can make substantial financial and environmental savings, as well as helping to improve our wellbeing, by using new multi-function devices (MFDs) which will reduce printing at the University by around 17%.

MFDs (Multi-Functional Devices) are cheaper to run than smaller printers and have a variety of functions, including scanning - a feature which is increasingly in demand.

Range of Functions

The new MFDs will scan and send to the user’s email address, produce colour or black and white printing and enable staff to photocopy documents. They will also staple and collate printed pages. Printing will be sent to a print queue, which holds the document and allows the user to print from any MFD on the system to which they can logon. There are over 70 MFDs on the Stirling campus.

Staff can log in to the PaperCut User Portal to view or cancel their pending print jobs, monitor their printing costs and their environmental impact.

The fleet monitoring software can detect the status of each device and email relevant administrators when the MFD for which they are responsible needs toner or has a fault.

Financial Benefits

The University will save between £70,000 and £300,000 each year by using MFDs. The actual amount saved depends on how much colour printing is carried out and the amount of print on each page – an email has about 5% coverage while an A4 photograph has about 80% coverage.

Self-regulation by users cuts printing by 7% and the opportunity to choose whether to print a document at the MFD reduces printing by a further 10% as reported by NewField IT.

Environmental Benefits

We have replaced 700 printers and 60 photocopiers with around 70 MFDs.

Between November 2010 and October 2011, staff printed over 6.5 million pages. This was reduced by a further 17% when all staff started using the system for print. The paper being supplied is Forest
Stewartship Council (FSC) certified. This paper is not contributing to the destruction of the world’s forests.

Double-sided black and white printing is the default and this will save 50% of paper that would otherwise be used on most of the local, smaller and older printers which only print single-sided. Utilising the 2 page to 1 page function by choosing the print queue of the same name one can reduce output by a further 50%.

Colour printing requires 3 additional colours of toner to achieve colour and although the new MFDs will provide colour, staff are encouraged to use colour only where it makes a significant difference to a presentation. Printing in colour is also slower. The quality of the print on the new Konica Minolta machines is superior to all previous printers and photocopiers and greyscale can be used to great effect.

Konica Minolta (KM) is on the 2011 Global 100 list of most sustainable corporations in the World and they have been appointed as the University’s supplier of new MFDs. Konica Minolta MFDs have sleep mode timers which can be set by hour, day, week, and month allowing the University to provide excellent energy saving during the off peak hours and be ready for use during the day. Their toner includes biomass and is CO2 neutral.

KM have cut CO2 by 15% through better systems of service calls and engineer tracking throughout the UK since it was introduced in 2005. The global KM targets include 20% reduction in petroleum usage and packaging by 2015. KM’s long term worldwide goal is for 2050 and is to reduce CO2 by 80% of 2005 levels. The new MFDs should enable the University to make substantial savings in energy and paper which will reduce the environmental impact of our printing.

Environmental Benefits Case Study

PaperCut is the print release software which won the University’s tender is being used with the new MFDs.

Case study 1

One organisation which has been working this way for about 18 months said that staff members were unhappy at having to give up printing at their desks and didn’t like having to release their printing from a central MFD.

Now they like the change, they have reduced their printing, and their organisation is winning awards for carbon reduction.

Case study 2

The other organisation said that the savings were obvious. While staff were not happy with the change at first, after working with the new system for a year all but a few staff members recognise the benefits:
the ability to print anytime but decide when to collect the prints from the machine, instead of everything piling up on a desktop printer so that staff have to sift through lots of paper to extract theirs;

people working remotely being able to send their documents to a print queue knowing that they will be kept securely until they are next in the office;

the greater flexibility of being able to collate and staple double sided printing from a pc;

consumables can be ordered online and stored until needed;

the noise in the main office is greatly reduced without numerous desktop printers constantly working.

**Health Benefits**

The University's work station assessment recognises that staff should take regular time away from their pcs. The guidelines recommend that staff move away from their pc once an hour and the new MFDs could encourage that.

**Testimonials**

‘PaperCut NG is easily the most cost effective with its low price and enterprise standard features that you would find on products costing thousands. We recoup the cost of printing, and can use features such as price reductions on the cost of duplex printing to encourage more environmentally friendly usage.’

*Tristan, Cranfield University - UK*

‘Well done on producing the best print charging solution I have used! PaperCut is fast, reliable and easy to manage. The advanced charging options provide excellent flexibility and the web administration interface is the icing on the cake.’

*Adrian, Jesus College, Cambridge University - UK*

‘The application is really very nice and we are on track to reduce our printing consumption from 1.1 million pages per month to a goal of 800,000 pages per month.’

*Glenn, Indiana University-Purdue University Fort Wayne - USA*

‘Since moving over to PaperCut Quota in January 2006, administration and management of the system could not have been easier or simpler.’

‘With the upgrade to PaperCut NG this year, ease of management is further enhanced with the administration console now accessible via a web interface. Staff can now manage the system from any workstation connected to the College network. The new reports available in NG will be very useful for printer management and planning/budgeting purposes.’
‘Technical excellence in the software itself is well complemented by your technical support team. The College has been most impressed with the level of service we have experienced in the past 18 months.’

**Sylvania, The University of Melbourne - St. Hilda's College, Australia**

‘We love PaperCut. It is a truly operating system agnostic solution that has allowed us to address almost any level of complexity in terms of tracking and allocating printer usage.

‘We have deployments that can manage the intricacies of graphic design output to plotters, computers labs accessible to tens of thousands of students requiring per page billing and small department print quotas with secretaries generating their own ad hoc reports.’

‘The internal reporting system and automation tools provided have saved our sys admins countless hours in generating data for administrators. It is rare to find a product so well thought out and beneficial to users in every role.’

**Bart, University of Illinois at Urbana-Champaign - USA**

‘I’ve gotta say PaperCut is great and I’ve been singing its praises to other departments. The reports quickly show me printer usage at a glance, which I use frequently to more accurately place orders for toner and paper. I used to throw thousands of pages into the recycling bin every day because of unclaimed printouts, but overnight it’s been whittled down to a couple reams! Aside from the money saved on toner/paper….I no longer need technical staff to supervise printing full time.’

**David, Case Western Reserve University - USA**