

# Windows and Linux on the Desktop

A Register Reader Study

April 2005

(8128 Respondents)

quocírca

The  Register

# Background

- This slide set presents the results of an online survey executed in February 2005 via The Register news site.
- The title of the survey was “Linux and Windows on the Desktop” and it was publicised via The Register site itself and via an email invitation sent to a panel of pre-registered respondents.
- The questionnaire used was designed by Quocirca Ltd, who also analysed and annotated the results appearing in the remainder of this document.
- A more complete report with full discussion entitled “Migrating to Linux on the Desktop – A Practical IT Management View” is available from:  
[www.quocirca.com/report\\_linuxdesk.htm](http://www.quocirca.com/report_linuxdesk.htm) (free of charge)

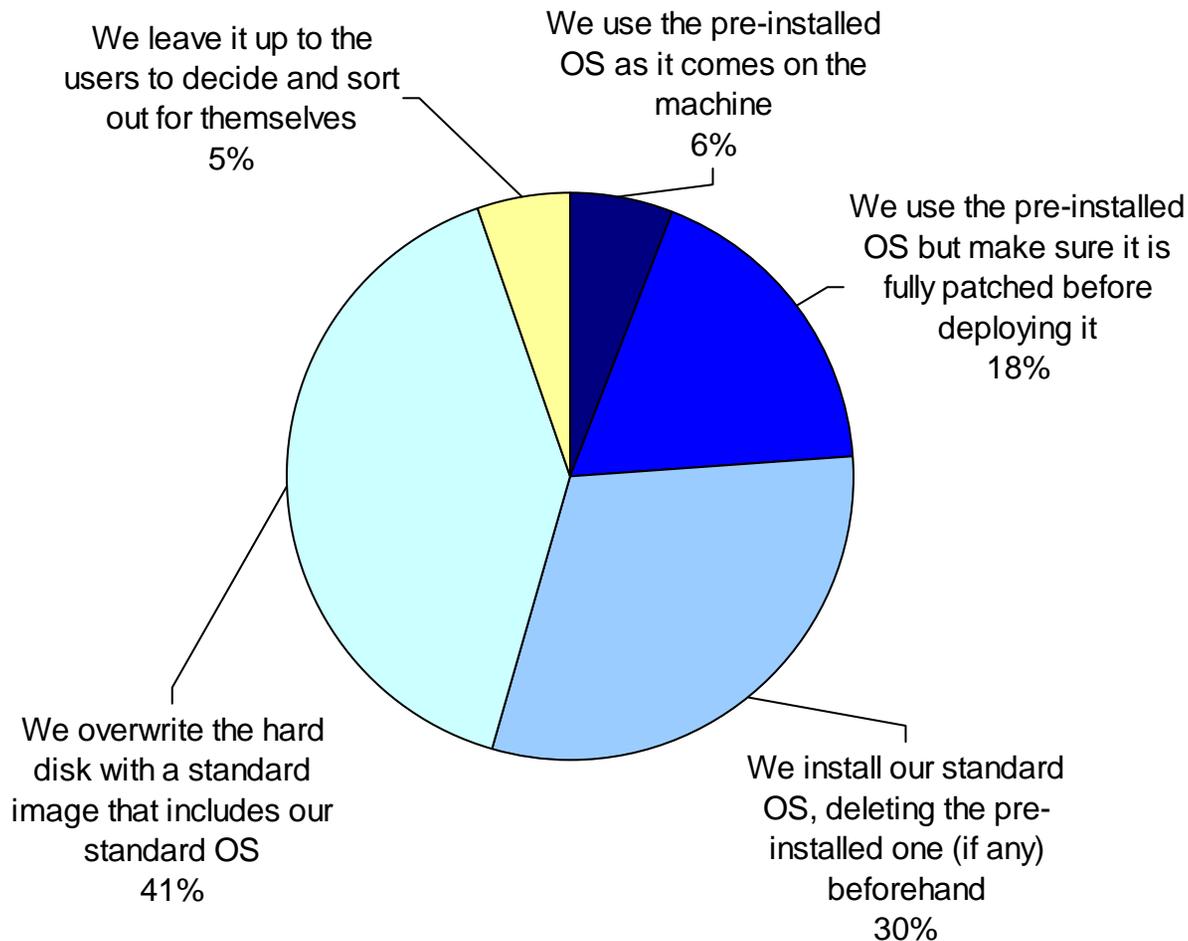
# CAVEAT

- This study was based on what's known in research circles as a “self selecting sample”. This essentially means that respondents chose whether or not to participate based on their level of interest in the topic.
- As a result of self selection, we can assume a natural skew towards extremes of feeling in this highly emotive area. Those with a strong advocacy for Linux or, to a lesser degree, Windows XP, are more likely to have responded and will therefore be over-represented.
- With this methodology limitation in mind, readers should remember that percentages relating to the total sample are almost certainly not representative of the general population.
- We can still learn a great deal, however, from looking at the variation between different types of respondent.

# Presentation of Results

- Results are presented in the order in which the questions were asked during the survey.
- For each question, results are plotted graphically at summary level (note caveat on previous page) then by relevant respondent segments (e.g. company size) or by cross tabbing responses with other relevant questions (e.g. perceptions of Linux benefits based on level of adoption).
- A frequently used segmentation is operating system advocacy - XP Advocates versus Linux Advocates versus those that are either open minded or agnostic.
- Operating system Advocacy was determined simply by whether the participant responded with the top most favourable option in relation to perceptions of the value of Windows XP or Linux.

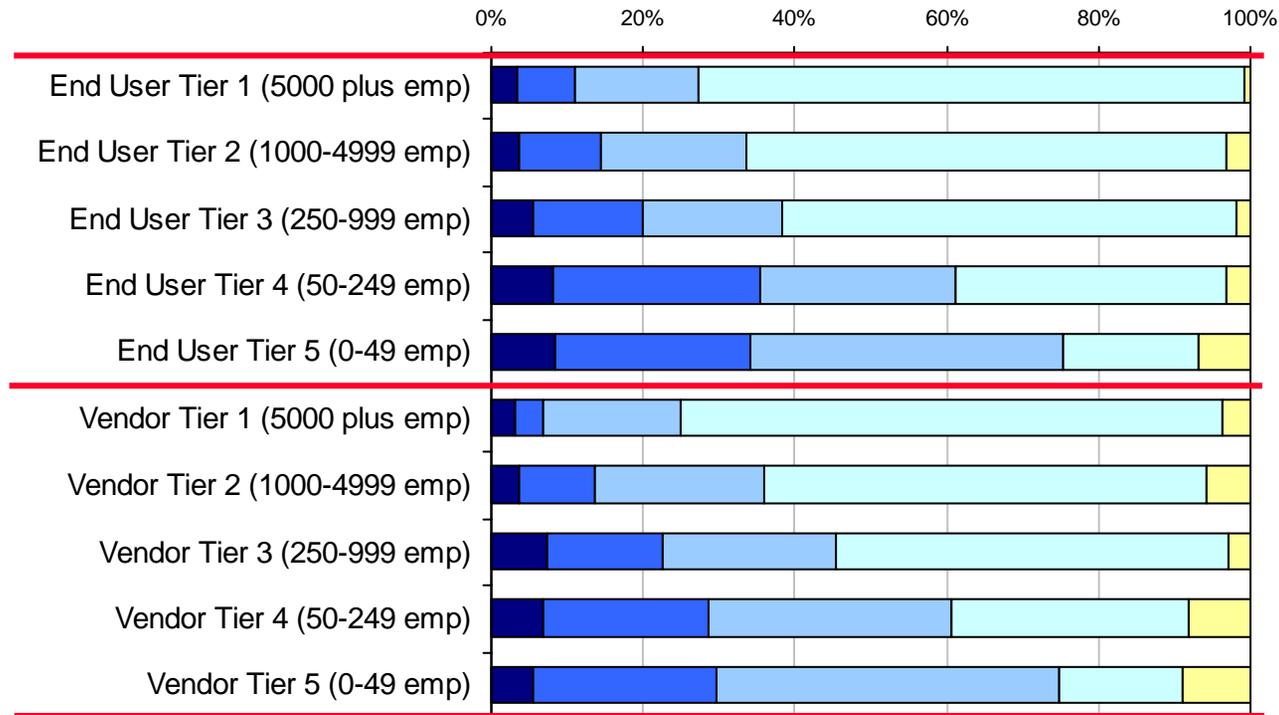
# When your organisation acquires a new PC, what do you (or the supplier that sets up new PCs for you) generally do about the operating system?



## Observations

Regardless of the operating system that comes pre-installed on the machine, almost three quarters (71%) of businesses replace it with their standard install or disk image. OEM versions of Windows in the business sector are therefore largely a licensing related consideration rather than a physical one. Pre-installation of the OS is of limited practical use to most organisations

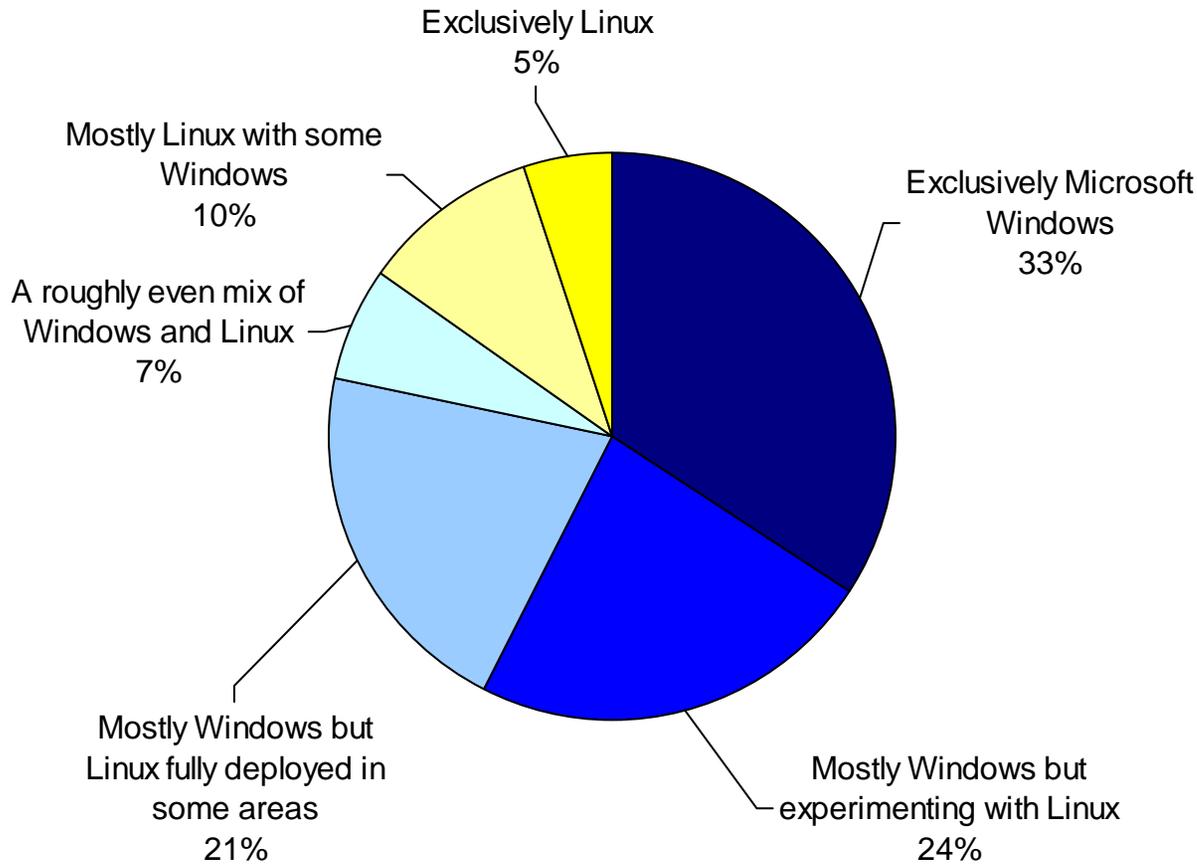
# When your organisation acquires a new PC, what do you (or the supplier that sets up new PCs for you) generally do about the operating system?



**Observations**  
 Smaller organisations are more likely to use the pre-installed operating system whilst the larger ones are much more likely to provision the machine with the aid of a standard disk image.

- We use the pre-installed OS as it comes on the machine
- We use the pre-installed OS but make sure it is fully patched before deploying it
- We install our standard OS, deleting the pre-installed one (if any) beforehand
- We overwrite the hard disk with a standard image that includes our standard OS
- We leave it up to the users to decide and sort out for themselves

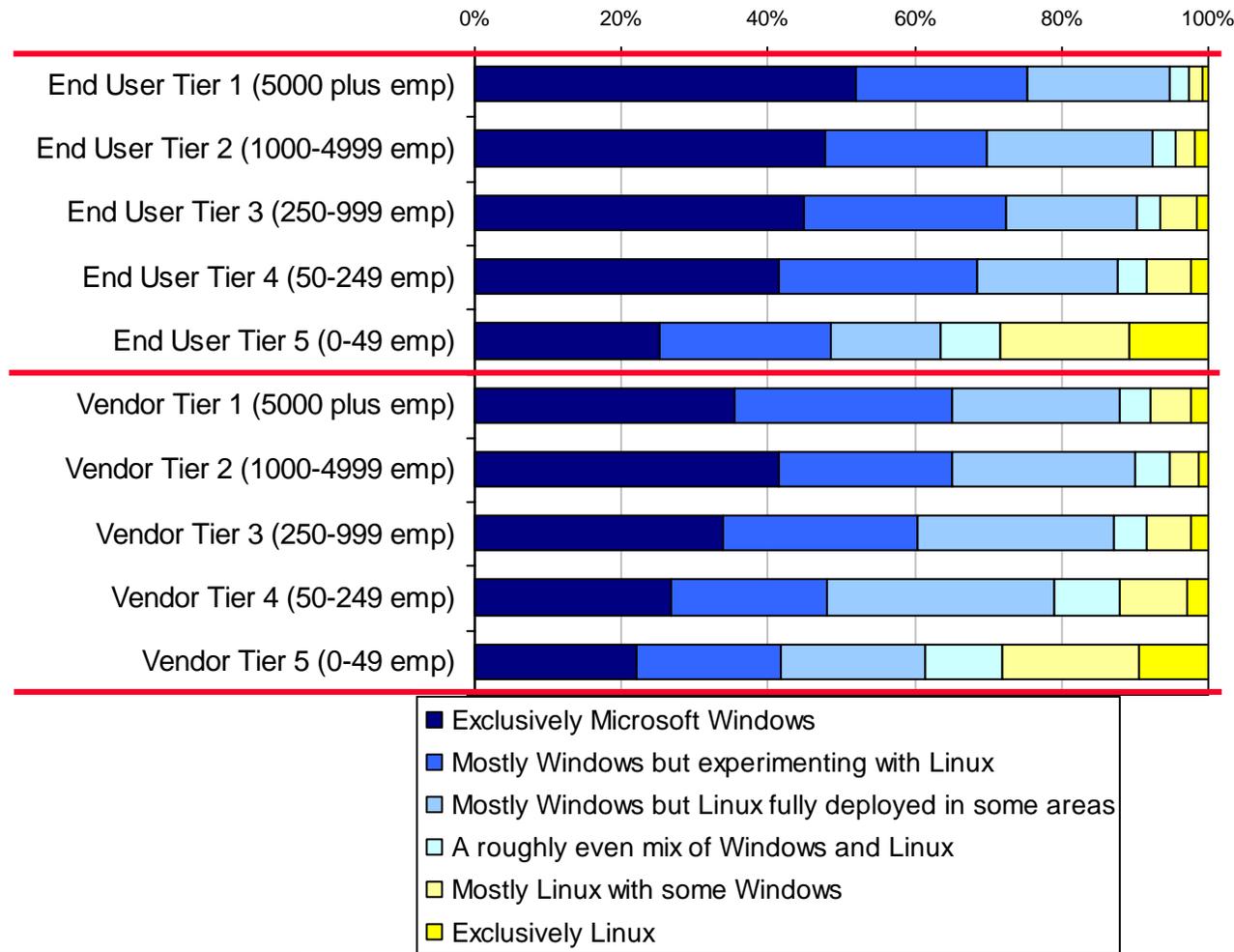
# Which of the following best describes the usage of desktop and laptop PC operating systems in your organisation?



## Observations

There was significant desktop Linux experience within the sample, with 43% having deployed it to one degree or another and 24% having experimented with it. As per previous comments, we should be careful not to regard this as representative of the general population. Nevertheless, the survey was live for only 4 days and the fact that we uncovered 5,300 respondents working in organisations with desktop Linux experience during that short time tells us that there is significant interest and activity out there.

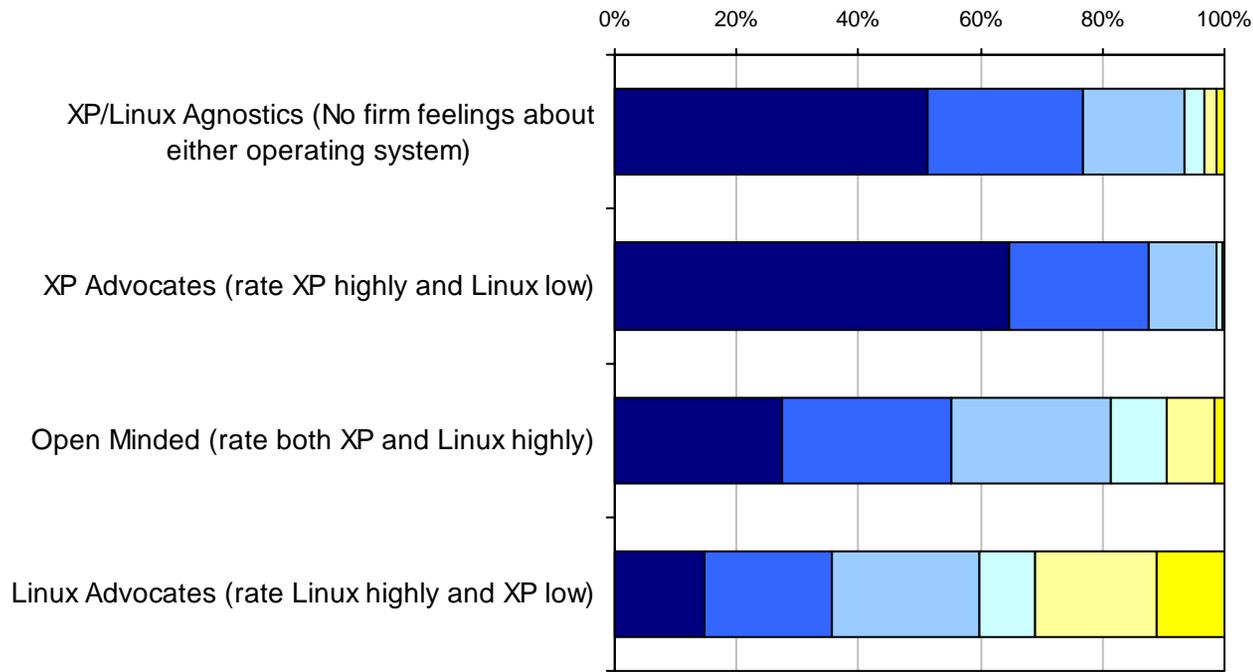
# Which of the following best describes the usage of desktop and laptop PC operating systems in your organisation?



**Observations**

Large organisations are less likely to be looking at or using desktop Linux, whilst smaller (sub 50 employee) organisations seem particularly keen. The data, along with free format comments captured during the survey suggests that desktop Linux penetrates more at the low end because IT staff at that level tend to have more freedom to drive technology decisions into their organisation. Comments along the lines of “I would use Linux if it were up to me but IT policy and user preference prevents it” tend to increase in frequency with organisation size

# Which of the following best describes the usage of desktop and laptop PC operating systems in your organisation?

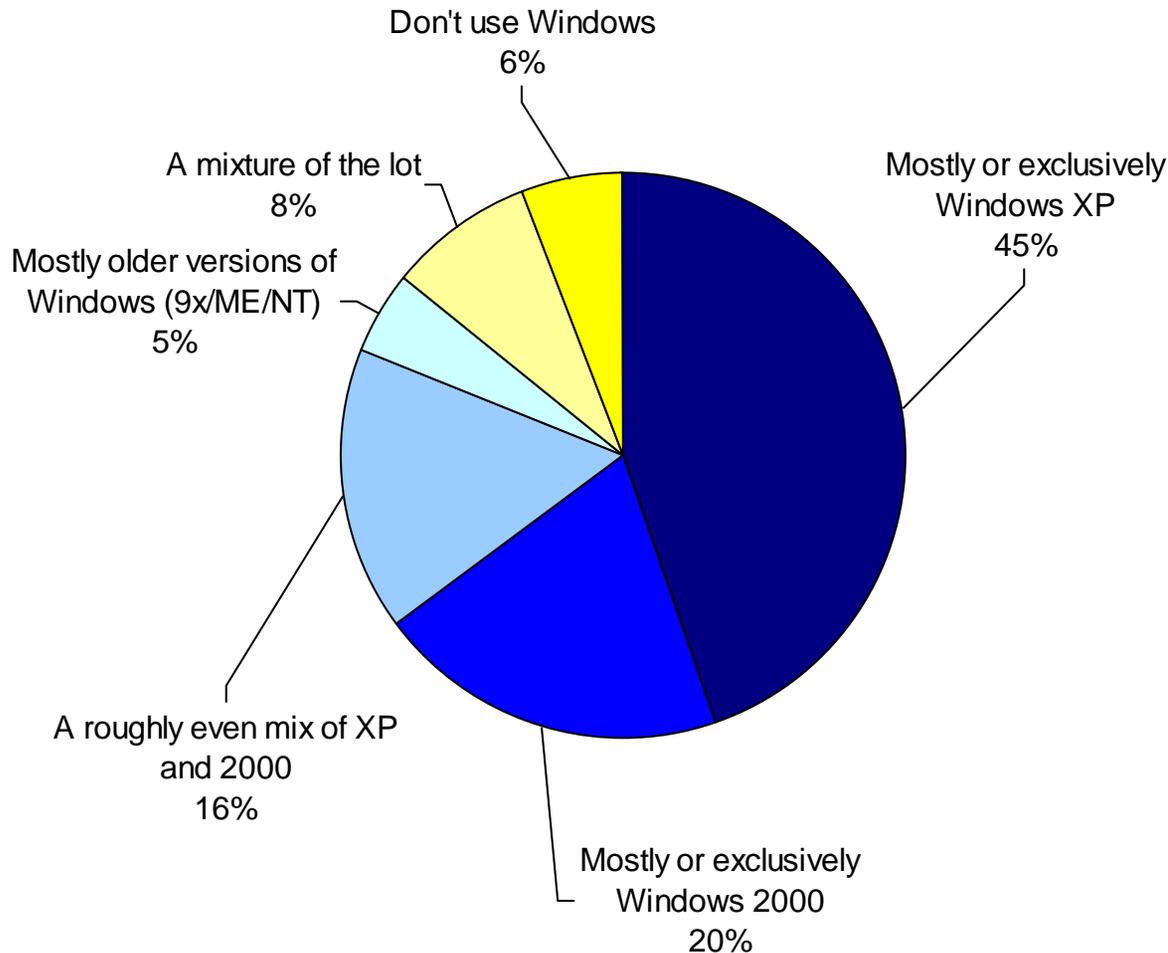


**Observations**

In line with the previous observation, whilst there is a correlation between advocacy and use, there are still many frustrated Linux advocates who perceive themselves to be stuck in a Windows dominated environment. Conversely, even XP advocates see Linux creeping into their organisation

- Exclusively Microsoft Windows
- Mostly Windows but experimenting with Linux
- Mostly Windows but Linux fully deployed in some areas
- A roughly even mix of Windows and Linux
- Mostly Linux with some Windows
- Exclusively Linux

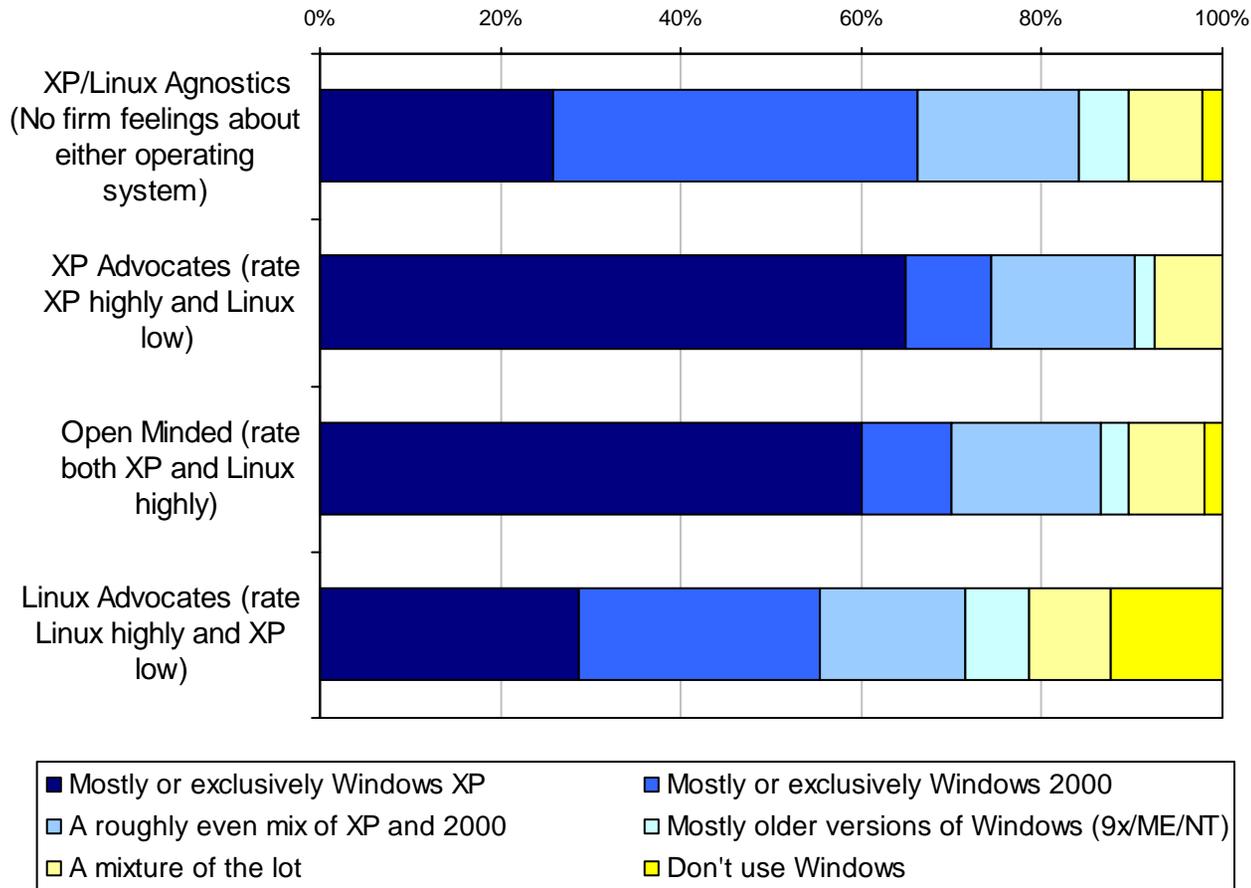
# If you are using Windows, which of the following best describes your current deployment in terms of versions?



## Observations

The dominant versions of Windows in use amongst the sample were XP and 2000. Relatively few were using older 9x/Me/NT releases, though we need to be aware that this is likely to be an under-represented group. Those running pre-2000 releases are likely to be the ones who have little passion for the operating system discussion on the basis that they just need an environment in which to run their applications. They are therefore much less likely to respond to a survey with this theme. Similarly, we can assume that the most likely version of Windows to create enthusiasm is XP, which was borne out by respondent free text comments. XP users are therefore almost certainly over represented.

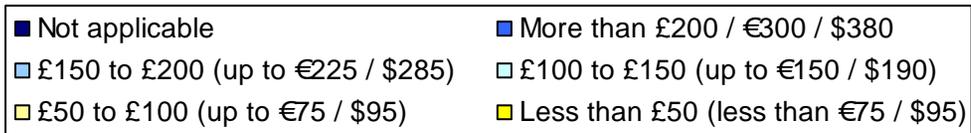
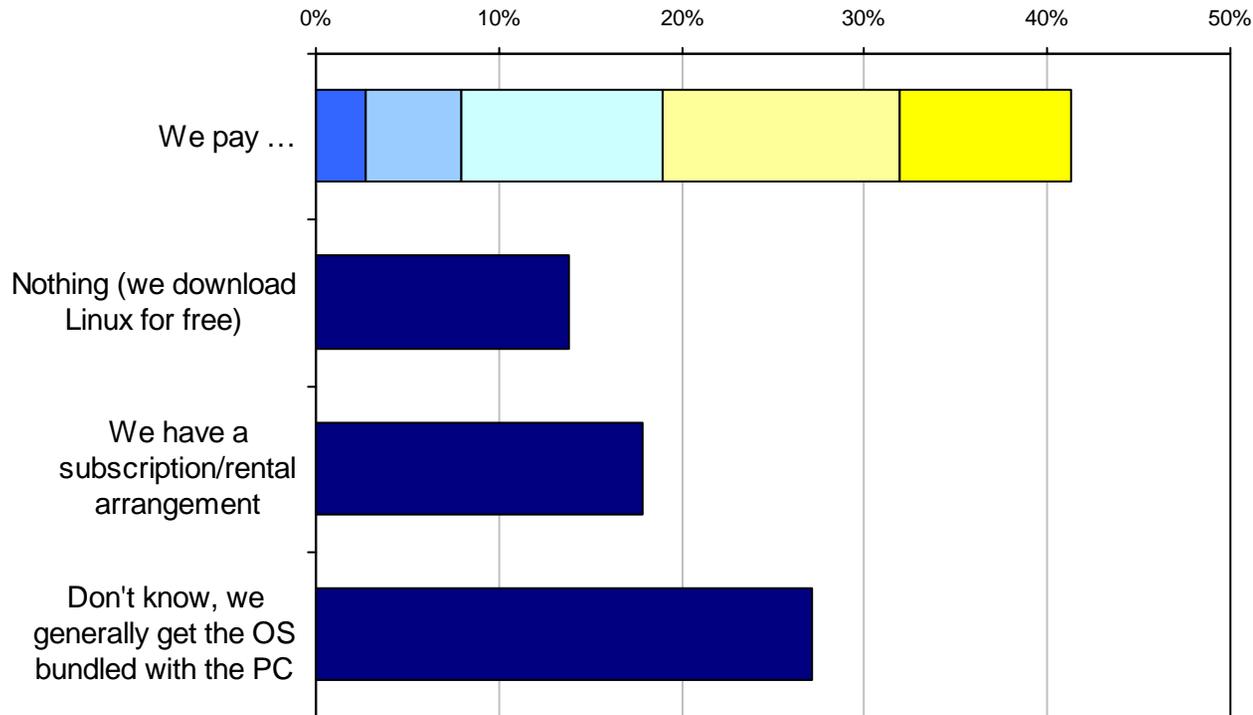
# If you are using Windows, which of the following best describes your current deployment in terms of versions?



**Observations**

Those who are either dispassionate about operating systems altogether or who advocate Linux over Windows are less likely to be XP users. This correlation is not surprising, though we cannot tell from this what's cause and what's effect - e.g. did XP advocates upgrade because they were impressed with XP or did their move to XP and subsequent experience create their enthusiasm for it.

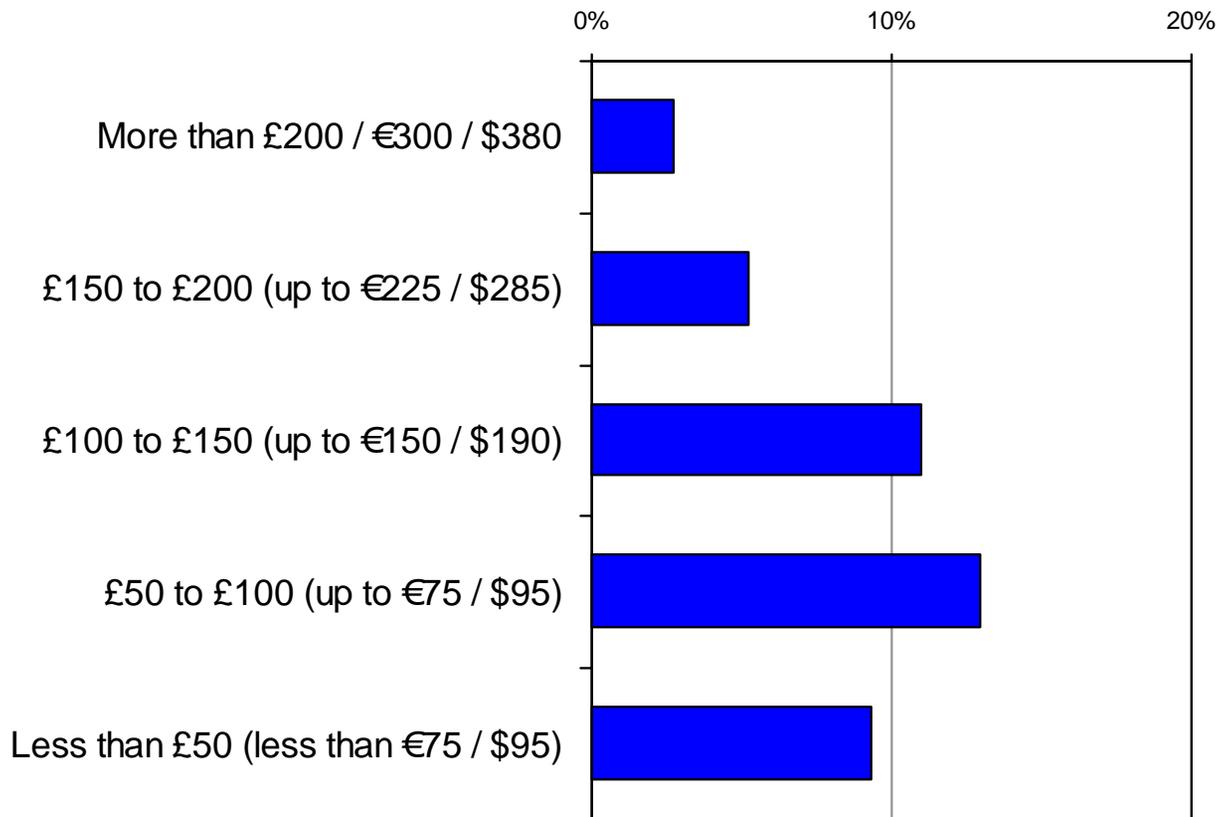
# Roughly how much does the operating system component cost you when you acquire a new PC or Laptop? (Please take into account the cost of acquiring the distribution if you use Linux)?



**Observations**

The centre of gravity for operating system pricing is around the €150 point, but OS bundling with new PCs means many are not explicitly aware of what they are paying. Others work on a subscription basis or are Linux users that make use of free distributions.

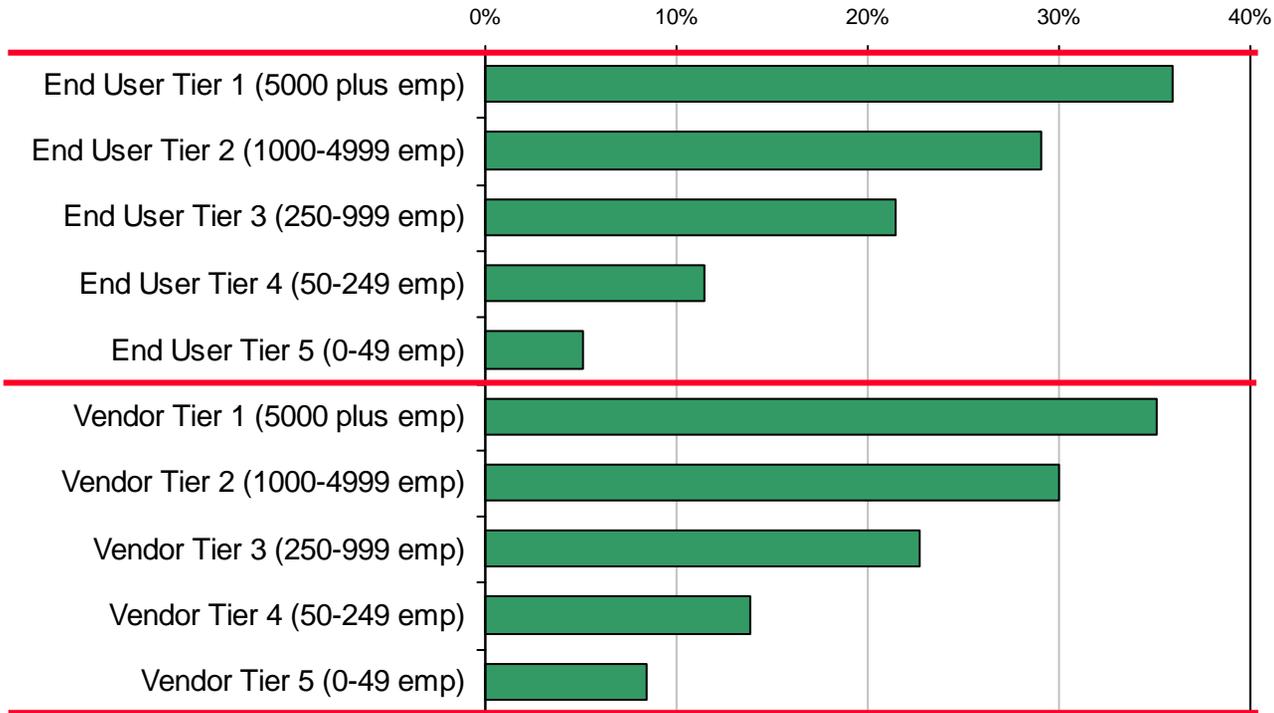
# Roughly how much does the operating system component cost you when you acquire a new PC or Laptop? (Please take into account the cost of acquiring the distribution if you use Linux)?



## Observations

This shows more clearly the variation in OS cost and the centre of gravity around the €150 point.

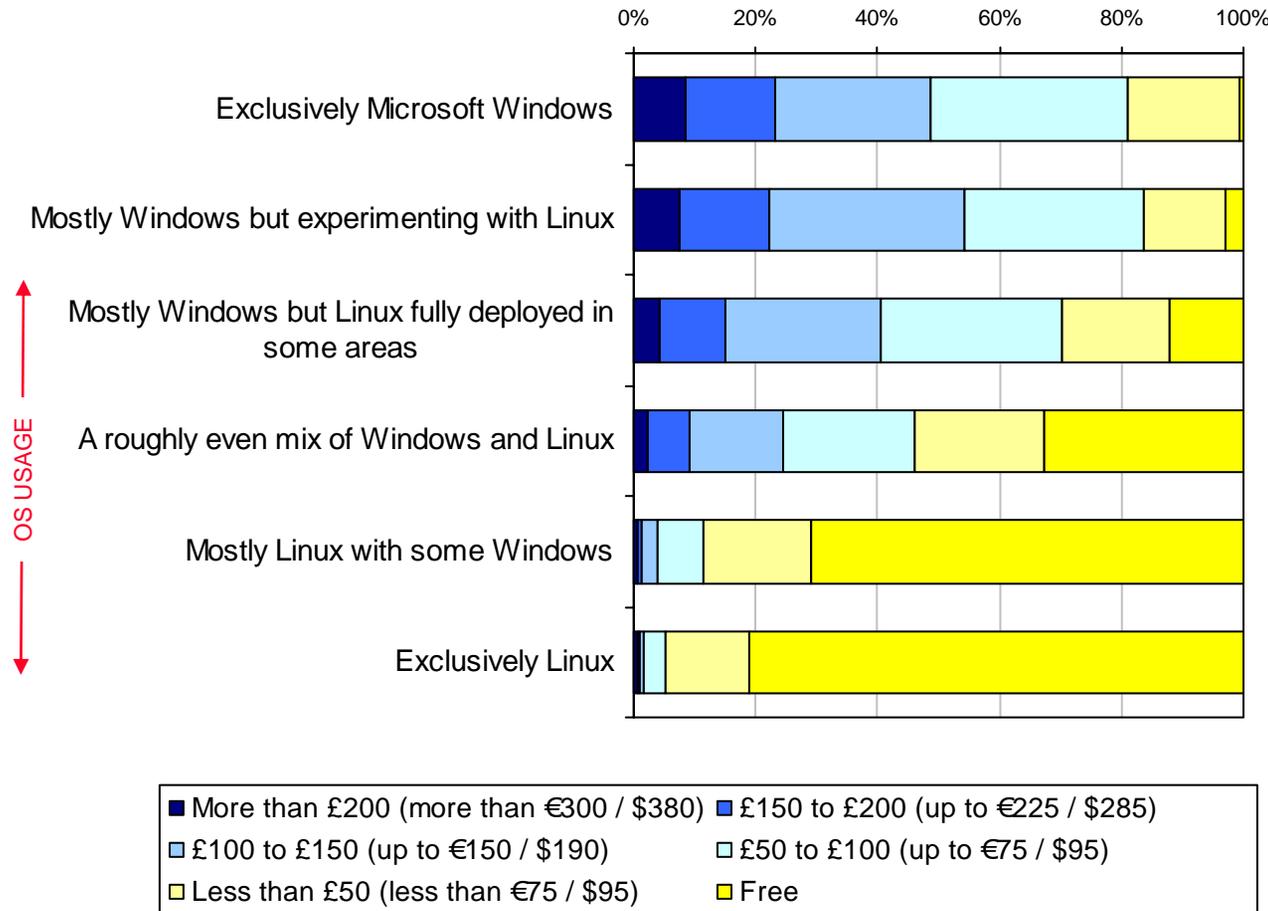
# Roughly how much does the operating system component cost you when you acquire a new PC or Laptop? (Please take into account the cost of acquiring the distribution if you use Linux)?



■ N/A - We have a subscription/rental arrangement

**Observations**  
Subscriptions are clearly more common amongst larger organisations who tend to have corporate deals in place with Microsoft.

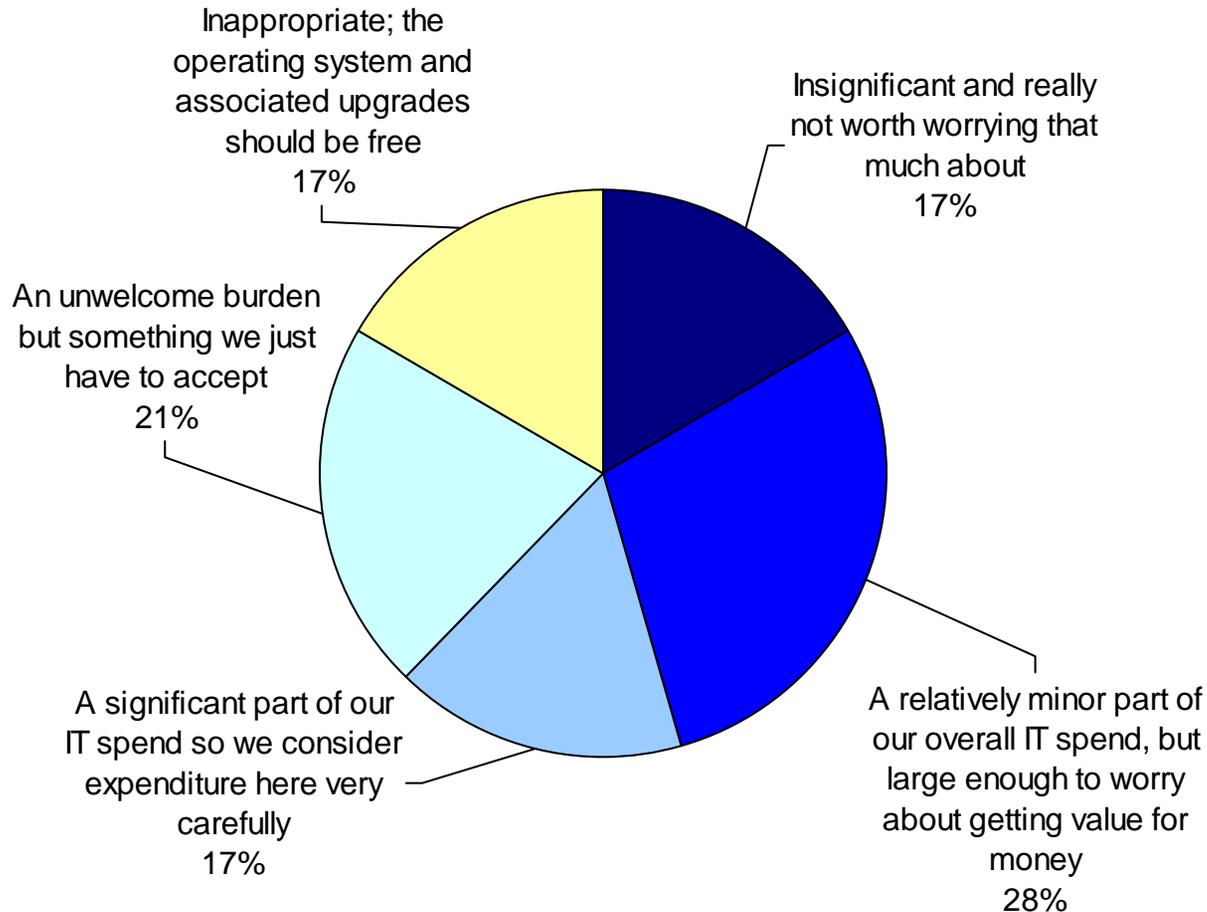
# Roughly how much does the operating system component cost you when you acquire a new PC or Laptop? (Please take into account the cost of acquiring the distribution if you use Linux)?



## Observations

The average OS acquisition cost for desktop Linux users is significantly lower. Indications of there being no cost for the majority of those using desktop Linux extensively raises a flag that activity might be on a purely download / self support / self maintenance basis, which many IT policies would discourage on the grounds of risk and management of overhead. However, some respondent comments alluded to the practice of buying a formally packaged distribution, then loading it onto the network, from where it may then be installed broadly and in a controlled manner with no incremental fees.

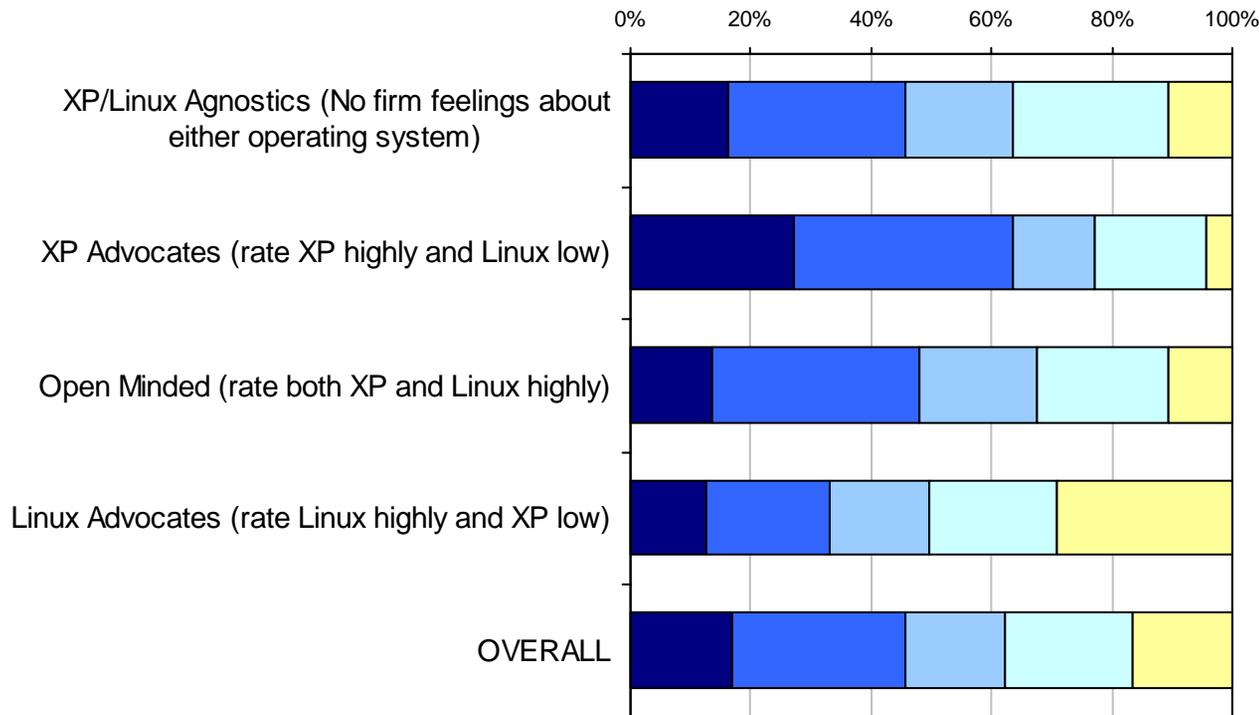
# In the overall scheme of things, how do you view the costs of acquiring and subsequently upgrading desktop/laptop operating systems licences?



## Observations

Many commentators dismiss the desktop operating system licence cost as insignificant in the greater scheme of things, highlighting the need to consider total cost of ownership (TCO). Only 17% of respondents thought that initial licence and upgrade costs were insignificant, however, and it is clear that the majority look to manage them (or avoid them). As a percentage of overall TCO, licence and upgrade fees might not be that great, but as an absolute amount, they can equate to significant sums.

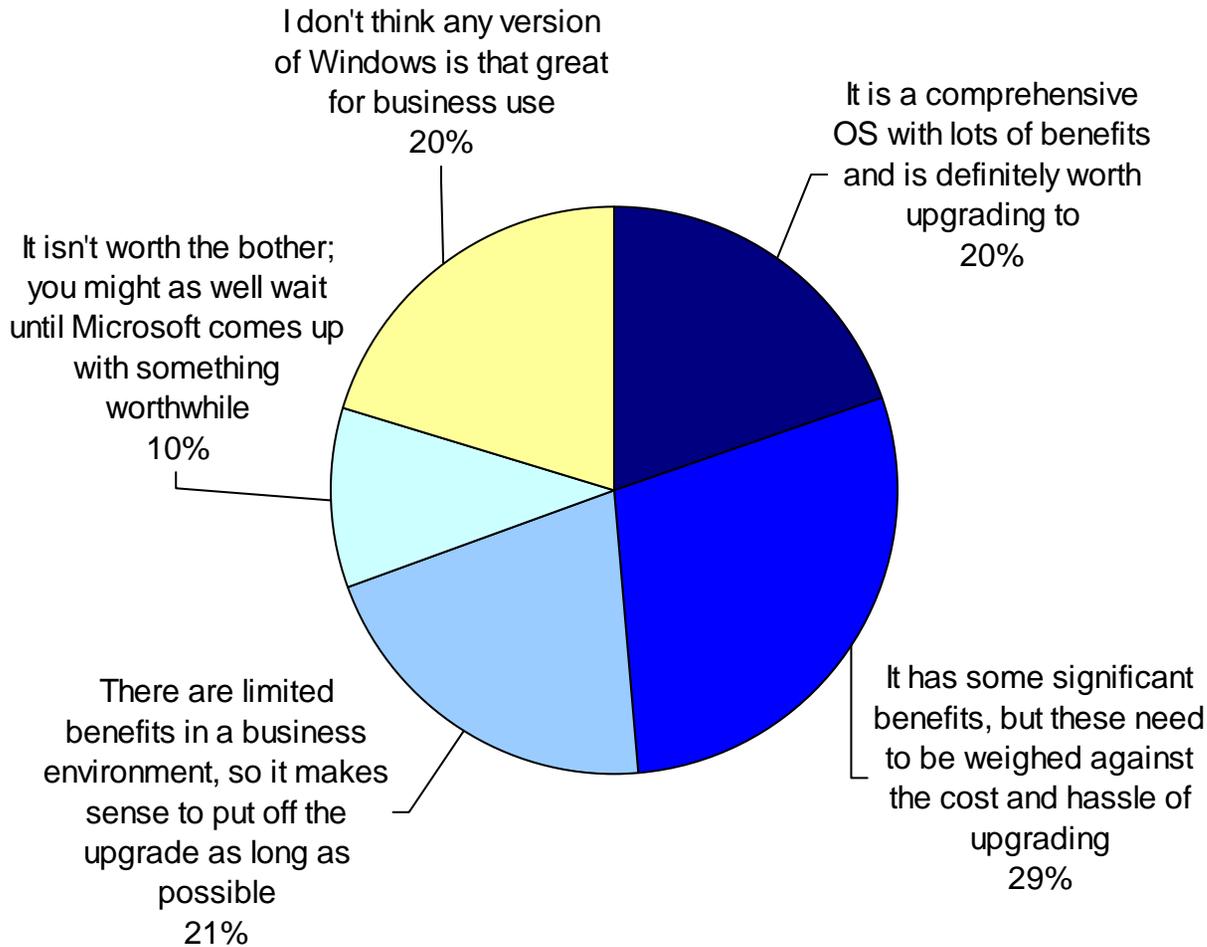
# In the overall scheme of things, how do you view the costs of acquiring and subsequently upgrading desktop/laptop operating systems licences?



**Observations**  
 Even three quarters of XP advocates care about desktop OS licence and upgrade costs.

- Insignificant and really not worth worrying that much about
- A relatively minor part of our overall IT spend, but large enough to worry about getting value for money
- A significant part of our IT spend so we consider expenditure here very carefully
- An unwelcome burden but something we just have to accept
- Inappropriate; the operating system and associated upgrades should be free

# What is your attitude to Windows XP?

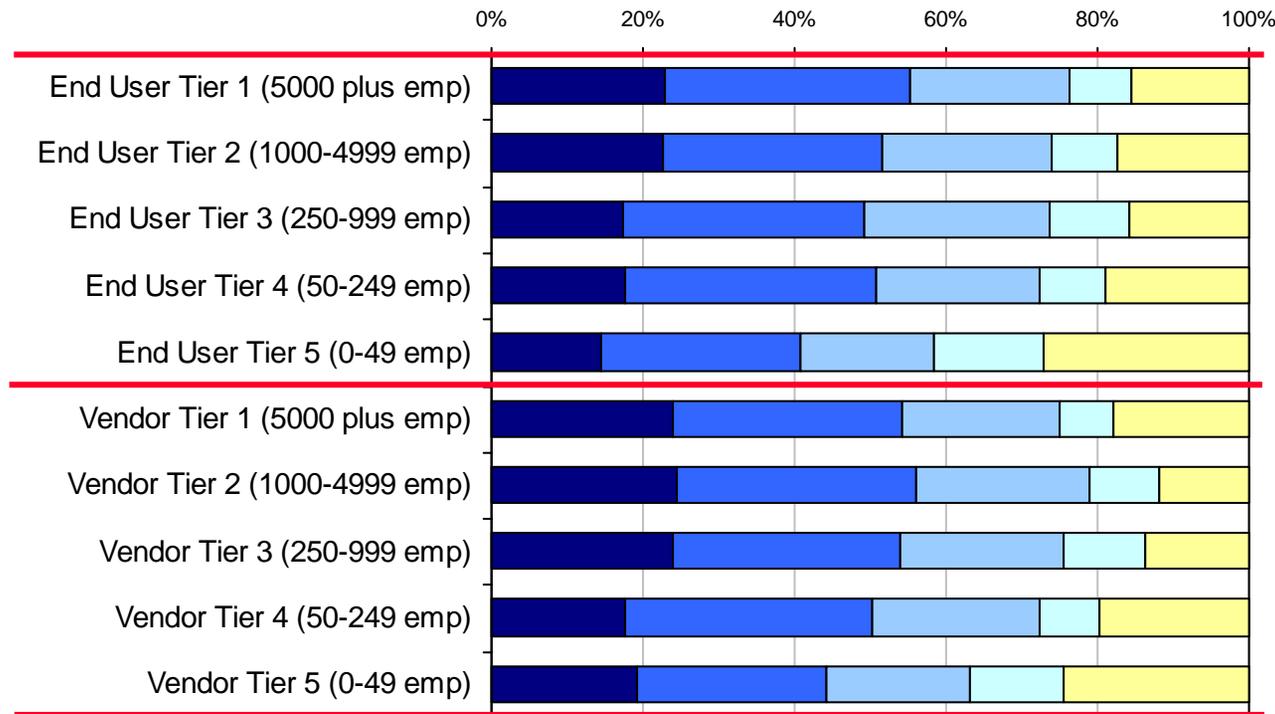


## Observations

About half of the sample acknowledge the benefits of Windows XP, though most of these said they had to be weighed against the cost and hassle of upgrading. The remainder of the sample were either lukewarm on XP or actively against it.

As before, we cannot assume these percentages are representative of the world as a whole as Linux advocates will be over represented in this survey.

# What is your attitude to Windows XP?

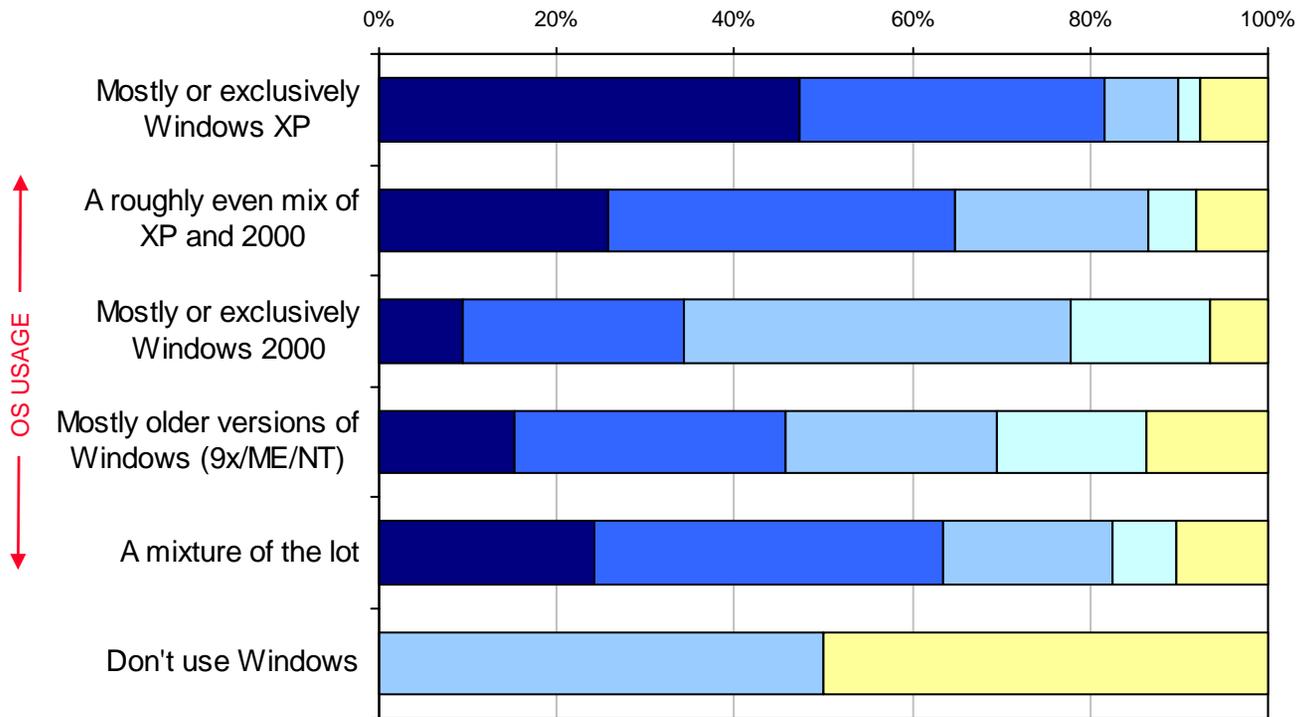


**Observations**

There is an indication of XP advocacy being greater in larger organisations, but this is not a dramatic correlation and will have been exaggerated by the over-representation of Linux advocates anyway, who tend to spring more from smaller organisations.

- It is a comprehensive OS with lots of benefits and is definitely worth upgrading to
- It has some significant benefits, but these need to be weighed against the cost and hassle of upgrading
- There are limited benefits in a business environment, so it makes sense to put off the upgrade as long as possible
- It isn't worth the bother; you might as well wait until Microsoft comes up with something worthwhile
- I don't think any version of Windows is that great for business use

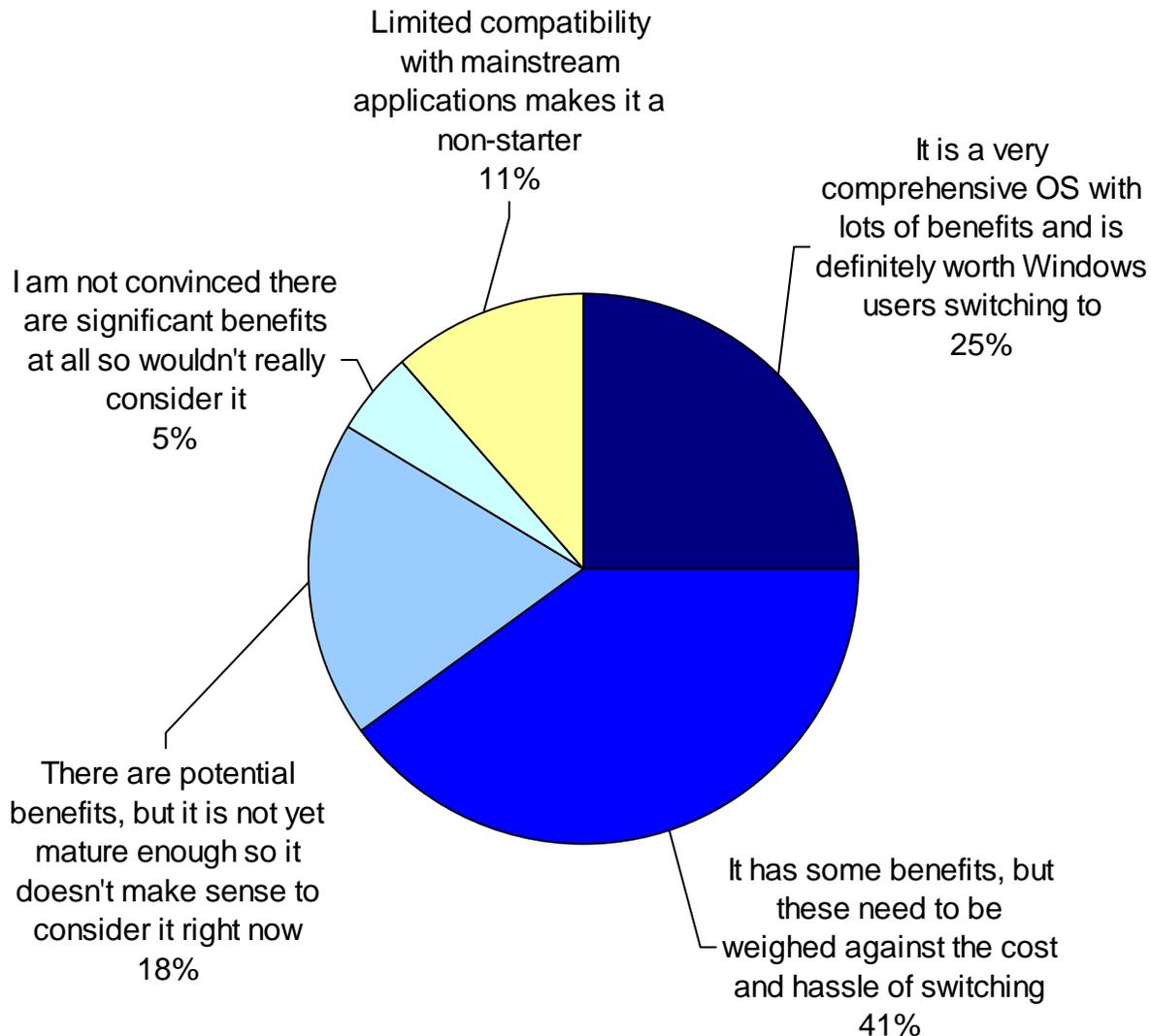
# What is your attitude to Windows XP?



**Observations**  
 This is a very positive finding for Windows XP. It suggests that the greater the degree of adoption, the more its benefits are understood and appreciated.

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- It has some significant benefits, but these need to be weighed against the cost and hassle of upgrading
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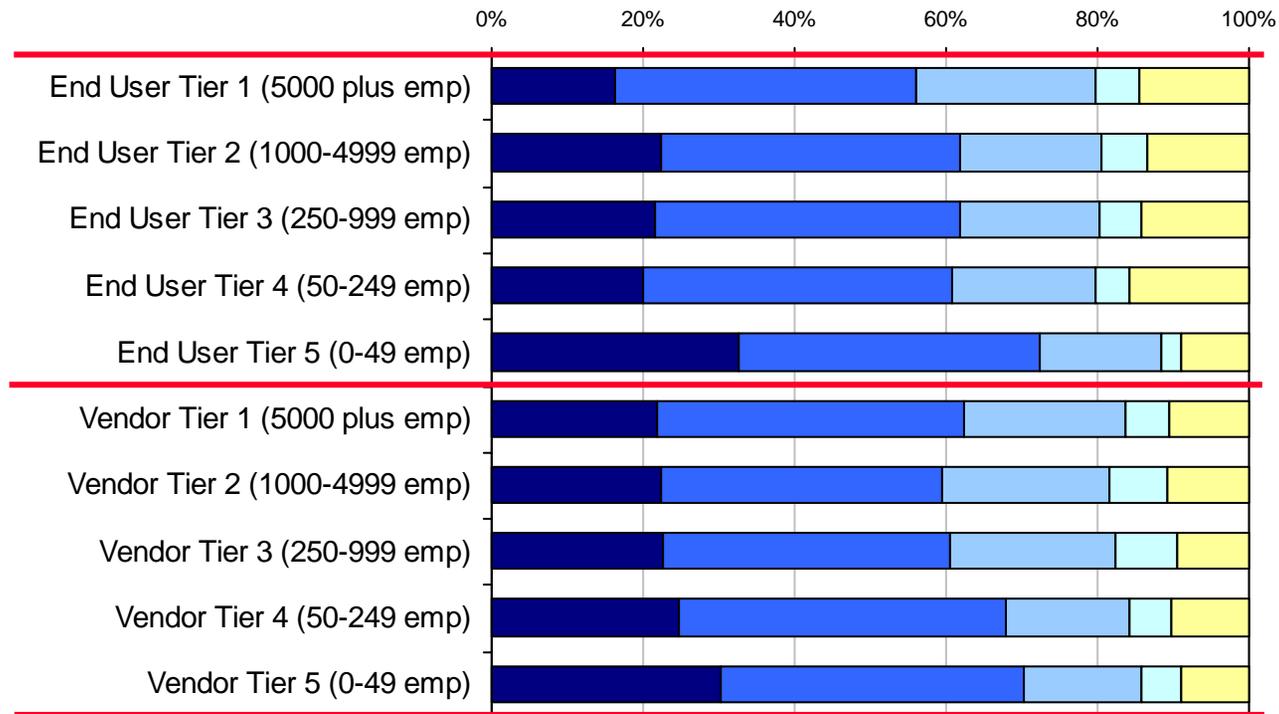
# What is your attitude to Linux on the desktop/laptop?



## Observations

Note that the desktop Linux advocates outnumber the XP advocates shown on previous slides, but again, we have to beware of the sample skew. Nevertheless, there are many who rate both Windows XP and desktop Linux highly and these are the respondents who make up the "open minded" segment we have seen on other slides.

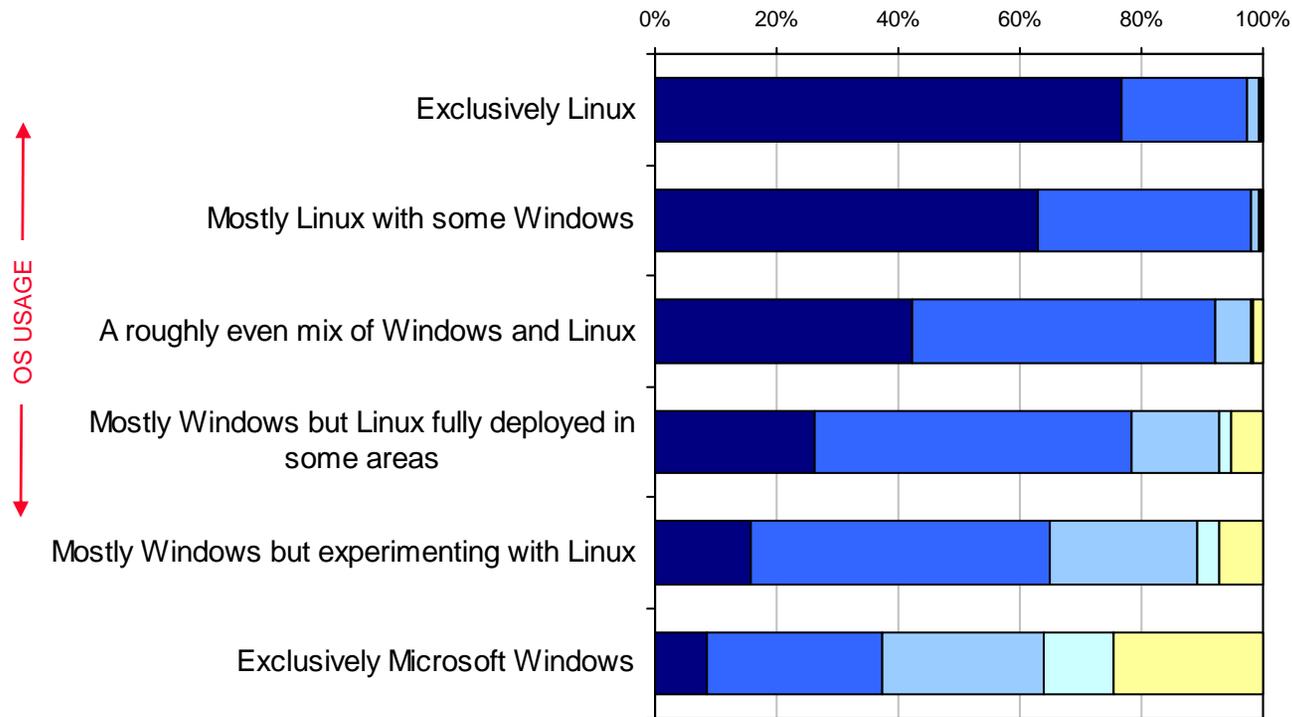
# What is your attitude to Linux on the desktop/laptop?



**Observations**  
 This is essentially the inverse of the Windows XP advocacy chart, with desktop Linux advocacy stemming more from smaller organisations than larger ones.

- It is a very comprehensive OS with lots of benefits and is definitely worth Windows users switching to
- It has some benefits, but these need to be weighed against the cost and hassle of switching
- There are potential benefits, but it is not yet mature enough so it doesn't make sense to consider it right now
- I am not convinced there are significant benefits at all so wouldn't really consider it
- Limited compatibility with mainstream applications makes it a non-starter

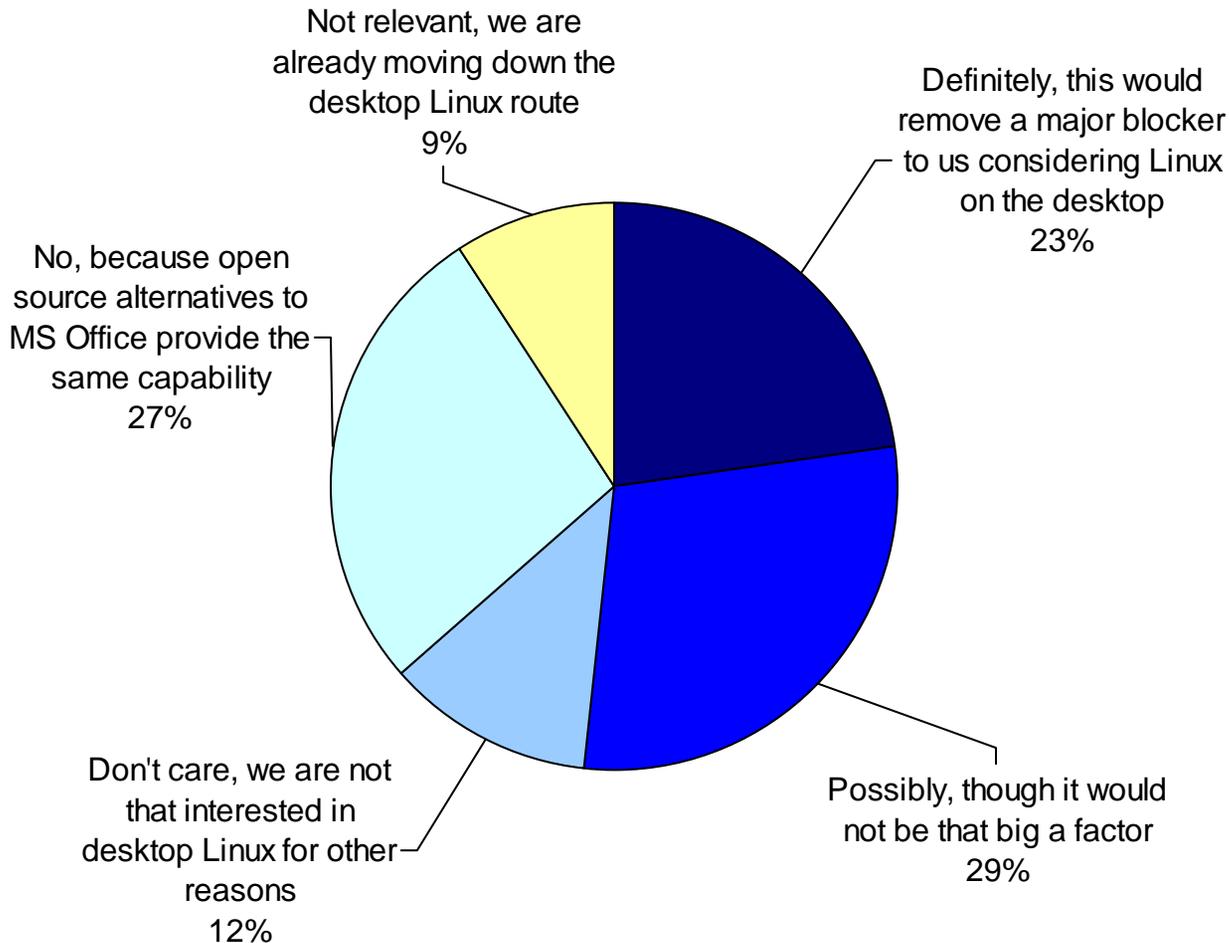
# What is your attitude to Linux on the desktop/laptop?



**Observations**  
 The equivalent of the XP experience / perception of benefits correlation is much more pronounced for desktop Linux. It is notable that there is still a high degree of respect for desktop Linux, even in mixed or Windows dominated environments.

- It is a very comprehensive OS with lots of benefits and is definitely worth Windows users switching to
- It has some benefits, but these need to be weighed against the cost and hassle of switching
- There are potential benefits, but it is not yet mature enough so it doesn't make sense to consider it right now
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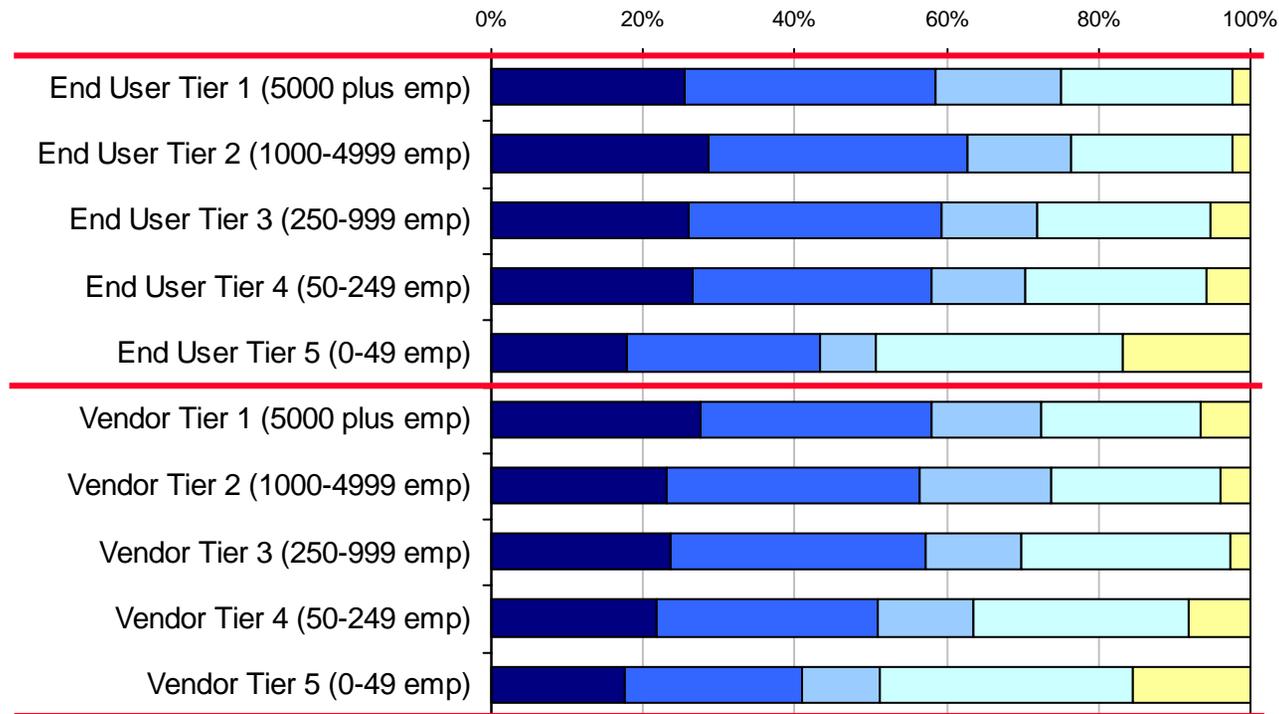
# If Microsoft Office was available on Linux, would this make you more likely to switch from Windows?



## Observations

Microsoft Office is not as major a factor as might be imagined. For those with experience of Open Source alternatives, they perceive they can get the same or similar elsewhere. For those who have Windows application dependency issues, the emphasis is put much more on the breadth and depth of applications available on desktop Linux as being the primary issue. In fact, comments to the effect that MS Office is the least of people's problems when looking at a Windows to Linux migration were quite common in response to this question.

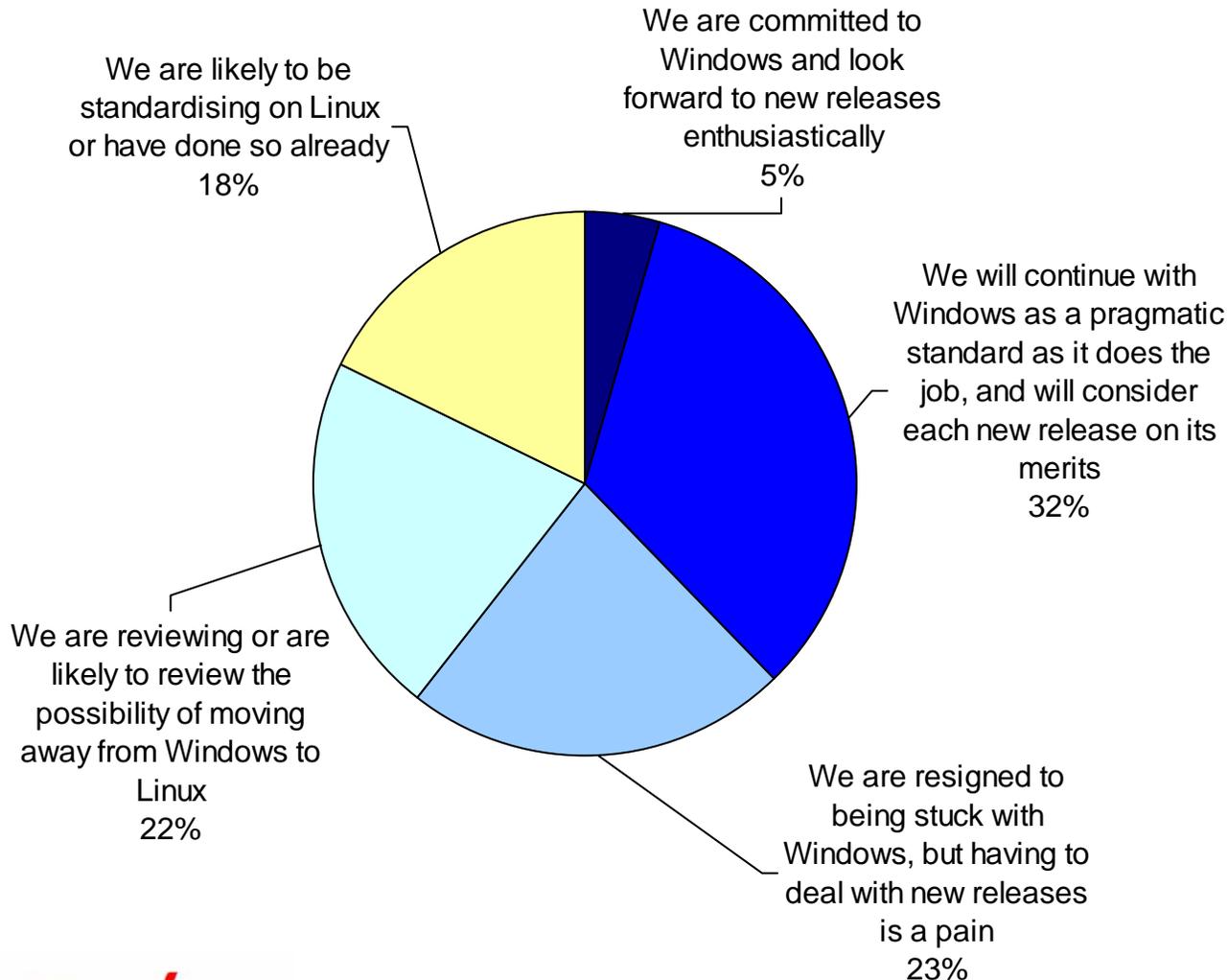
# If Microsoft Office was available on Linux, would this make you more likely to switch from Windows?



**Observations**  
Smaller organisations are more comfortable with open source in general, not just Linux.

- Definitely, this would remove a major blocker to us considering Linux on the desktop
- Possibly, though it would not be that big a factor
- Don't care, we are not that interested in desktop Linux for other reasons
- No, because open source alternatives to MS Office provide the same capability
- Not relevant, we are already moving down the desktop Linux route

# Looking forward, how do you see your use of desktop/laptop PC operating systems evolving?



## Observations

Only 18% of the sample indicated a high probability of standardising on desktop Linux in the longer term, which seems surprisingly low given the nature of the sample.

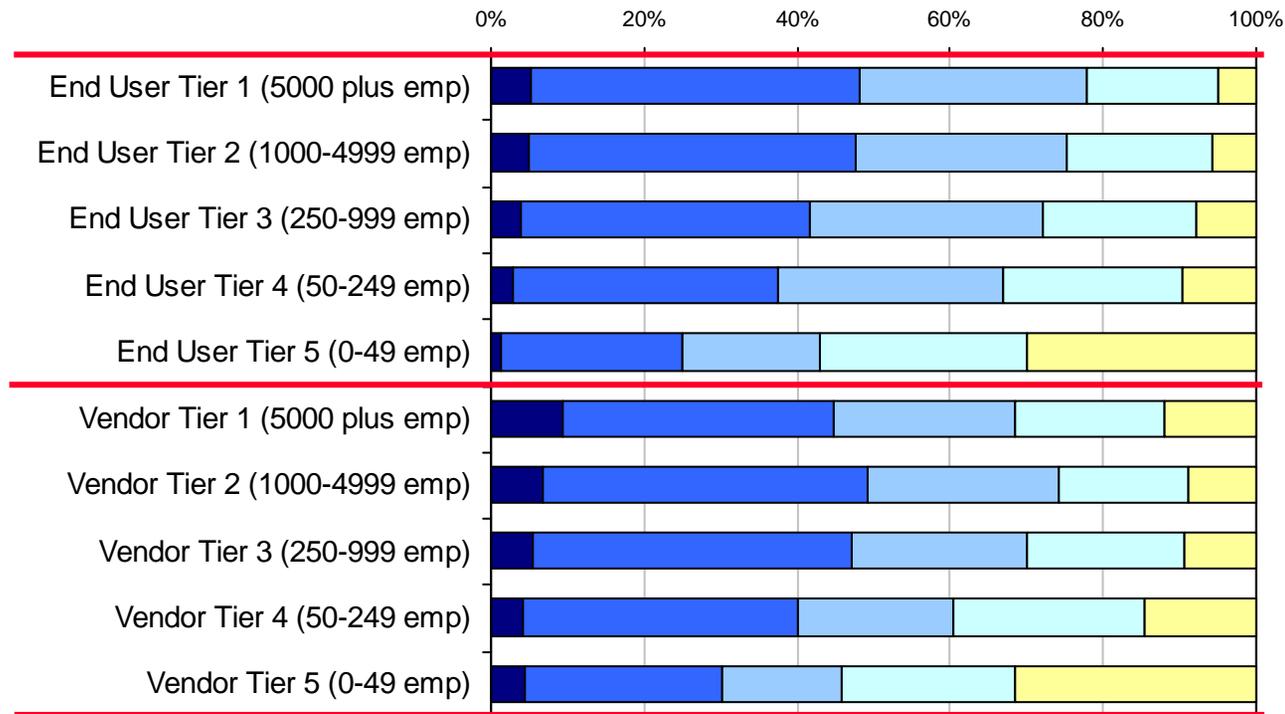
One explanation for this is the number of perceived practical barriers to desktop Linux adoption that can prevent organisations moving forward with it (see later).

Many respondents also pointed out in their comments, however, that the options they were presented with for this question did not cater for the common strategy of selective adoption of desktop Linux in areas where it made sense, but continuing to use Windows in other areas.

# Perceived Barriers to Desktop Linux Adoption

- No explicit question was asked on barriers to Desktop Linux adoption, but the following issues were identified from mining approximately 1,700 free text comments provided by respondents (ranked in frequency order):
  1. **Software Availability and Compatibility**
  2. **Usability, User Acceptance and Resistance to Change**
  3. **Cost and Challenge of End User Training and Support**
  4. **Cost and Challenge of Porting Bespoke Applications**
  5. **Dependency on Microsoft Active Directory**

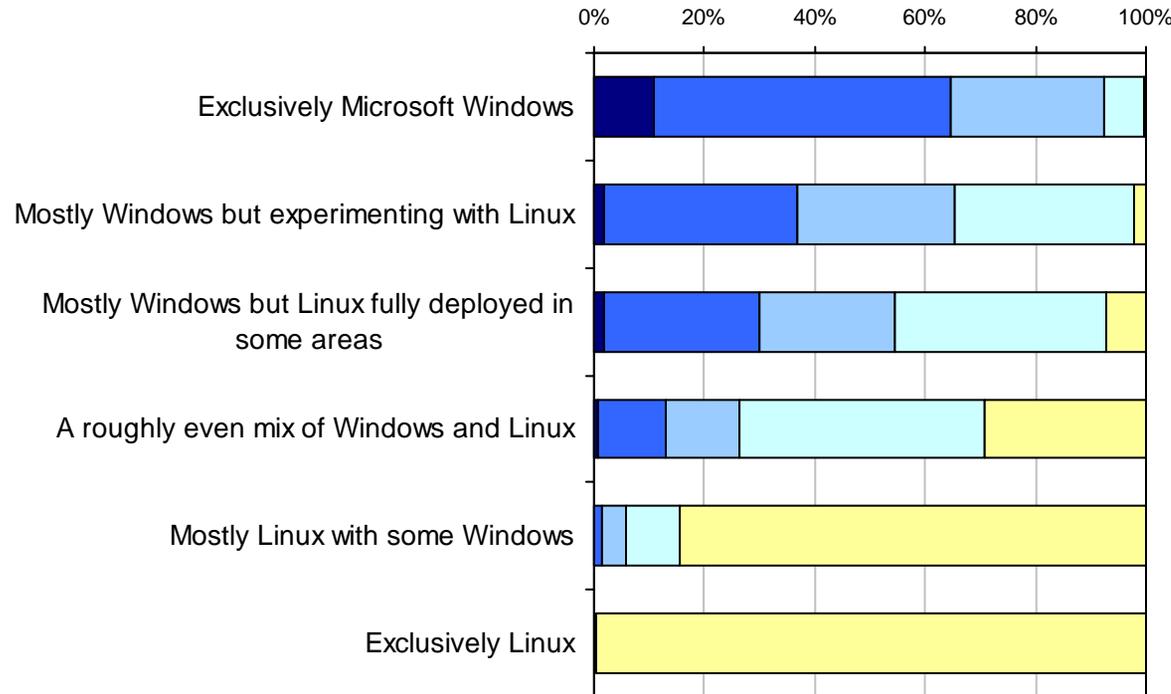
# Looking forward, how do you see your use of desktop/laptop PC operating systems evolving?



**Observations**  
 We see a more marked correlation with organisation size on this relatively “bottom line” question. Perceived barriers to desktop Linux adoption tend to be accentuated by scale.

- We are committed to Windows and look forward to new releases enthusiastically
- We will continue with Windows as a pragmatic standard as it does the job, and will consider each new release on its merits
- We are resigned to being stuck with Windows, but having to deal with new releases is a pain
- We are reviewing or are likely to review the possibility of moving away from Windows to Linux
- We are likely to be standardising on Linux or have done so already

# Looking forward, how do you see your use of desktop/laptop PC operating systems evolving?



## Observations

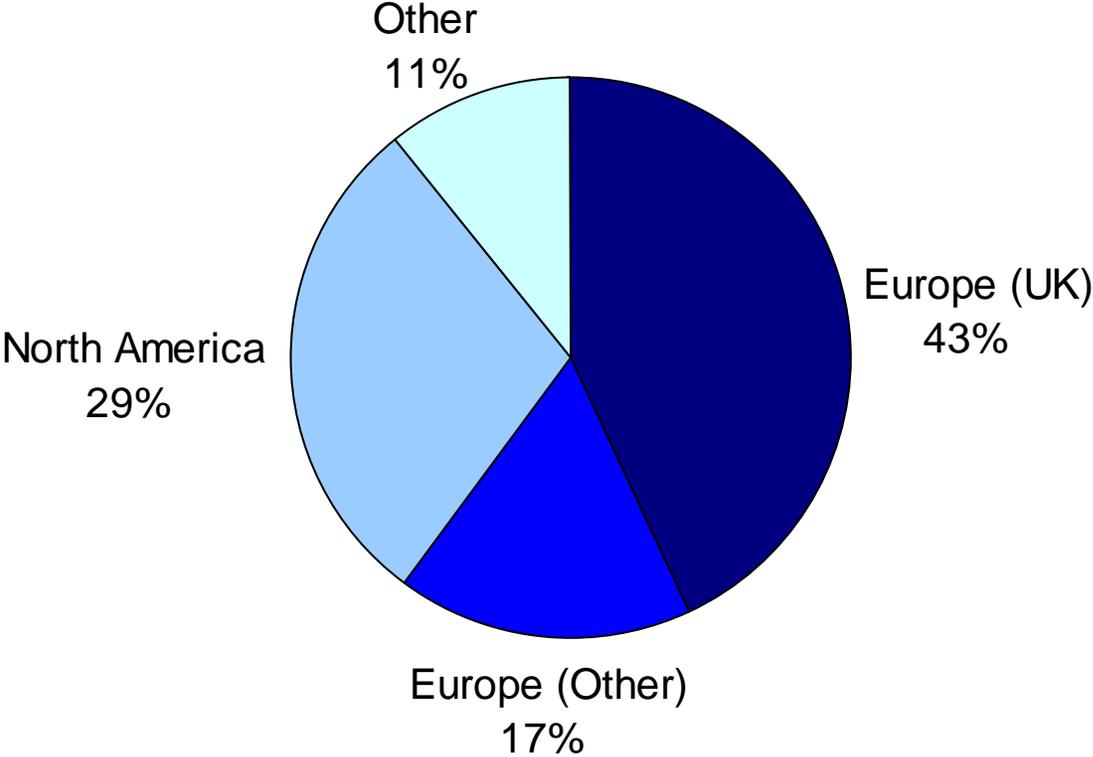
The relationship between experience of desktop Linux and the likelihood of it being adopted as a standard in preference to Windows suggests that perceived barriers may not be actual showstoppers in reality. Indeed respondent comments suggest that solutions and workarounds exist for many situations and these are discussed in "Migrating to Linux on the Desktop – A Practical IT Management View", available free of charge from: [www.quocirca.com/report\\_linuxdesk.htm](http://www.quocirca.com/report_linuxdesk.htm)

- We are committed to Windows and look forward to new releases enthusiastically
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# SAMPLE COMPOSITION

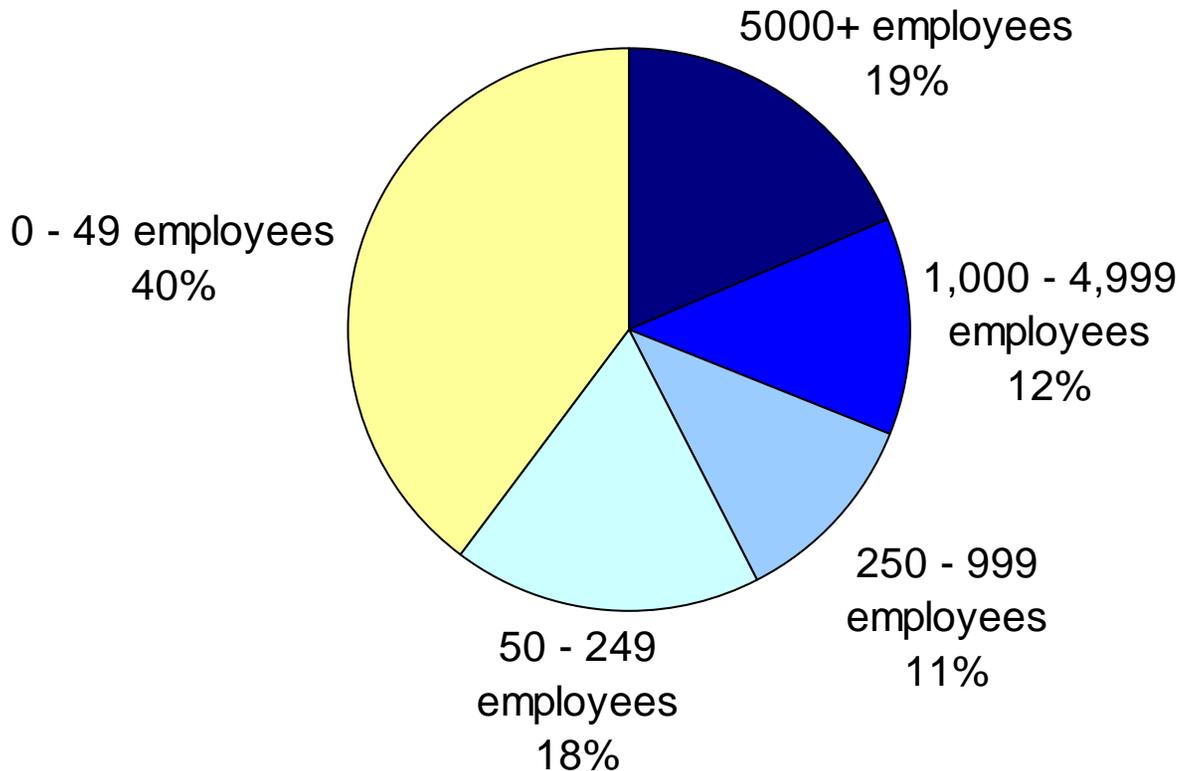
The following slides provide more details of the nature of the sample

# Sample distribution by Geography



**Observations**  
No significant differences were observed between the USA, Europe and other geographies in terms of attitudes or activity

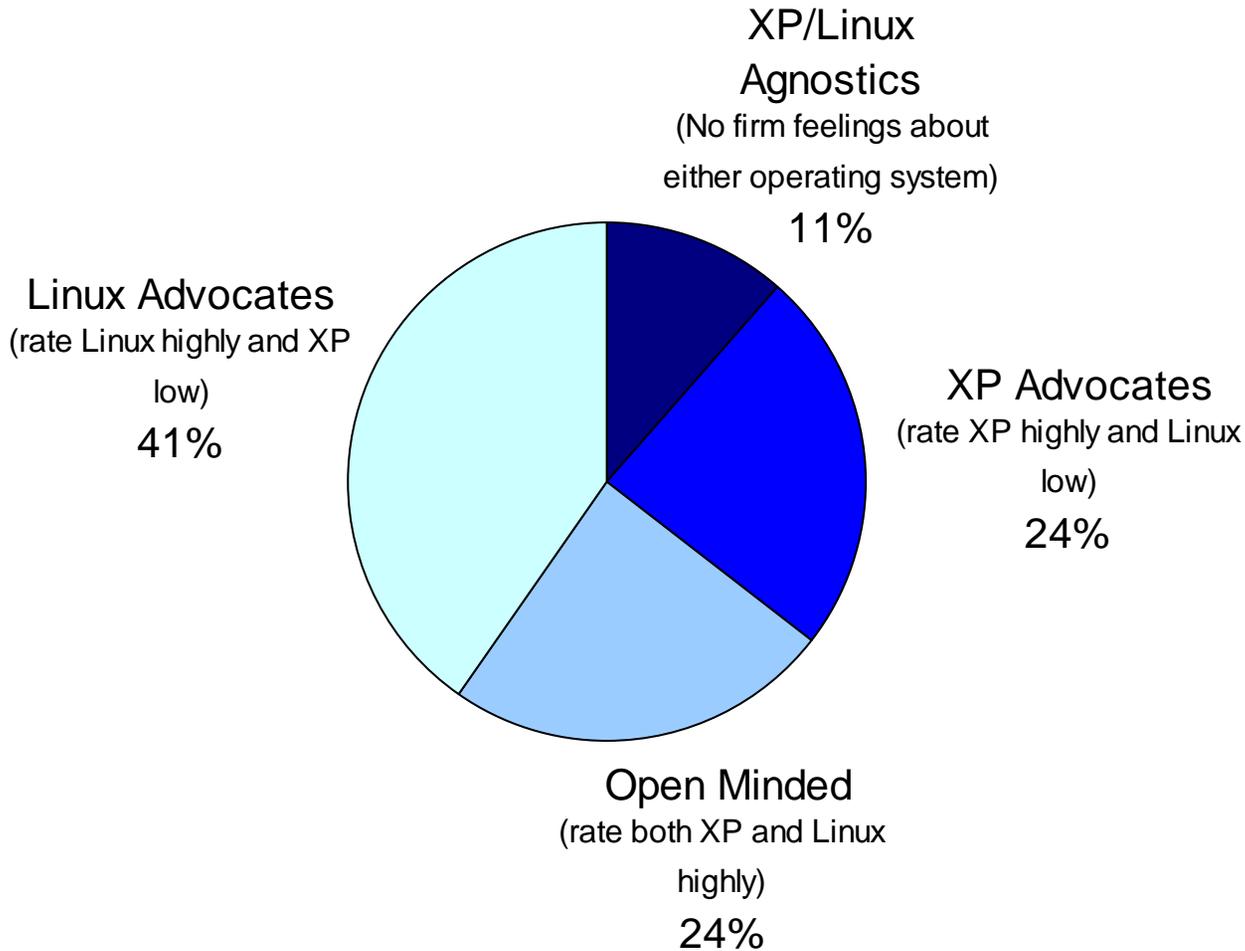
# Sample distribution by Organisation Size



## Observations

Within this, approximately 50% of respondents declared their organisations sold IT products or services. Such organisations make up the "Vendor" segments in the relevant breakout slides that show result by organisation size. The remainder make up the various "End User" tiers.

# Sample distribution by Operating System Advocacy



## Observations

These segments are based on responses to the two questions asking for opinions of Windows XP and Desktop Linux.

# Contacts for feedback and further information

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