

## Windows 7 & Microsoft Office 2010

Market Research Results 2011

#### Introduction

ICT Services are looking to upgrade the operating system used in the University, from Windows XP to Windows 7. This will also include the introduction of Microsoft Office 2010 to replace the current Microsoft Office 2003.

The upgrade is expected to improve user experience of the institution's computing as well as to meet the standards required by the modern IT users.

The aim of this research is to determine which of the proposed technologies- Citrix XenApp and Microsoft Remote Desktop Services would deliver Windows 7 and Office 2010 in a cost-effective and manageable manner. The purpose of using the two technologies is to also find out how well the system works when users access it remotely via other different operating systems e.g. Mac OS X and other computing devices e.g. iPad tablet.

## Methodology

- 1. On 24<sup>th</sup> August 2011, 30 users were invited to trial using Windows 7 via Citrix XenApp and Microsoft Remote Desktop.
- 2. They were asked to log-into the system using their University account ID and password.
- 3. Using the device of their choice, they were asked to try use Microsoft Office Plus 2010 to do their work.
- 4. Other software including Adobe Reader, Internet Explorer 9 and SPSS was also available for them to use on the system.
- 5. Users had access to their usual University resources including H: Drive, Safecom printing and desktop shortcuts to online services.
- 6. Given a trial period of one month, users were then asked to evaluate their experience via an online survey.
- 7. The survey was distributed on 27<sup>th</sup> September 2011 and closed on 7<sup>th</sup> September 2011. 22 out of 30 users filled in the survey.



## **Results Analysis**

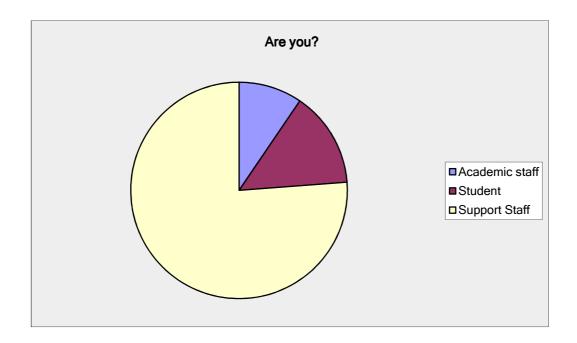
#### Are you...

76.2% of users were university Support staff. This covers a wide range of roles from administrators to technicians. These people tend to spend most of their time working from their desks and are likely to use the system the most.

14.3% of users were students. This group of people easily adapt to changes in technology, due to the nature of their work and their age range.

9.5% were Academic staff.

Are you?			
Answer Options	Response Percent	Respons Count	
Academic staff	9.5%	2	
Student	14.3%	3	
Support Staff	76.2%	16	
ans	wered question		21
Si	kipped question		1



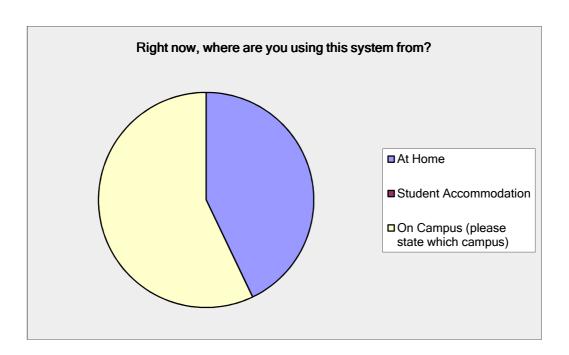


## Right now, where are you using this system from?

57.1% accessed the system on-campus. 10 people from Brayford campus, one from Cathedral and one from Hull campus.

42.9% accessed the system from home and nobody used it from student accommodation.

Right now, where are you using this system from?						
Answer Options	Response Percent	Response Count	9			
At Home	42.9%	9				
Student Accommodation	0.0%	0				
On Campus (please state which campus)	57.1%	12				
ans	swered question		21			
s	kipped question		1			



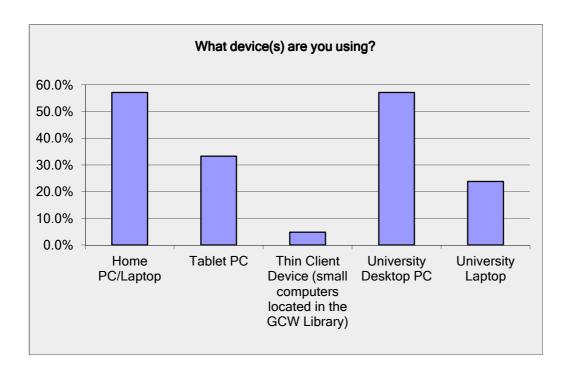


## What device(s) are you using?

57.1% used the system on a home PC/ laptop. The same amount of people also used it on a university desktop computer. 23% used it on university owned laptops and only 4.8% use it on a thin client device. These users accessed the system via Windows Remote Desktop.

33.3% used the system of a tablet PC such e.g. an iPad. These users accessed the system through the Citrix XenApp.

What device(s) are you using?							
Answer Options	Response Percent	Response Count					
Home PC/Laptop	57.1%	12					
Tablet PC	33.3%	7					
Thin Client Device (small computers located in the GCW Library)	4.8%	1					
University Desktop PC	57.1%	12					
University Laptop	23.8%	5					
ans	answered question						
Si	1						





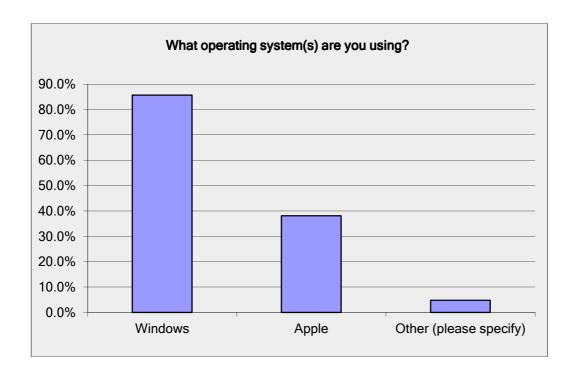
## What operating system(s) are you using?

85.7% were using Windows to access the system.

38.1% used Apple and 4.8% used Linux.

This shows that despite the increasing popularity of other operating systems such as Mac OS X, Windows is still the most preferred and used choice. Therefore, the upgrade will work to the advantage of users.

What operating system(s) are you using?						
Answer Options	Response Percent	Respons Count	e			
Windows	85.7%	18				
Apple	38.1%	8				
Other (please specify)	4.8%	1				
ans	swered question		21			
S	skipped question		1			

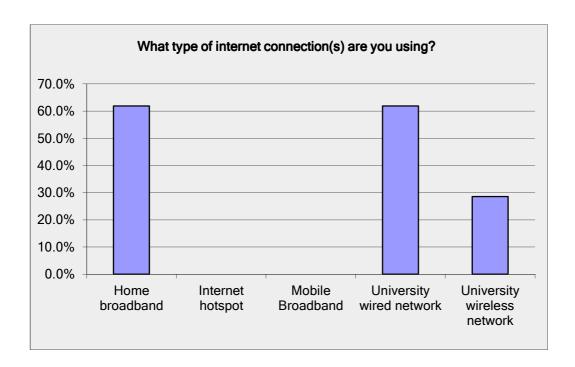




## What type of internet connection(s) are you using?

61.9% used home broadband and the same amount also used the university wired network. The remaining 28.6% accessed the system via the university's wireless network.

What type of internet connection(s) are you using?							
Answer Options	Response Percent	Response Count					
Home broadband	61.9%	13					
Internet hotspot	0.0%	0					
Mobile Broadband	0.0%	0					
University wired network	61.9%	13					
University wireless network	28.6%	6					
ans	swered question	21					
S	kipped question	1					



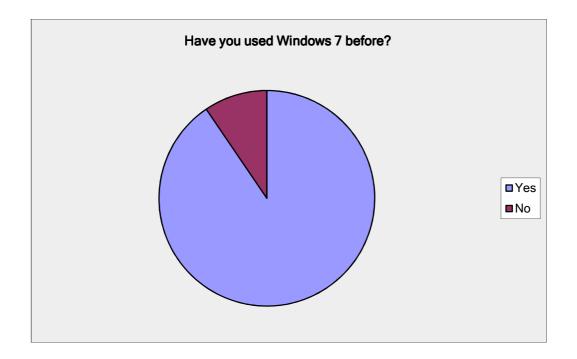


## Have you used Windows 7?

90.5% of users have used Windows7 before. This could be due to it being the default operating systems for most computers and laptops sold since 2009. And with the increasing popularity of the system, most users would have had to use it at some point either on or off-campus.

Only 9.5% had not used Windows 7 before.

Have you used Windows 7 before?			
Answer Options	Response Percent	Respons Count	e
Yes	90.5%	19	
No	9.5%	2	0.4
	swered question		21
S	kipped question		1

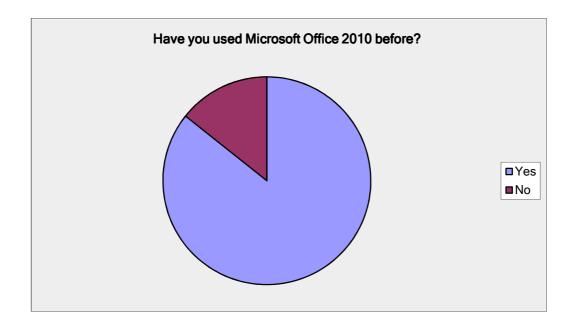




## Have you used Microsoft Office 2010 before?

85.7% of those asked, have used Microsoft Office 2010 before and 14.3% had not.

Have you used Microsoft Office 2010 before?						
Answer Options	Response Percent	Response Count	Э			
Yes No	85.7% 14.3%	18 3				
ar	swered question		21 1			





# On a scale of 1 to 5 (1 being the lowest), how easy was it to access this new system?

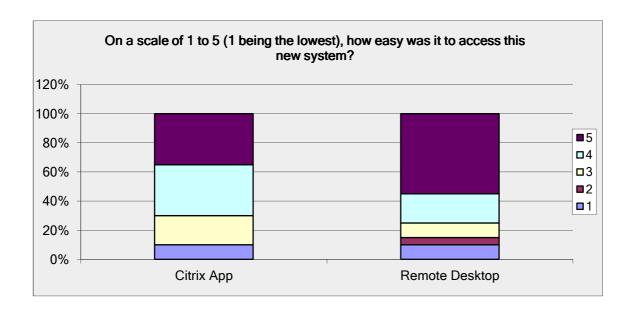
#### Citrix App:

35% found it very easy to access, giving it a rating of 5. 35% rated it 4 and 20% rated it a 3 (neutral). 10% rated it 1 meaning, they found it difficult to access.

#### **Remote Desktop:**

55% found it very easy to access, giving it a rating of 5. 20% rated it a 4. 10% were neutral, rating it 3.

On a scale of 1 to 5 (1 being the lowest), how easy was it to access this new system?						
Answer Options	5	4	3	2	1	Response Count
Citrix App	35%	35%	20%	0%	10%	20
Remote Desktop	55%	20%	10%	5%	10%	20
	answered question				20	
skipped question					2	





## How quickly were you able to log on?

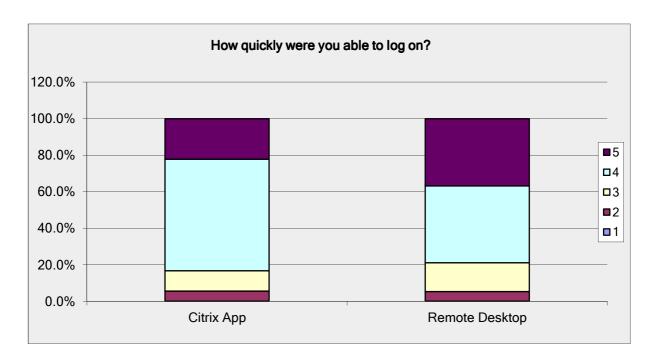
#### Citrix App:

Users found the speed of logging in to be good with 61.1% giving a rating of 4 and 22.2% rating it 5. 11.1% rated it a neutral 3 and only 5.6% gave it a rating of 2.

#### **Remote Desktop:**

42.1% of users found the speed of logging in to be good giving a rating of 4 and 36.8% rating it 5. 15.8% rated it a neutral 3 and 5.3% rated it 2.

How quickly were you able to log on?						
Answer Options	5	4	3	2	1	Response Count
Citrix App	22.2%	61.1%	11.1%	5.6%	0.0%	18
Remote Desktop	36.8%	42.1%	15.8%	5.3%	0.0%	19
				answer	ed question	19
	skipped question				3	





## How quickly did the application load?

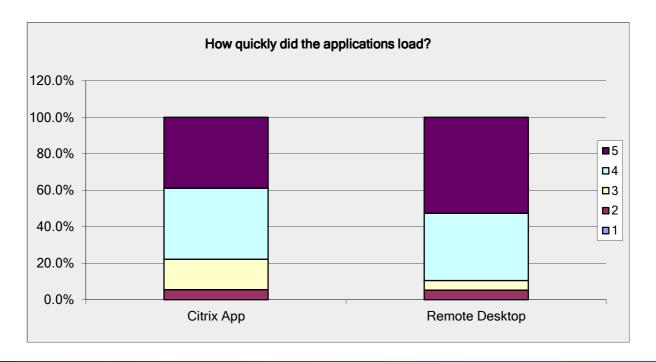
#### Citrix App:

Overall, 77% found the application to have loaded quickly with 38.9% giving it a rating of 5 and the same number, rating it 4. 16.7% felt neutral about eh loading speed and 5.6% gave a rating of 2.

#### **Remote Desktop:**

52.6% were pleased with the speed at which the application loaded, rating it a 5 and 36.8% rating it 4. 5.3% rated it a neutral 3 and the same amount gave it a rating of 2.

How quickly did the applications load?						
Answer Options	5	4	3	2	1	Response Count
Citrix App	38.9%	38.9%	16.7%	5.6%	0.0%	18
Remote Desktop	52.6%	36.8%	5.3%	5.3%	0.0%	19
				answer	ed question	19
	skipped question			3		





## Please rate your web browsing experience whilst using the system.

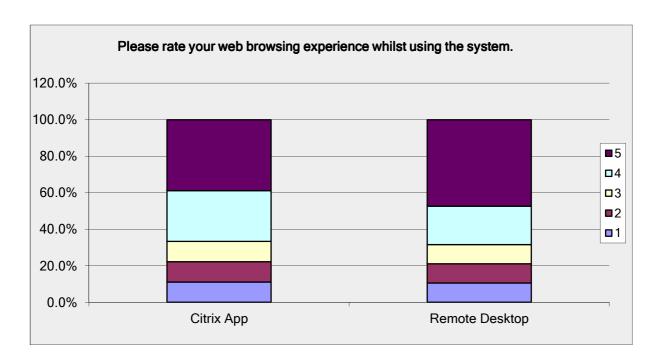
#### Citrix App:

Overall 66.7% of users had a good web browsing experience, with 38.9% rating it 5 and 27.8% rating it 4. 11.1% rated it a neutral 3 with the same number rating it a 2 and one.

#### **Remote Desktop:**

Overall 68.5% had a pleasant web browsing experience, with 47.4% rating it 5 and 21.1% rating it 4. 10.5% had a neutral browsing experience with a rating of 3 and the same number rated it 2 and one.

Please rate your web browsing experience whilst using the system.						
Answer Options	5	4	3	2	1	Response Count
Citrix App	38.9%	27.8%	11.1%	11.1%	11.1%	18
Remote Desktop	47.4%	21.1%	10.5%	10.5%	10.5%	19
answered question					19	
skipped question					3	





## While accessing this system, how stable was your connection?

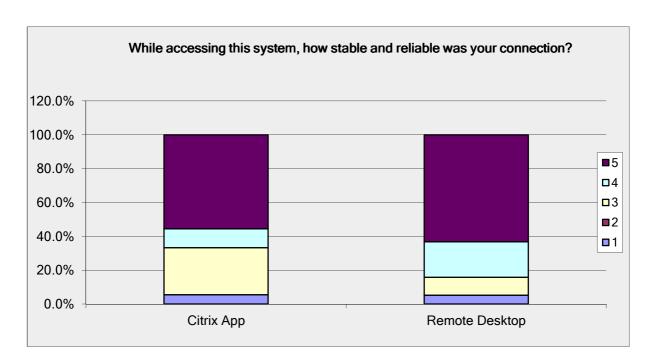
#### Citrix:

66.7% of user had a stable connection with 55.6% rating it 5 and 11.1% rating it 4. 27.8% found the stability to be a neutral 3 and 5.6% did not have a stable connection.

#### Remote desktop:

84.3% of user had a stable connection with 63.2% rating it 5 and 21.1% rating it 4. 10.5% had a neutral connection and 5.3% did not have a stable connection.

While accessing this system, how stable and reliable was your connection?						
Answer Options	5	4	3	2	1	Response Count
Citrix App	55.6%	11.1%	27.8%	0.0%	5.6%	18
Remote Desktop	63.2%	21.1%	10.5%	0.0%	5.3%	19
				answere	ed question	19
	skipped question				3	





## What do you like about the look and feel of the system?

1	Clear uncluttered fast	Oct 6, 2011 4:53 PM
2	Both looked and worked without problems. I've logged on at home and at work without any issues. its a tough choice between the two but I guess Citrix will cost the university more to implement.	Oct 5, 2011 8:35 AM
3	The modern fresh feel combined with the convenience and familiarity of the university desktop.	Oct 4, 2011 9:24 PM
4	Easy to use, requires little or no training, very intuitive	Sep 30, 2011 8:03 PM
5	I am a user of Windows 7 / Office 2010 at home, so I liked the way the experience was just like being at home.	Sep 29, 2011 10:26 AM
6	I saw little difference in look and performance between the two systems, but overall the experience was much better than I had anticipated. Little tricky installing Citrix at home on my Mac at first, but once sorted worked perfectly everytime (wasnt able to test remote desktop as was required to pay for app). Programs loaded at lightning speed (better than my actual desktop) and impressed that I was able to access all my email, desktop applications and shared drives remotely. Experiemented with using it on iPad 2 - worked well, however it was difficult to use without a mouse, but overall impressive.	Sep 28, 2011 9:49 AM
7	The look and layout of Outlook is much better and was able to navigate through word etc without too many problem but I have used Office 2007	Sep 28, 2011 9:35 AM
3	Familiarity	Sep 28, 2011 9:24 AM
9	All ok - comparable with the office	Sep 28, 2011 9:17 AM
0	So much cleaner to look at. More professional tools in Word too. It also just feels ncer to use.	Sep 28, 2011 6:41 AM
1	Easy to use.	Sep 27, 2011 8:51 PM
2	quick and easy	Sep 27, 2011 8:42 PM
3	it was quick	Sep 27, 2011 6:28 PM
4	I thought it looked fine - familiar and easy to use	Sep 27, 2011 4:40 PM
5	I found the file structure within CITRIX took getting used to but I tried this one first.	Sep 27, 2011 4:39 PM
6	N/A	Sep 27, 2011 4:00 PM
7	it looks new	Sep 27, 2011 3:47 PM

24/7 T: **01522 88 6500** 



What do you like about the look and feel of the system?		
Answer Options	Response Count	
	18	
answered question	18	
skipped question	4	

Overall, users liked the fresh layout and feel of the system. As it is an upgrade from the current system, the environment felt familiar to them, so they found it easy to use.



## What do you NOT like about the look and feel of the system?

1	nothing	Oct 6, 2011 4:53 F
2	nothing really	Oct 5, 2011 8:35 A
3	Would prefer more seamless integration between remote access and my laptop (i.e. automatic access to my local drives)	Oct 4, 2011 9:24 F
4	Citrix can be a little slow	Sep 30, 2011 8:03
5	N/A	Sep 29, 2011 10:26
6	Due to the way the system works, it feels like the responsiveness of your mouse and keyboard is sluggish - the same experience you would have on an older windows machine that was on its last legs. Obviously this problem was more evident when using the system over wi-fi or using my home broadband connection (10MB virgin cable). Using it on campus was the best experience - however, it did on occassion freeze and have to reboot (but i think i'd been away from my desk for some time). I also encountered the usual network performance problems using outlook and connecting to shared drives, exactly the same as i do currently with XP and Outlook 2003. Messages such as 'Outlook is trying to retrieve information from the remote server' or the search light icon when trying to access H or I drive. As far as I recall, ive never had this problem off campus - having said that, i only use remote desktop in evenings or weekends. When i first used both systems, applications loaded instantly (ie less than 1 second to launch). Now it has slowed to a couple of seconds - but still faster than using hi spec desktop at home. Using it to browse the web was extremely poor. Particularly sites reliant on moving graphics, such as You Tube.	Sep 28, 2011 9:49
7	There were some aspects of Outlook I didn't like - having multiple messages open at the same time and copying & pasting between them	Sep 28, 2011 9:35
8	Limited customisation A little latency with both systems which seems insignificant but begins to grate after a while. Video playback poor, especially on Citrix.	Sep 28, 2011 9:24
9	NO real issue	Sep 28, 2011 9:17
10	My only comment would be the transition between XP and 7 is a big one, particularly in Office. I think many staff will need an online training package to get used to it.	Sep 28, 2011 6:41
11	Nothing	Sep 27, 2011 8:51
12	na	Sep 27, 2011 8:42
13	There was nothing to say that once you logged on you had to then go through one of these systems	Sep 27, 2011 6:28
14	nothing	Sep 27, 2011 4:40
15	I preferred the look and feel of CITRIX to Remote Desktop	Sep 27, 2011 4:39



Page 7, Q15. What do you NOT like about the look and feel of the system?		
17	how you log into it is alittle tricky the 1st time	Sep 27, 2011 3:47 PM
18	Nothing.	Sep 27, 2011 2:49 PM

What do you NOT like about the look and feel of the system?		
Answer Options	Response Count	
	18	
answered question	18	
skipped question	4	

50% of users felt there was nothing that they did not like about the new system. However the remaining 50% had concerns about the practicality of the system especially when it comes to the reliability of a remote connection and speed.



#### How many times in total, have you used the new system?

Overall, users claim to have used the new system, a total of 369 times.

Staffs appear to have used it more than students. This is due the nature of work that the users do. Students tend to use their personal PC more often than university ones- and these are most likely to already have Windows 7 pre-installed into them.

Whereas staff tend to use university owned computers more often than personal ones. These computers are most likely to have Windows XP pre-installed into them as this is currently default operating system of the institution. So the only access they have to Windows7 is via the remote desktop connection.

Page 8,	Q16. How many times in total did you use the new system?	
1	75	Oct 6, 2011 4:55 PM
2	50	Oct 4, 2011 9:25 PM
3	40	Sep 30, 2011 8:05 PM
4	15	Sep 29, 2011 10:28 AM
5	20	Sep 28, 2011 9:49 AM
6	12	Sep 28, 2011 9:36 AM
7	6	Sep 28, 2011 9:28 AM
8	100	Sep 28, 2011 9:17 AM
9	7	Sep 28, 2011 6:42 AM
10	4	Sep 27, 2011 8:52 PM
11	6	Sep 27, 2011 8:43 PM
12	2	Sep 27, 2011 6:29 PM
13	2	Sep 27, 2011 4:40 PM
14	2	Sep 27, 2011 4:39 PM
15	5	Sep 27, 2011 4:01 PM
16	3	Sep 27, 2011 3:47 PM
17	20	Sep 27, 2011 2:50 PM

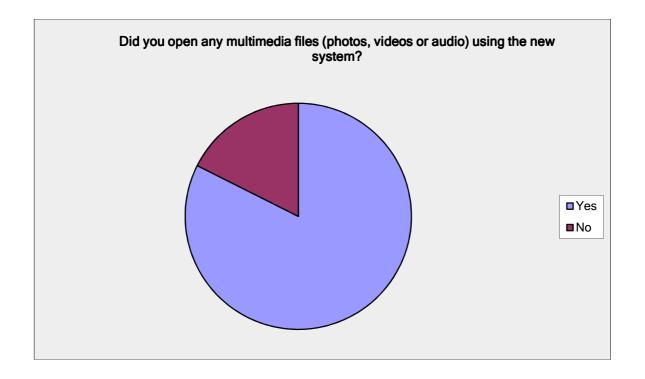
Approximately, what was the total time you spent using the new system?		
Answer Options	Response Count	
	17	
answered question	17	
skipped question	5	



# Did you open any multimedia files (photos, videos or audio) using the new system?

82.4% users opened multimedia files using the new system. The remaining 17.6% did not.

Did you open any multimedia files (photos, videos or audio) using the new system?			
Answer Options	Response Percent	Response Count	
Yes	82.4%	14	
No	17.6%	3	
ans	swered question	17	
s	kipped question	5	





### On a scale of 1 to 5 (1 being the lowest), how well did they work?

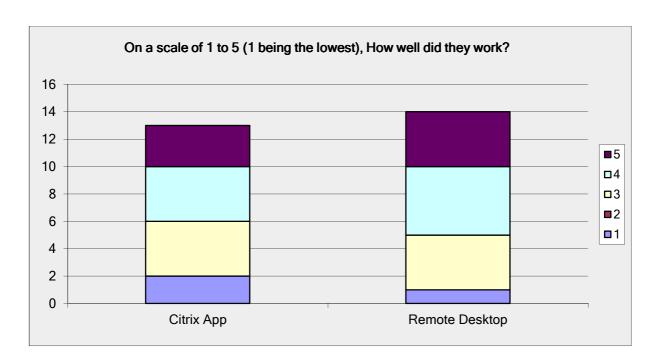
#### Citrix:

A total of 53.9% of users felts that this app functioned well as a system to work from, with 23.1% rating it 5 and 30.8% rating it 4. However, 30.08% also had neutral perceptions of it while 15.4% felt it did not function well at all.

#### **Remote Desktop:**

A total of 64.3% of users felt this technology functioned very well, with 28.6% rating it 5 and 35.7% rating it 4. 30.8% had perceptions towards it and only 7.7% did not think it work well.

On a scale of 1 to 5 (1 being the lowest), How well did they work?						
Answer Options	5	4	3	2	1	Response Count
Citrix App	23.1	30.8	30.8	0.0	15.4	13
Remote Desktop	28.6	35.7	30.8	0.0	7.7	14
				answere	d question	14
				skippe	d question	8



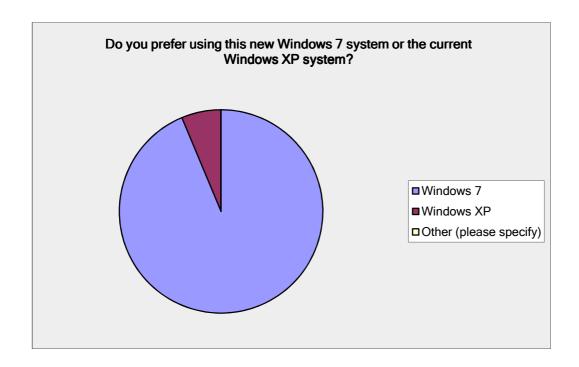


# Do you prefer using this new Windows 7 system or the current Windows XP system?

93.8% of those questioned prefer using Windows 7. This shows that there is a demand for an up-to-date operating system. And if introduce, users will embrace it as it will be a familiar work environment, but with more up-to-date features.

Only 6.3% preferred using Windows XP to Windows 7.

Do you prefer using this new Windows 7 system or the current Windows XP system?				
Answer Options	Response Percent	Response Count		
Windows 7	93.8%	15		
Windows XP	6.3%	1		
Other (please specify)	0.0%	0		
ans	swered question	16		
S	kipped question	6		



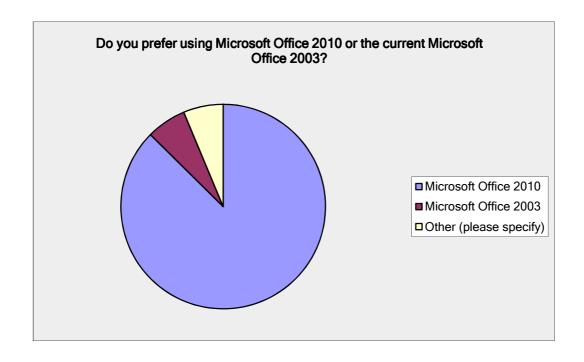


## Do you prefer using Microsoft Office 2010 or the current Microsoft Office 2003?

87.5% of users prefer using Office 2010 instead of Office 2003. This is due to increase in features available to design a document. And as Office is the main method of producing word processed documents, there is always a demand for it.

Only 6.3% preferred Office 2003 and the same number had no specific preference.

Do you prefer using Microsoft Office 2010 or the current Microsoft Office 2003?				
Answer Options	Response Percent	Response Count		
Microsoft Office 2010	87.5%	14		
Microsoft Office 2003	6.3%	1		
Other (please specify)	6.3%	1		
ans	swered question	16		
s	kipped question	6		





# Is there a feature that you feel needs to be added onto the new system?

Page 1	1, Q22. Is there a feature that you feel needs to be added onto the new system?	
1	maybe option for low bandwidth version for off campus access. Difficult to say as this is a trial version and we know there will be much more on any final version. Not much.	Oct 6, 2011 5:17 PM
2	No	Sep 30, 2011 8:08 PM
3	No.	Sep 29, 2011 10:31 AM
4	Access to other non-microsoft applications specific to my role - eg Adobe,	Sep 28, 2011 9:54 AM
5	No	Sep 28, 2011 9:36 AM
6	an upgrade on Photoshop would be great!	Sep 28, 2011 6:43 AM
7	No	Sep 27, 2011 8:53 PM
8	more software	Sep 27, 2011 8:43 PM

Is there a feature that you feel needs to be added onto the new system?		
Answer Options	Response Count	
	8	
answered question	8	
skipped question	14	

Overall, the users felt the trial system did not need extra features at its current stage. However if it was to be implemented to a full scale and be made available to all users, it would need more non-Microsoft software.

They also felt that as the system was being upgraded, an upgrade on non-Microsoft programs would be valuable too e.g. Adobe suite.



## Any additional comments?

age 11	1, Q23. Any additional comments?	
1	The only complaint was the poor playing of youtube video files. They were jerky at any large screen size. Maybe due to trial set up? Absolutely loved the access to full corporate desktop from home and from macs. Could make life much simpler, ruling out having to cater for mixed computer suites in Art and Design. Like it.	Oct 6, 2011 5:17 PM
2	Brilliant! Lets get it implemented permanantly ASAP.	Oct 4, 2011 9:26 PM
3	The sooner we start using win 7 & Office 2010 the better, thin client systems will make admin and support easier.	Sep 30, 2011 8:08 PM
4	I wasn't able to use the export / reporting feature within the staff database, Empower. I don't think this should be an issue, however, as these features are always fragile when testing patch updates in a test environment. We would need to ensure that Empower is fully compatible with Windows 7 / Office 2010 before upgrading.	Sep 29, 2011 10:31 A
5	Overall, I was impressed with the systems and the ability to connect from any device (accessed it on iMac, iPad and iPhone!) However, I do not think it would be a suitable replacement to the current desktop system as it would become completely reliant on the network. I'd imagine performance would slow down considerably if all staff and students were accessing the system at the same time (potentially 13,000 users?) It is perfect as a supplementary system, allowing users to login remotely from home - but as a replacement for current desktop - a definate no no. Purely because, I dont think the network would be able to support everyone, and i'd expect if it had a much wider roll out the performance issues i've experiedned would be significantly increased. Hope this helps!:0)	Sep 28, 2011 9:54 AM
6	I might warm to 2010 but training would be helpful to adapt to the ribbon interface	Sep 28, 2011 9:33 AM
7	Stability of the system is key - eg: e mail address block was thereone minute and gone the next on both systems.	Sep 28, 2011 9:19 AM
8	I think this is a great opportunity to improve our professionalism. Great stuff!	Sep 28, 2011 6:43 AM
9	Thanks for the opportunity to trial this	Sep 27, 2011 8:53 PM
10	Q19 - only answered xp as I run everything (portable web browser, documents etc) of my usb but the new system didn't recognise the usb, only constantly read the drive resulting in it becoming hot. So not being able to actually do any work on the windows 7 system I logged off and went back to an XP machine, which at least worked.	Sep 27, 2011 6:35 PN
11	I kept getting messages when using CITRIX saying that it wanted access to my computer.	Sep 27, 2011 4:40 PI