

Rethinking Printing

Kyocera Environmental Survey 2011



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Executive summary

The Rethinking Printing research, conducted by Loudhouse Research on behalf of Kyocera, examines UK workplace printing attitudes and behaviours in 2011. Following on from previous research conducted in 2007, 2008 and 2010, it provides a view of the impact of the recent economic downturn and ongoing recovery on printing behaviour, how environmental attitudes have evolved and in what ways businesses are choosing to respond.

Previous reports highlighted the prevalence of 'green' ideas among workers, but found employers and employees adopting a somewhat haphazard approach to translating their concerns into action. There were hints that in order to achieve a 'greener' printing future, the burden might need to be shifted away from employees' own efforts toward a more centrally-driven approach.

This year's Rethinking Printing research reinforces this need: while signs of 'green fatigue' amongst consumers are abating and overall print volume is down, proportional waste remains consistent. With more companies accepting that greener printing has environmental and cost benefits in the current economic climate, the business case for Managed Print Services remains strong. However, with progress made in the last year, it is clear that employers need to look at external options to drive environmental behaviours in their business. In view of this, the scope of this year's report has increased to include the analysis of trends from procurement managers as well as IT managers and office workers.

Green Concerns, Green Fatigue

While evidence of the 'green fatigue' seen in 2010 remains, employees have demonstrated more environmental concern as they feel the effects of energy prices at a personal level (up to 87% from 80% in 2010). There has been a net decrease in printing while employees continue to perceive themselves as more environmentally conscious than their employers. Despite this, levels of environmental concern amongst employees remains below the peak reached in 2007-8. The rise in concern about energy prices has seen overall employee concern increase from 63% in 2010 to 71%. Such an increase confirms that while continuing economic turbulence is still forcing some environmental factors, such as recycling and waste management, to take a back seat the more tangible factors are of increasing concern.

Employers remain keen to stress their own concern for the environment, with the same percentage as 2010 (67%) claiming that they make environmentally conscious decisions at work. Despite ongoing economic concerns, employers still feel that the effects of the recent economic downturn are impeding their progress towards a 'greener' workplace with only 47% saying it has had little or no impact on their plans, down from 62% in 2010. Economic factors are increasingly forcing employers to look towards environmental measures as a

Key Stats Summary

71% of office workers consider themselves environmentally conscious

14% of workers have increased the amount of printing they do in the last year

Workers print **6,000** sheets a year on average, of which **3,720** are wasted or unnecessary

Only **25%** of companies have a formal, written print policy

21% of IT time is spent dealing with printer issues

62% have audited their print services in the past year

Nearly half (**48%**) of workers claim to have no knowledge of their companies' carbon offset policy

driver to cutting operational cost, however (39% report this, up from 25% in 2010).

Employees' concerns over rising energy costs are shared at the organisational level. With companies also showing a greater concern for waste reduction and energy efficiency. While there has been a slight decline in paper recycling facilities, this could be attributable to the decline in volume printing.

Despite this decline, it is clear that companies are still finding it difficult to educate employees. Reasons for unwarranted printing remain consistent year on year, with employees on the whole accepting responsibility themselves. However, much of the waste remains due to default printer settings that could be overcome by mandates and automation. While three quarters of IT managers now believe that their company could do more to encourage greener printing habits, only 25% of employees believe that their company has written print guidelines in place. With little change in company policy it is unsurprising that the attitude towards personal printing remains relatively unchanged in the last 12 months with 73% of employees printing personal documents in the workplace.

There is some indication that companies' commitment to IT investment remains a key reason for this. There has been a slight swing from IT managers believing environmental concerns being a key importance (a 7% reduction) in IT investment compared to those who believe cost savings are a primary driver (a 4% increase). In contrast, while (unsurprisingly) 89% of procurement managers see cost reduction as an important factor, 52% of them also see environmental concerns as an important factor.

Open to Change

The use of tablets and mobile computing continues to increase, but employees still acknowledge that 25% of their printed material could be read on a computer screen. Despite the overall decrease in printing, this percentage remains consistent with 2010. However, with 35% (down from 40% in 2010) of employees still describing themselves as 'paper people' and a 5% rise in those who admit that they could do more to reduce their printing, it appears that slow progress towards a paperless office is being made.

The average office worker prints as many as 6,000 sheets of paper in a year (25 per day). Of these, approximately 3,720 sheets can be considered as wasted or unnecessary. While the reasons for and proportions of waste remain consistent with previous years, there seems to be increasing willingness from employees to make changes in their workplace printing behaviour.

Corporate responsibility

While 72% of employees believe that they have ultimate responsibility for reduced printing, default print settings still contribute much of the waste, with few companies showing convictions to match their green aspirations. 61% of employees and 75% of IT managers believe that their company could do more to encourage greener printing habits, and the number of IT managers who feel that their organisation to be environmentally friendly has fallen to 52% from 61% in 2010. Personal printing has slightly decreased to 73% from 76% in 2010, but convenience remains the key driver with little policy or motivation in place to stop this.

Though greatly reduced from previous years, of the 3,720 sheets wasted by an employee in the average year, around 1,140 can still be attributed to printing single-sided rather than double-sided. This remains the print wastage issue that employees are most likely to believe could be solved by corporate intervention (32%), whether by laying down firmer rules or by implementing automation.

IT managers retain a consistent belief (68%) that 'user education around cost benefits' is the ideal way to encourage best practice printing, however there is a much stronger sway towards mandates and automation (85% as opposed to 27% in 2010), perhaps because of the wider range of automation options now available. Despite this change, employees believe that there has only been an aggregate 9% increase in the use of swipecard or password controlled printing and written printing policies. While employees' overall behaviour shows signs of a seachange not present a year ago, companies need to take the initiative to turn this trend into a pattern of behaviour. However, despite this opportunity and companies stressing their credentials, there are still signs that attitudes need to develop. 11% of companies have not completed an audit of their printing services in the last three years. While Procurement Managers currently demonstrate a strong commitment to the environment when first dealing with printing suppliers, only 18% continue to audit them after acceptance of the tender. It appears that green concerns are not followed through after purchase.

New Green Options

The time IT departments devote to supporting printing services has fallen from over a third in 2010 to around a fifth (21%) in 2011, as could be expected from a net decrease in printing. However, 80% of IT managers still believe that printing efficiency could be improved and 75% believe that their organisation could encourage greener printing habits.

Cost savings remain the primary driver of IT investment, a belief that has been further strengthened by the ongoing economic climate. However, while 66% of IT managers are required to report on IT environmental performance, the majority at senior management level, only 58% have conducted an energy audit. Overall, the number of companies who have audited their printing practices in the past year has remained relatively consistent with 2010 levels at 62%.

The percentage of companies who have instigated an audit of their printing practices in the last year has remained relatively consistent at 62%, with 11% having not completed one in the last three years. Printing policy in most organisations continues to be either absent, or leaning towards 'advice' rather than regulation. Employees suggest that 46% of companies have 'loose guidelines relating to printing' in place, against only 24% who have a 'formal written policy'.

Offset policies are also increasingly central to green printing strategy, with 60% of procurement managers and 56% of IT managers reporting that their companies have offsets in operation, on at least some activities at a team or department level. Workers clearly aren't being informed of this activity, with 48% reporting that they don't know their company's offset policies, and only 21% reporting the levels of offsets Procurement and IT managers take for granted!

In contrast to 2010, workers appear to be following through on their good intentions and regulating their own behaviour with little practical support from companies. However, managers do have an increasing awareness of the issues involved and an understanding of the benefits, It is clear that a great deal of opportunity remains, the majority of this lying with external suppliers.

External procurement can bring a vast range of improvements, and while companies are increasingly asking the right 'green' questions of suppliers, this needs to be carried throughout the lifetime of relationships to ensure that environmental change continues. Most importantly, there needs to be more synergy between the beliefs of IT and Procurement managers to effect changes of behaviour both internally and externally.

The research was conducted in Q3 2011 by Loudhouse Research, an independent market research consultancy based in the UK. The report is based on responses from 1000 office workers, 200 procurement professionals, and 200 IT managers in medium to large enterprises in a range of vertical sectors (500+ employees) in the UK.

Green Concerns, Green Fatigue

The ongoing economic situation has continued to affect concerns about environmental issues (*fig. 1*). While concern has increased from the 2010 figures, the rise may be largely attributable to concerns over rising energy prices. There is rising concern about climate change in comparison to 2010 figures, possibly in the face of continued media coverage and recent environmental catastrophes, but concern about 'recycling', 'waste disposal' and particularly 'waste generation' remains in decline.

While there has been a slight rise in employees (61%) who believe that their company could do more to encourage greener behaviour, there has been a slight decrease (72%) in those who believe that they have ultimate responsibility as individuals. Despite this, 71% consider themselves to be environmentally responsible, an 8% rise on 2010, and 50% believe their company to be so (a 5% increase on 2010). While these are minimal increases, there seems to be an increased appreciation of environment concerns on all sides of the business.

Despite a 48% decrease in individual printing, reasons for printing waste have remained relatively consistent with total print wastage of 62%.

2011 sees the number of employees sharing a printer with five or more colleagues rise to 62%, an increase from 50% in 2010. Against the background of a decline in overall printing, there has been a slight increase in personal printing, with a consistent year on year amount of employees (18%) believing that they should be able to print as they see fit, a view that remains more even more popular with IT managers and Procurement professionals (34% and 36% respectively).

At a corporate level, there is an increased view that any environmental activities have increased mainly to reduce costs and increase efficiency (39% up from 25% in 2010). Only 7% believe that the economy has had no impact and 11% indicate that projects have been abandoned (*fig.2*). Accountability on the issue remains high at 66% (with senior management reporting 58%), but the proportion who have actually conducted an audit of IT energy use remain lower at 58%. While awareness remains encouraging, progress in this area is slower than expected based on reported enthusiasm.

Fig 1: How concerned are you personally about environmental issues? (Office workers)

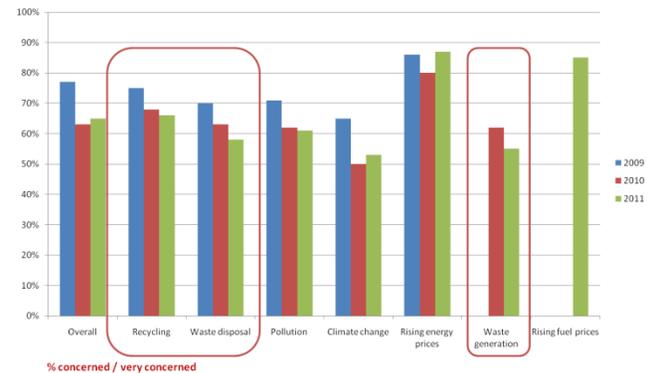
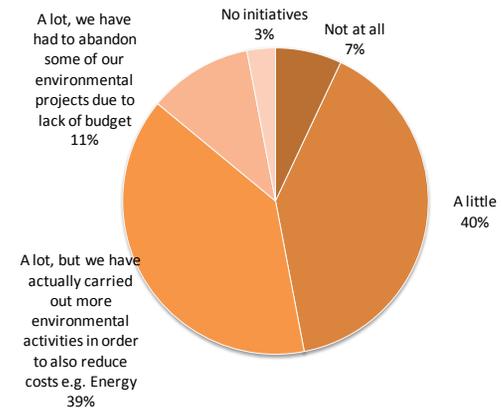


Fig 2: Which best describes how you feel environmental initiatives in your company have been affected by challenging economic circumstances? (IT managers)



In procurement there seems to be a similar disconnect between environmental commitment and actual practices. While 52% of procurement managers rate environmental concerns highly, commitment beyond supplier tender process is limited with only 18% auditing supplier's green performance regularly following their acceptance (fig.3). In addition one fifth are not prepared to pay a premium for green criteria from suppliers, and only a quarter would discount a supplier if environmental expectations were not met (fig.4). Procurement's green ideas have yet to be reflected in green practice over the long term, but there are indications of emerging green consciousness.

There is little indication that it is getting easier for IT managers to encourage users to print less or 'incorporate rules or policies on the network that enforce environmental policies' with figures remaining consistent with 2010. However, with a decrease in user apathy, employers may now have the chance to find the consensus they need to tackle what has long been their major challenge. In respect of procurement, it is clear that companies need a similar commitment, with more investment in relationships and increased auditing of relationships with suppliers necessary to move forward.

Fig 3: Do you include questions about suppliers' environmental performance in tenders? Do you audit your suppliers' environmental performance? (Procurement managers)

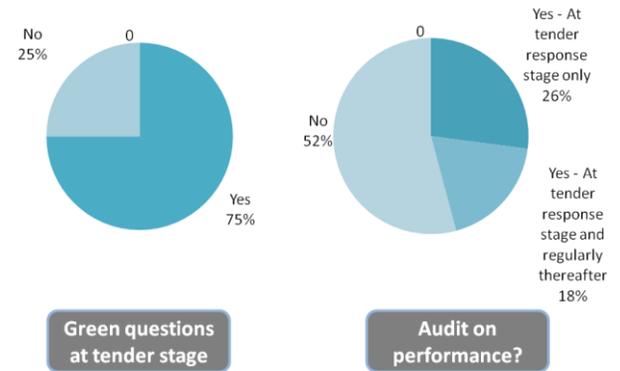
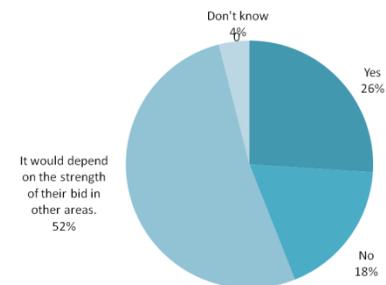


Fig 4: Would you discount a supplier if it failed to meet your minimum environmental standards? (procurement managers)



Open to Change

Following the increases in printing seen in 2010, 2011 has seen a considerable reduction, with nearly half of office workers having decreased their levels of printing. This decrease exceeds the increase in those employees who consider themselves to be environmentally conscientious or acknowledge that they could print less than they actually do (8% and 5% increases respectively). Could it be that after years of speculation, an at least partially paperless office is winning out?

84% of respondents have either decreased or maintained their levels of printing in the past 12 months (*fig. 5*) with far more (48%) having decreased than increased (14%). The average employee now prints over 6,000 sheets a year (*fig. 6*) based on a stated average of 25 sheets per day a considerable decrease on the 45 sheets per day stated in 2010. There has been a 5% decrease in those office workers who admit to being 'paper people' in the past year (35%), and a 5% increase in those who agree that they could print less than they currently do.

However, despite this considerable reduction, companies should be concerned that the reasons for wastage have remained consistent and that managers and employees are increasingly suggesting that more could be done to reduce waste. Between 2009 and 2010, there was a 1% increase in *wasted* printing; in 2011 this percentage has fallen by only 5% to 62%. The most consistent cause remains printing single-sided instead of double-sided, contributing 1,140 sheets per worker per year. While an overall printing decrease is welcome, the percentage of printing that could actually be read on a screen has marginally risen.

Employees seem to be making more connections between printing and environmental issues although they remain happy to print personal documents, mainly due to its convenience. The idea of printing as a necessity is being challenged but these changes seem to have taken place with little concrete action by companies. Printing policy in most organisations continues to be either absent, or leaning towards 'advice' rather than regulation. 46% of employees believe that their company has 'loose guidelines relating to printing' in place, against only 25% who believe there is a formal written policy.

It seems that employees have started to carry through on their long-held assertion that they have the ultimate responsibility for greener printing, but action still needs to be taken on both sides.

Fig 5: Overall, how would you say the amount of printing you do has changed in the last 12 months? (Office workers)

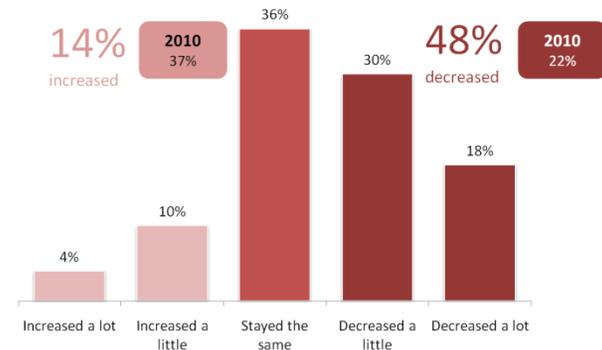


Fig 6: Average number of sheets printed/wasted per year (Office workers)

	Average number of sheets
Total printed per year	6,000
... Of which wasted/unnecessary	3,720
... Could be printed double-sided	1,140
... Could be read onscreen	900
... Printed for proof-reading	660
... Unnecessary duplicates	420
... Wrong documents	300
... Left forgotten on the printer	300

Corporate Responsibility

Office workers continue to believe that their employers' approach to printing is laid-back and hands-off. Measures taken to curb print wastage still indicate passive encouragement rather than active enforcement or automation despite a stated increased interest from employers. Carbon neutral printing demonstrates the split in approaches between employees and companies. While a quarter of employees claim that carbon neutral printing would decrease their printing volumes, the majority of companies believe that printing would remain the same (*fig. 7*)

Only 25% of employees remain aware of a written printing policy while 30% believe they have access to swipe card or password controlled printing. While there has been signs of behavioural change, employees still fall into one of two camps regarding responsibility, albeit with signs of a shift: more employees now believe that the company should take responsibility (28%) a 6% increase on 2010. Employees still concede that most types of print wastage could be cut if they 'made more effort' (*fig. 8*), and the reasons have remained consistent from 2010 with 75% printing the wrong document and 72% forgetting to collect printouts. Employees still believe that mandating or printer automation would be the single largest solution (57%).

Consistent with 2010, IT managers remain more likely than workers to believe that employees should be free to print 'as they see fit' (34% of IT managers against 18% of office workers). There also remains a strong belief that the way to encourage best practice printing in their company is through education. Perhaps unsurprisingly, 68% of IT managers think that educating users about cost benefits will have an impact while 48% believe the same about environmental benefits. However, there is an indication of a response to the fact that a soft company approach has been shown not to work, with a sharp rise in those IT managers who believe that 'enforced mandates/ pin codes/ swipe cards' are the answer (85% up from 27% in 2010).

Previous reports have shown a need for companies must look for environmental solutions elsewhere, and while environmental considerations in their relations with suppliers are positive, there is room for improvement. Companies' awareness of environmental issues has clearly increased with 71% of companies stating that they have an environmental policy, 73% of these having introduced such a policy within the last five years. However, while supplier CSR standards are a more important consideration for procurement managers (73%) than IT managers (48%), 1 in 5 procurement managers remain unprepared to pay a premium based on green criteria (21%). The emphasis of green issues seems to fall heavily on the tendering parts of the process with 75% of companies asking 'green' questions' of suppliers at this stage. That only 18% of companies audit a suppliers green performance once their tenders have been accepted reinforces the need for companies to prolong this emphasis throughout the life of any contracts.

Fig 7: How might having carbon neutral printers change your team's printing volumes? (Office workers / Procurement / IT)

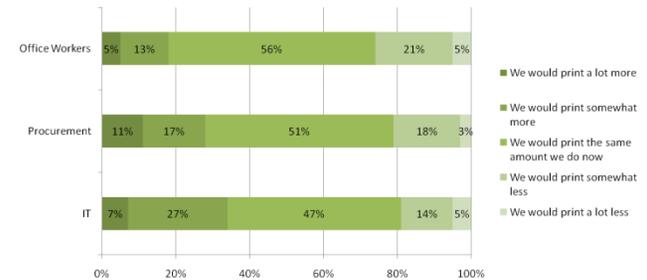
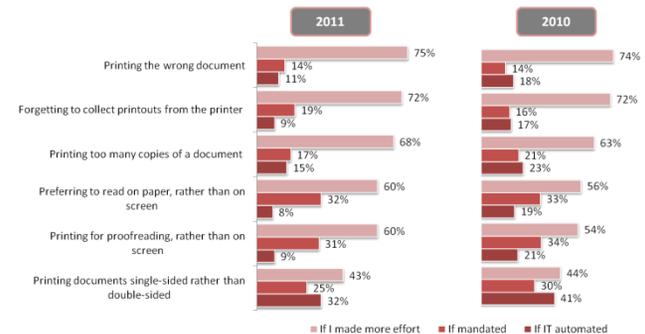


Fig 8: Ways percentage of print wastage could be reduced (Office workers)



New Green Options

Carbon offsets, on the other hand have received high acceptance levels from management – 60% of procurement managers and 56% of IT managers in the study report that their companies have at least some offsets in place at the team/department level or above. These offsets are diverse, but the most popular criteria for choosing them are home-country focus, focus on one's own industry, and offsets independently verified by respected third parties. Despite this emphasis on direct local relevance, it appears that companies are not doing a very good job communicating their offset programmes to their workers – 48% of workers report not knowing whether their companies have offsets, and only 21% report team-level or higher offsets (*fig. 9*). One of the most effective methods of greening company technology use is therefore going unnoticed by most company staff.

Both efficiency and cost are high on the list of concerns for IT managers, with 80% now believing that the efficiency of their print setup could be improved against 71% in 2010. The decline in time IT departments devote to document systems could be attributed to the decrease in volume printing. However, a fifth of an IT department's time is still dedicated to this (*fig. 10*). While there has been a 9% drop in IT managers who believe that their company is environmentally friendly in the last 12 months, the number of managers who personally believe themselves to be environmentally conscientious has remained consistent at 67%.

However, companies clearly need to look externally to affect more environmental change. In respect of printing services, there are clear differences of opinion between company managers. It is perhaps unsurprising that fewer Procurement managers (56%) than IT Managers (75%) believe that their company could do more to encourage greener printer habits as many of their green policies are supplier facing.

While company awareness of environmental issues remains high, it is perhaps more telling that the percentage of companies who have instigated an audit of their printing practices in the last year has remained relatively consistent at 62%, with 11% having not completed one in the last three years (*fig. 11*). In contrast Procurement Managers have shown strong commitments to the environment when first dealing with suppliers, but this disappears over time, with only 18% continuing to audit them after acceptance.

Fig 9: Which of the following best describes your company's current activities? (Office workers / Procurement / IT)

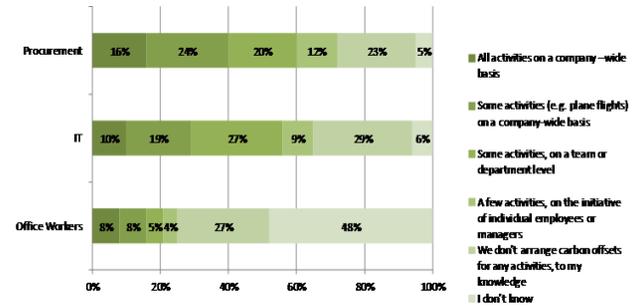
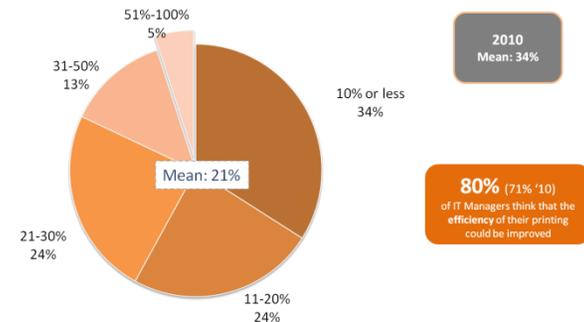


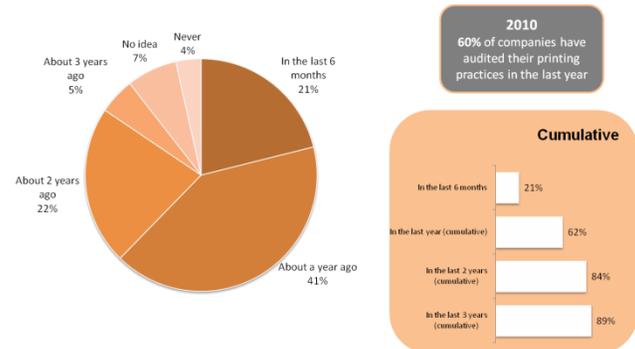
Fig 10: Approximately what percentage of your IT department's time is spent devoted to supporting printers and other document systems? (IT managers)



Procurement brings a range of environmental options which can have considerable effects on a company's environmental performance. These range from a product's carbon foot print (which 61% of Procurement managers and 58% of IT managers rate as important) to its design for disassembly and recycling (68% to 55% respectively). CSR standards remain of far higher importance to Procurement managers than IT managers (73% compared to 43%) when it comes to supply of printers or photocopiers while more Procurement managers still rate environmental issues as important compared to IT managers overall.

There is strong indication that further environmental improvements can be made through companies looking at external as well as internal solutions. However, for this approach to yield results, there will need to be more synergy between company managers.

Fig 11: When did your company last audit its printing operations / practices? (IT managers)



Q7 - When did your company last audit its printing operations / practices, including establishing the cost of printing within your company? All IT Professionals (200)

Conclusions

Business technology is a major area of environmental concern. Too often, however, environmental action in the workplace take a back seat to concerns seen as more immediate, such as short-term cost savings. The current economic situation, which has given rise to a renewed emphasis on longer-term savings, has motivated increased emphasis on efficiency and related green concerns. Obstacles to more responsible green action in the workplace remain, however. These include ingrained habits (such as single-side printing and assigning employees their own printers), short-term planning (such as examining supplier efficiency at tender, but not after), and lack of joined-up action (such as not communicating existent offset schemes to environmentally-concerned employees). All of these are part of a larger, overarching issue: businesses are still not fully connecting their day-to-day green concerns to their long-term plans for business success.

This is particularly striking in the technological environment of 2011, in which the efficiency and sustainability benefits of green choices bring ever-clearer benefits to the bottom line. Businesses who 'think green' when making technology and policy choices have the opportunity to make a profit both for themselves and for the environment. In order to fully capitalise on the opportunity for green technology success, the most forward-looking businesses need to rethink their established ways of doing things. They need to:

- Consider centrally-managed policy change to combat habitual waste and actively promote more efficient alternatives. Consistency across the business, which comes from central management decisions, will insure that no 'pockets of bad practice' remain, and that the entire business benefits from the best green initiatives.
- Monitor their actions on an ongoing basis, to make sure that standards are being met, and that the business receives maximum benefits. This ongoing engagement includes technology purchases (which should be audited regularly) and consideration of other, possibly more efficient solutions, such as externally managed printing services and the cloud.
- Communicate across the business about what is being done, why it is being done, and how it could be done better. Businesses need to capitalise on the reservoirs of green concern and engagement within their business. They need to make sure that employees are aware of initiatives and able to contribute ideas for improvement, so that innovation can come from all levels.

Success in 2012 and beyond is about going beyond short-term efficiency measures and moving toward a truly green model of business technology. In the most innovative companies, the green concerns of management and staff are harnessed into a continual effort toward innovation. With the entire organisation engaged in continual improvement, both the bottom line and the environment benefit.

