



Next Generation Datacentres Index – Cycle II

Following on from the first cycle of research carried out in February 2011, this re-run of the next generation datacentre research covered 10 regions to identify what progress organisations have made in preparing to adapt to new IT architectures and approaches to computing.

January 2012

This second cycle of the next generation datacentre (NGD) research shows that there has been modest progress in how organisations are preparing for changes in how ITC is used to support their businesses. However, in a flat economy, any progress is welcome, and it is good to see that more organisations are preparing to invest in their datacentre facilities and are also making use of external facilities to provide greater flexibility.

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Next Generation Datacentres Index – Cycle II

Following on from the first cycle of research carried out in February 2011, this re-run of the next generation datacentre research covered 10 regions to identify what progress organisations have made in preparing to adapt to new IT architectures and approaches to computing.

There has been growth across all sub-indices

The Cycle II research shows that there has been investment in datacentres that have improved flexibility, sustainability and supportability. However there are large differences on both a regional and a vertical market basis, indicating that datacentre best practices are not propagating across regional and vertical barriers.

More respondents are seeing the need for a new datacentre in the foreseeable future

In Cycle I, 17% of respondents did not see the need for a new facility within the foreseeable future – in Cycle II, this has fallen to 8%. Quocirca believes that this is due to organisations finding that, as new architectures and equipment are being deployed, existing facilities do not have the capability to deal with the increased densities of the equipment, along with their energy and cooling needs. Therefore, for many, even where space is not an issue, the cost of retrofitting new energy distribution and cooling systems to existing facilities may make a new datacentre more attractive.

The use of external datacentre facilities is growing

In Cycle II, the number of people using external datacentre facilities has almost doubled from 16% to 30%. Quocirca believes that this reflects the increasing view that new datacentre facilities will be required in the foreseeable future. Many organisations see that outsourcing the building and management of the datacentre facility (via colocation) or through a complete outsourcing of IT function (via cloud computing) gives them greater flexibility with meeting their IT needs.

Virtualisation is increasing in its use and impact

Although still not being used as much as many would have us believe, virtualisation is increasing in its use, and its positive impact on organisations is apparent. Virtualisation has led to a marked increase in server utilisation rates – and this has led to savings in energy, so improving datacentre sustainability scores.

The improvements to datacentres are providing demonstrable business benefits

The research shows that changes in how organisations are dealing with their datacentres are providing greater levels of systems continuity with fewer outages and less impact on the business should any item of IT equipment fail. However, there is still a chasm between the business and IT, with too many organisations seeing IT as a pure service provider. Without bridging this gap and making IT a core part of the business decision-making process, the increased levels of IT availability will not provide the business with the desired end result – that of using IT to facilitate highly dynamic business processes.

Understanding of new technologies remains weak

The research shows that newer approaches to dealing with computing are still not well understood, and that many organisations are still loathe to commit their mission- and business-critical workloads to more efficient and effective virtualised platforms. This may well hold back the capabilities of the business itself, and organisations would be well served in looking to a more rapid adoption of well-planned and implemented virtualisation in order to provide a more flexible, supportable and sustainable IT platform.

Conclusions

It is good to see that, even under highly constrained economic conditions, there has been investment in datacentres that shows distinct benefits to the business. However, much remains to be done, and the move towards cloud computing will introduce greater stresses on existing and future datacentre requirements.



Background

The technical environment is going through a period of rapid change. The use of old-style, centralised datacentres is being reviewed as the use of co-location, outsourcing, hosting and cloud services bring different options and opportunities to the fore. However, the global economy is looking weak, and the changes required to make the most of the new possibilities in how technology is implemented and used may be seen as too costly by many organisations.

The first cycle of this research, carried out in early 2011, coincided with recessionary pressures on a worldwide basis outside of the high-growth BRIC (Brazil, Russia, India, China) economies. This second cycle of research, carried out 10 months further on, coincides with news pointing towards continuing economic woes and a possible slip into a second recession. Indeed, for many of the European countries involved in the research, it also coincides with their economies having to deal with the issues around the Euro and how the various Euro countries deal with each other.

Through all of this, information technology and communications (ITC) vendors have had to try and position themselves to pick up whatever technical investments organisations are prepared to make. Many have been banging the 'cloud computing' drum, others have been trying to play the 'speeds and feeds' message of keeping up with the latest technology in order to provide the raw horsepower required to support highly dynamic business processes. Others focus on the benefits of virtualisation, others on the need to control energy usage across an ITC platform. What the research shows, however, is that the majority of respondents are still struggling not only to understand a lot of the technologies involved in newer approaches to computing, but that they are also not ready to implement these to underpin important or mission critical applications and services until they are better proven.

Note that, due to changing the core countries covered, the figures presented throughout this report will not necessarily agree with those shown in the equivalent report covering the first cycle research (<http://quocirca.com/reports/597/>). Here, the findings for the US have been dropped from the first cycle of results, and the findings on Ireland and Russia have not been included in the main comparative details in order to gain full comparison of the research findings. However, Ireland and Russia have been covered in the final sections of the report to show how they compared against the other regions, and also to show the impact their scores would have had on the overall indices.

Research methodology

The research was conducted using Quocirca's standard methodology. A total of 949 interviews were carried out during November 2011. All interviews were carried out via telephone to reduce the skew associated with web-based research, where respondents tend to be from the two extremes of agreeing or disagreeing with the subject. Respondent profiles were chosen from a range of commercially available databases and were checked as part of the interview process to ensure that the respondent fell within the agreed profile. Where English is not spoken widely, all interviews were carried out in native language to avoid any issues with misunderstanding the questions. All results were quality checked to assure that no skew had been introduced by specific interviewing agents, that no responses were predominantly completed with an 'average' score, and that all responses made sense within the context of the individual and organisation concerned.

The results of the research were analysed at an aggregate level and also by region, by vertical and by size of business. Cross correlations were also carried out to see how well responses tallied against each other.



The regions covered were as follows:

- UK – 100 interviews
- Belgium/Netherlands (Benelux) – 101 interviews (51/50)
- Germany/Switzerland (DCH) – 98 interviews (68/30)
- France – 100 interviews
- Spain/Portugal (Iberia) – 100 interviews (70/30)
- Italy – 100 interviews
- Saudi Arabia/UAE (Middle East) – 100 interviews (50/50)
- Denmark/Finland/Norway/Sweden (Nordics) – 100 interviews (25/25/25/25)
- Russia – 100 interviews
- Ireland – 50 interviews

Note that the USA was dropped from the second cycle of the research, and Russia and Ireland were added. In order to maintain fidelity in the index, top-level scores throughout this report will compare the 8 common regions where comparisons are drawn.

The vertical mix for interviews was as follows:

- Financial Services – 150 interviews
- Healthcare – 137 interviews
- Media – 147 interviews
- Public Sector – 143 interviews
- Retail – 143 interviews
- Telco – 79 interviews
- Utilities – 114 interviews
- Other – 36 interviews

By size, the interviews were as follows:

- Tier 1 (>\$1b revenues) – 473 interviews
- Tier 2 (\$100m - \$1b revenues) – 476 interviews

The research was organised in four sections. The first three of these sections were aimed at creating a set of measurements to form a baseline against which organisations can be positioned. By using a scoring system for each question asked or statement provided to an interviewee to match against, a score between 0 and 10 could be calculated. By averaging these scores out, the series of sub-indices could be created at a per-respondent level, and these could then be averaged out to provide overall sub-index scores.

These three areas, each of which results in a sub-index score, are:

- **Datacentre flexibility** – Looking at how well the existing datacentre is monitored, measured and controlled, and how easy it is to introduce new equipment, new technical architectures and new workloads into the existing datacentre environment
- **Datacentre sustainability** – Looking at how efficient and effective the existing datacentre environment is, and how core the business views the sustainability of its technical environment
- **Datacentre supportability** – Looking at how well the existing datacentre facility provides support to the organisation through availability, being able to plan for future workloads and how well it is aligned with the organisation's strategy.

From these three sub-indices, an overall score for each respondent's next generation datacentre (NGD) index was calculated.



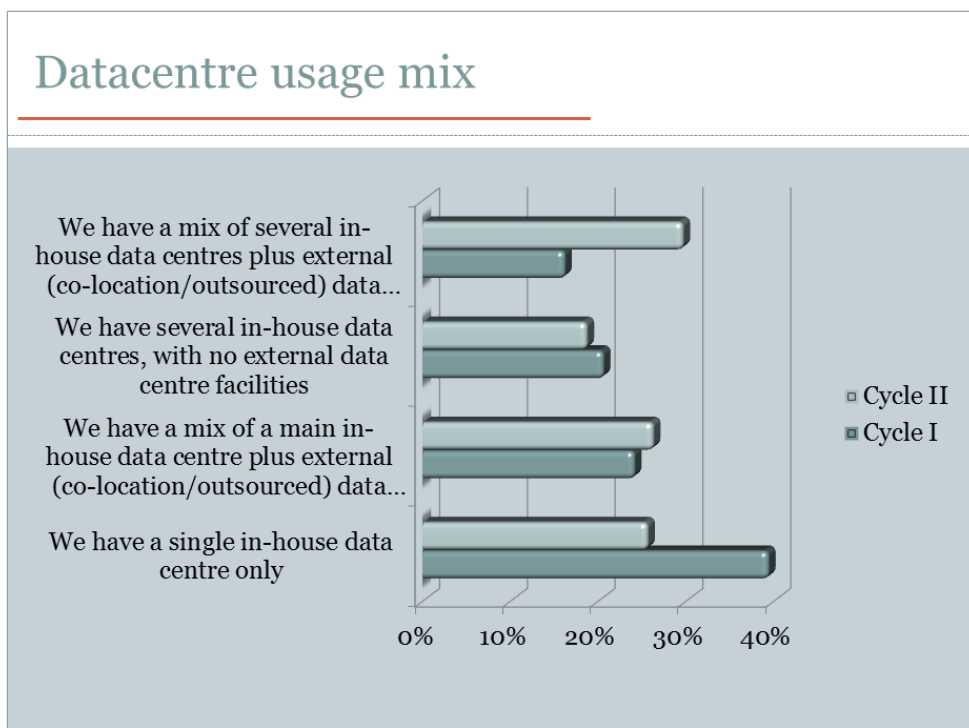
The fourth section of the interview looked specifically at respondents' views around cloud computing. These results have not been used within the main NGD index calculation. They do, however, provide interesting and valuable information on organisations' perceptions of the promise and issues of cloud computing across a broad range of respondents, and will be reported in a separate Quocirca report.

Research findings

As part of the overall profiling of respondents, each person was asked how their organisation's existing datacentre facilities were organised.

Question: How many datacentres are there in your organisation?

The question had five possible responses. Response "A:" was that all datacentre functions were held externally – such a response resulted in no further participation in the survey; such responses have been filtered out from the results shown in the graph below.



As can be seen, there has been a shift towards outsourcing datacentre facilities, with dependency on a single corporate datacentre dropping from 39% of respondents to 26%. The move has been toward the use of multiple in-house datacentres used in a hybrid architecture with external facilities. Here, the research shows a growth from 16% to 30%.

Quocirca believes that this reflects more of a focus on the need for higher levels of ITC platform availability, which is difficult to provide from a single facility. However, just backing up a single existing datacentre with external capabilities may not meet the needs of organisations, with many still having the perception that information



security is better served by controlling the datacentre facility through ownership. Therefore, Quocirca believes that many organisations will have implemented small datacentre facilities or that they are now using containerised systems to provide what they perceive as required levels of availability and security.

Next Generation Datacentre Index

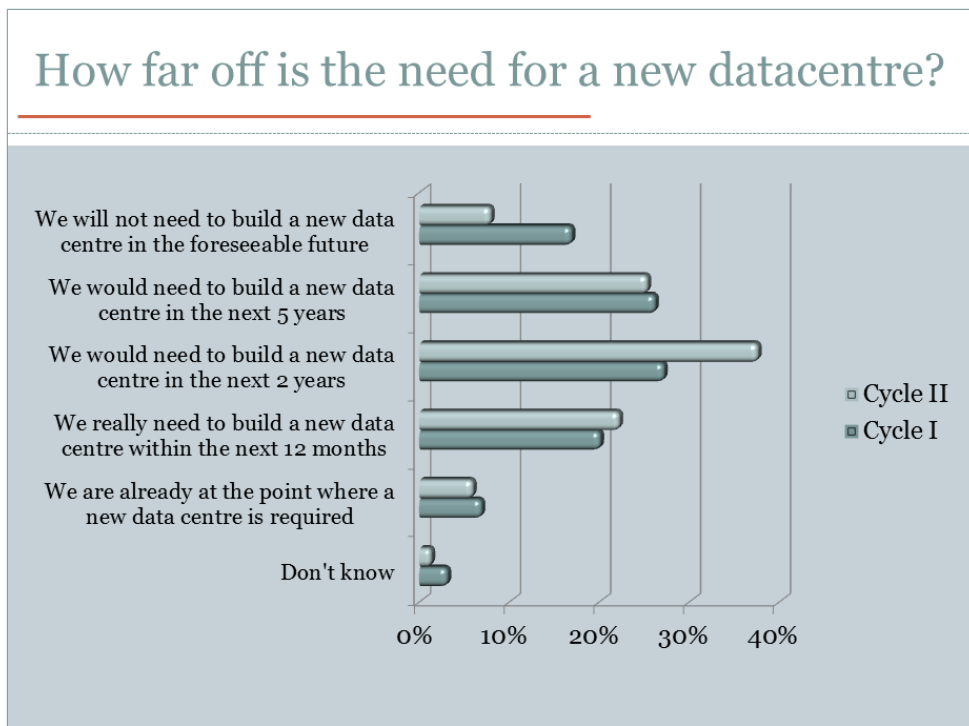
The main index research was split into 3 main sub-indices. These looked at the following three areas – datacentre flexibility, datacentre sustainability and datacentre supportability.

Datacentre flexibility

Interviewees were asked a series of questions around how their existing datacentre facilities were set up to deal with the changing workload and architectural needs presented to them.

Question: If money was no object, in an ideal world, how far off is the need for a new datacentre for your organisation?

The question was worded so as to remove any skew from the response, such as the respondent knowing that there was a need for a new facility, but that there would be over-riding arguments such as economic concerns or lack of interest within the organisation that would prevent anything from being done.



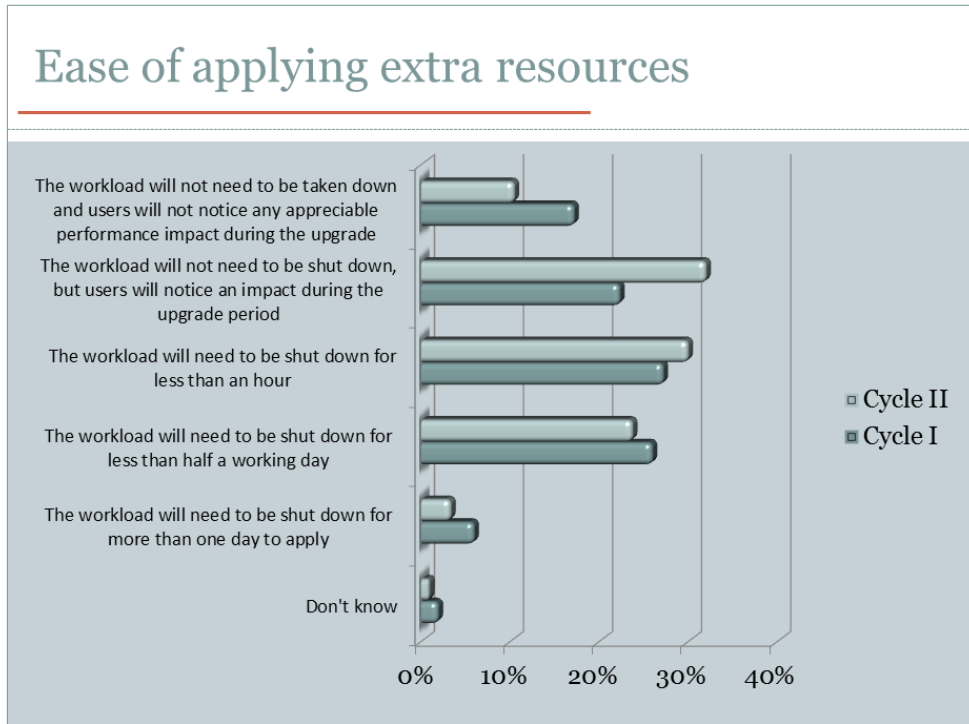
The research shows that there is a growing need for new datacentre facilities. Whereas 17% of respondents in Cycle I saw no need for a new datacentre within the foreseeable future, this has now fallen to only 8%. Those seeing the need for building a new datacentre within the next two years have grown from 27% to 36%. Quocirca believes that this shows how the changes coming through, driven by virtualisation and cloud computing, are beginning to have an



impact on how organisations view their ITC requirements – and how they are beginning to see that existing datacentre facilities are not up to the densities, energy requirements and cooling needs of new architectures.

Next, interviewees were asked how easily resources could be applied to a workload.

Question: On average, how rapidly can a specific business-critical workload have more resource (cpu/storage/bandwidth) applied to it?



Again, there seems to be a growing realisation of possible impact of change on the business. In Cycle I, 17% said that a workload would not be taken down and that users would hardly notice any impact while extra resources were being applied. In Cycle II, this has fallen to 10%. However, the numbers stating that the workload will not have to be taken down but that users would notice an impact has risen from 22% to 32%. Quocirca believes that is a more realistic reflection of the state of current datacentres, and that the change in response has been driven by datacentre managers better understanding how their actions impact the business.

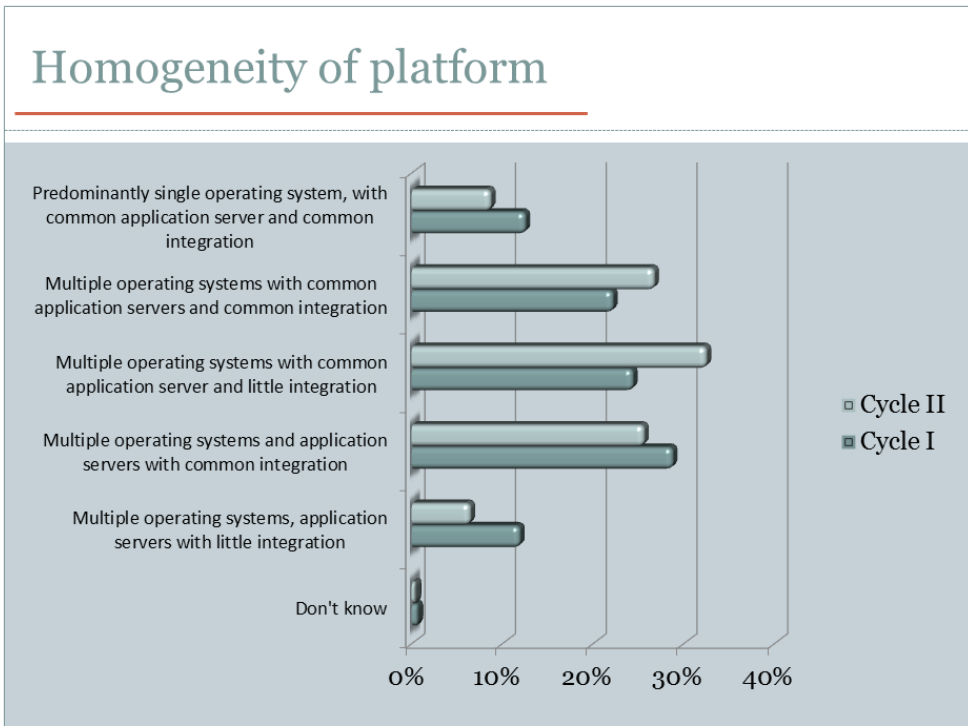
Next, the consistency and homogeneity of the underlying platform was looked at.

Question: How homogeneous is your platform?

Here, the research shows a marked movement away from homogeneity, along with an increase in the use of different types of integration to pull everything together. The biggest winner here is the use of common application servers, but not everyone is using the common application server’s capabilities to provide integration across the different environments.

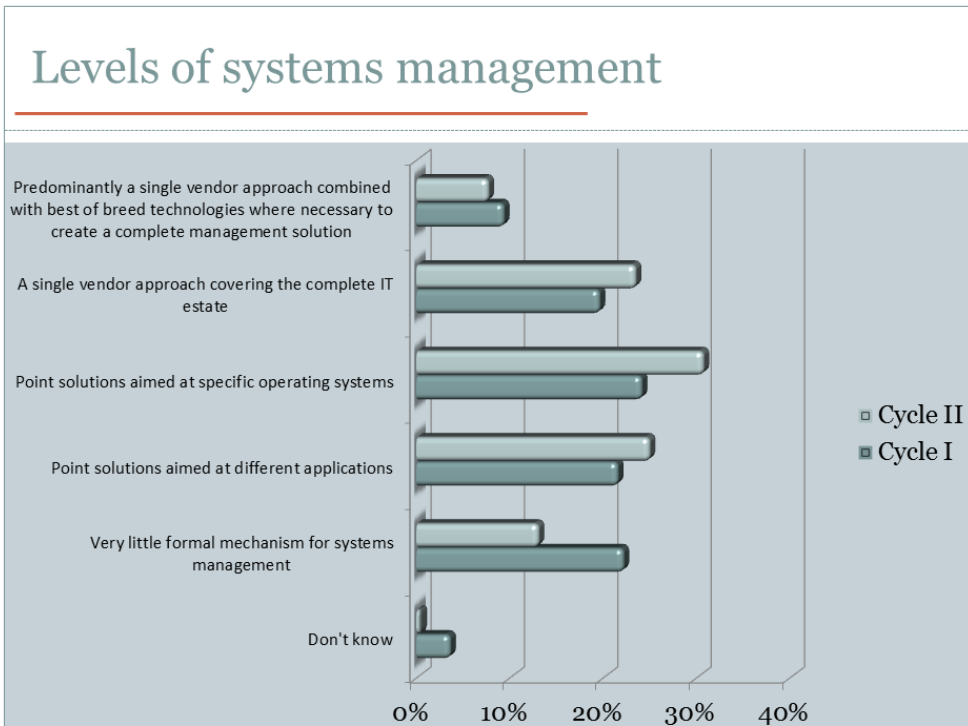
However, Quocirca believes that as virtualisation and cloud become more mainstream, having common application servers to build from will provide organisations with a good starting point on which to build a more modern technical platform.





Next, the capability to monitor and manage the datacentre was looked at.

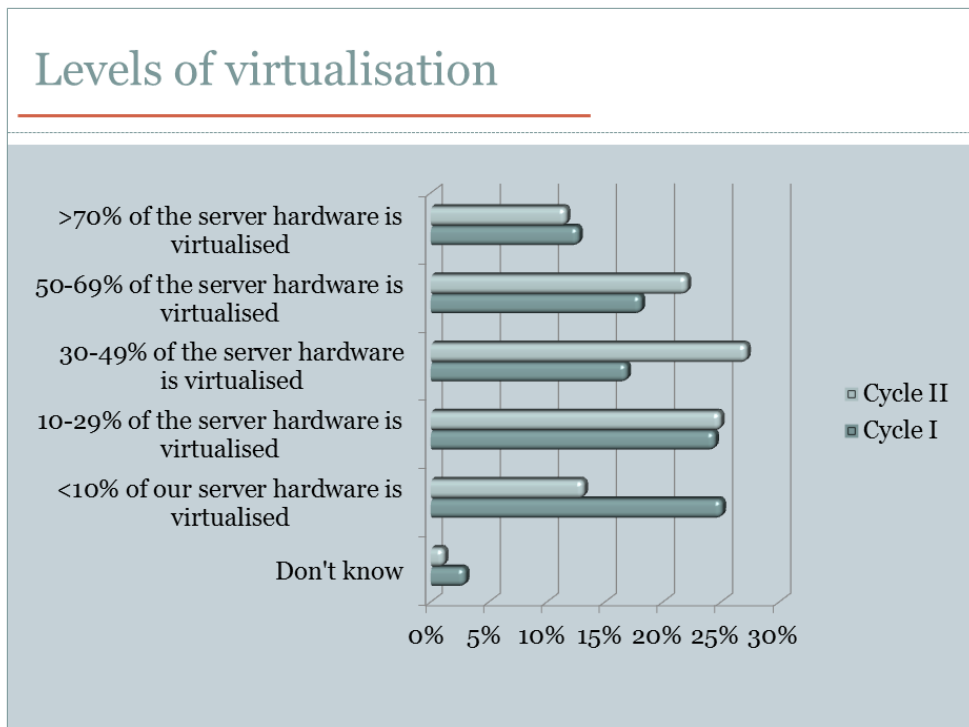
Question: What level of systems management do you have in place?



The first cycle of research showed a worryingly high number of respondents stating there was little formal systems management in place (22%). In Cycle II, this has dropped to 13% - still far too high a percentage, but at least a move in the right direction. The biggest move has been towards the use of point solutions based around each operating system, from 24% to 31%, which is, in itself, worrying as this creates a set of silos of information and makes root cause analysis of any issues difficult. The second greatest winner has been to move to a single vendor covering the total IT estate (20% to 23%) – a move that is sensible with the research showing a move away from homogeneity, towards greater virtualisation and also towards an acceptance of cloud computing.

The use of virtualisation across the datacentre was also looked at.

Question: How much virtualisation is there in your run-time environment?



Virtualisation is – at last – becoming more mainstream. Cycle I research showed that 25% of respondents had less than 10% of their servers virtualised – in Cycle II this has dropped to 13%. 27% now state that they have 30-49% of their servers virtualised against 17% in Cycle I.

Finally in this section, the reasons for making any datacentre investments were investigated.

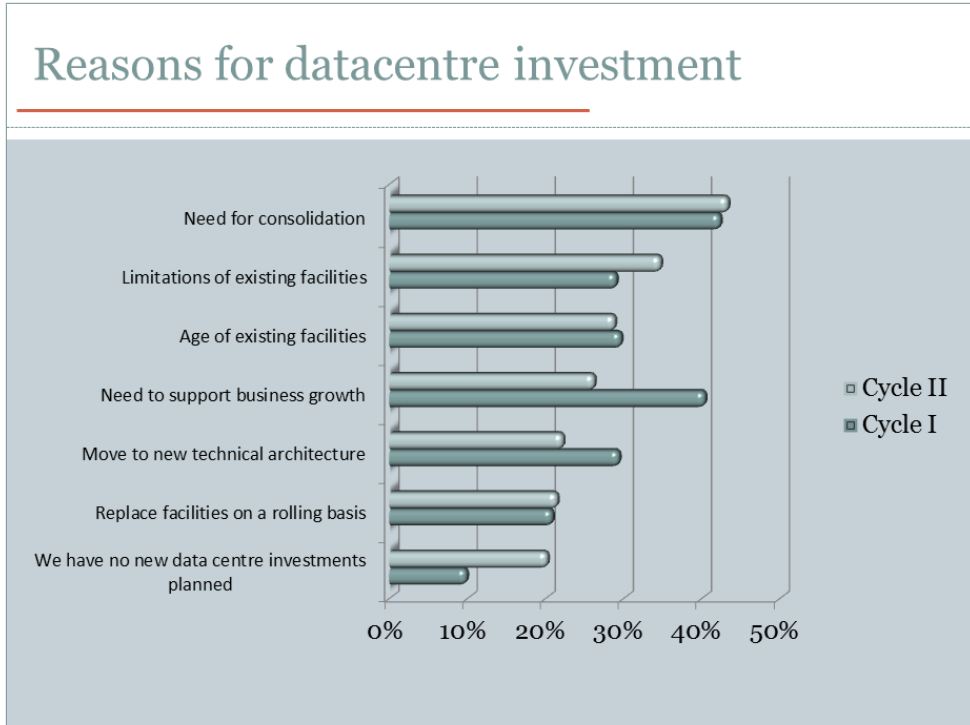
Question: What are the main reasons for new datacentre investments (if any)? For this question, respondents were allowed to choose more than one response.

The biggest climber here is in those having no investments planned (rising 100% from 10% to 20%). Quocirca believes that this does not reflect a belief that current facilities are up to meeting future requirements, but is a hard reflection on economic conditions forcing large facility investments on to the back burner.

The other growth is seen in those finding that existing facilities have limitations that are preventing them from moving the datacentre in the direction they would like to, with a growth from 29% to 35%.



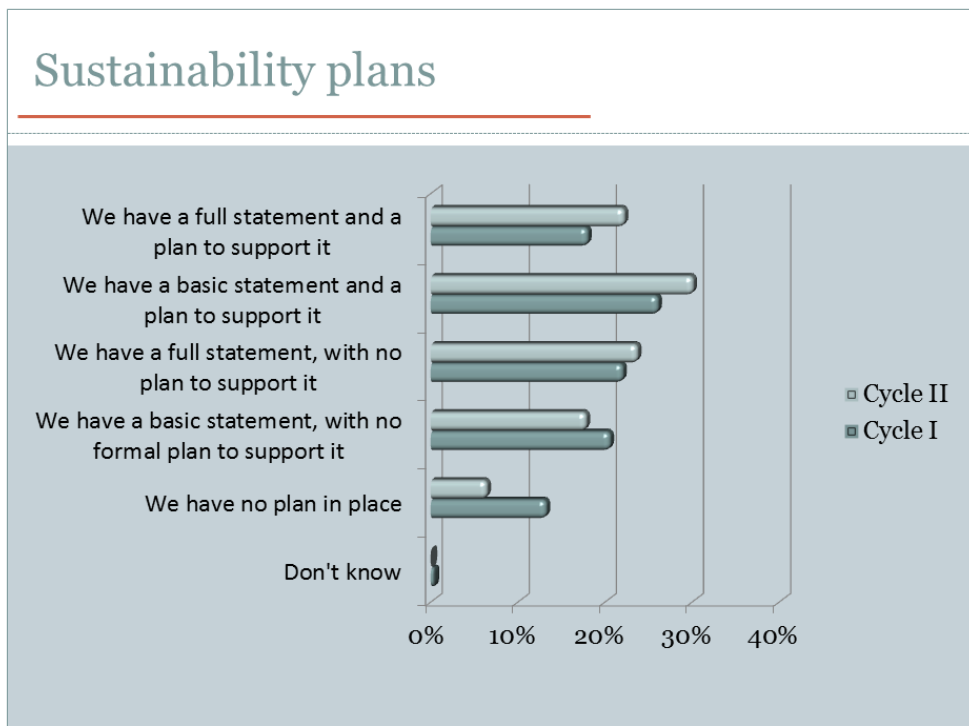
The big falls are in the need to support business growth (down from 40% to 26%) and the need to support moves to new technical architectures (down from 29% to 22%). Again, Quocirca believes that this reflects economic conditions – consolidation remains the biggest driver, which is far more aimed at saving against the facility and its energy needs on an on-going basis.



Datacentre sustainability

Although the strong philosophical interest in ‘green sustainable’ computing seen in the early 2000s has died down to be replaced with a far more pragmatic ‘economically sustainable’ model, there are plenty of savings that can be made in a datacentre through relatively simple steps, such as ensuring that cooling is targeted, running the datacentre at higher ambient temperatures, consolidating workloads and so on. While providing direct economic benefit to the organisation, these also have the knock-on effect of being able to be honestly messaged as ‘green’ strategies, so providing a double benefit to an organisation. However, to make the most of this, an organisation must have a sustainability statement – and a plan to support it.

Question: Does your organisation have a formal sustainability plan?



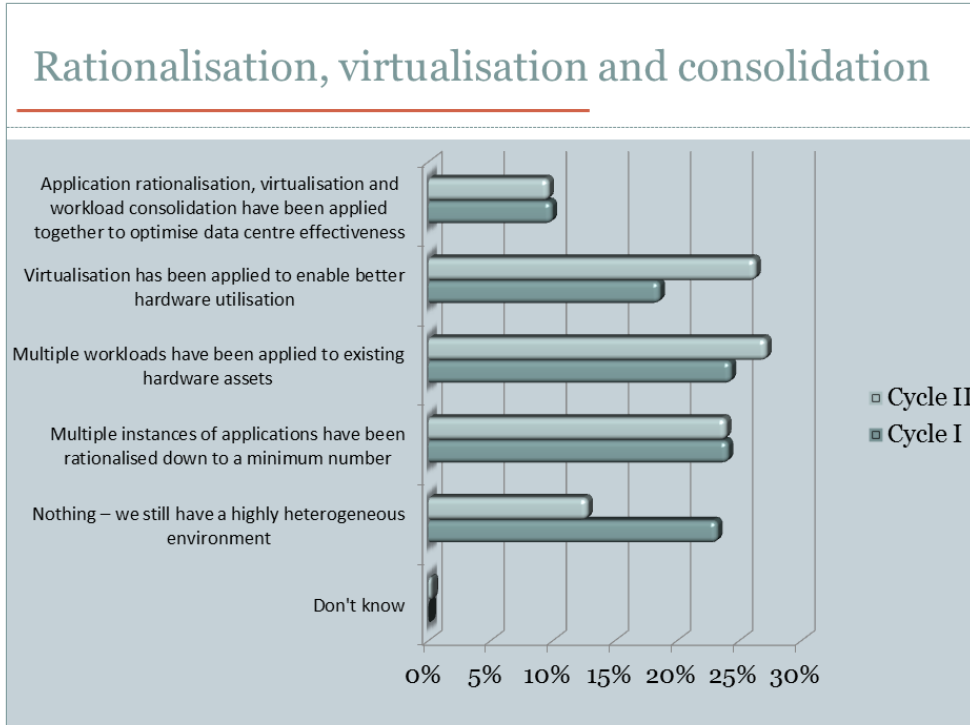
There has been a sharp drop in those stating that they have no sustainability plan in place at all between the two Cycles, from 13% to 6%. Those with basic or full statements with plans to support them have grown from 26% to 30% (basic plan) and 18% to 22% (full plans). Quocirca believes that this is not due to any philanthropic, ‘save the planet’ strategy by organisations, but reflects the worries around more centralised government actions to tax and fine those organisations that cannot demonstrate better control over their carbon emissions.

Whatever the reasons, it is good to see that over half of respondents now have a statement and a plan in place concerning how their organisations are approaching the issues surrounding sustainability.



To see what simple steps had already been taken by respondents towards a more sustainable datacentre, they were asked how far along the path of rationalisation, consolidation and virtualisation they were.

Question: What has been done within the datacentre environment around consolidation?



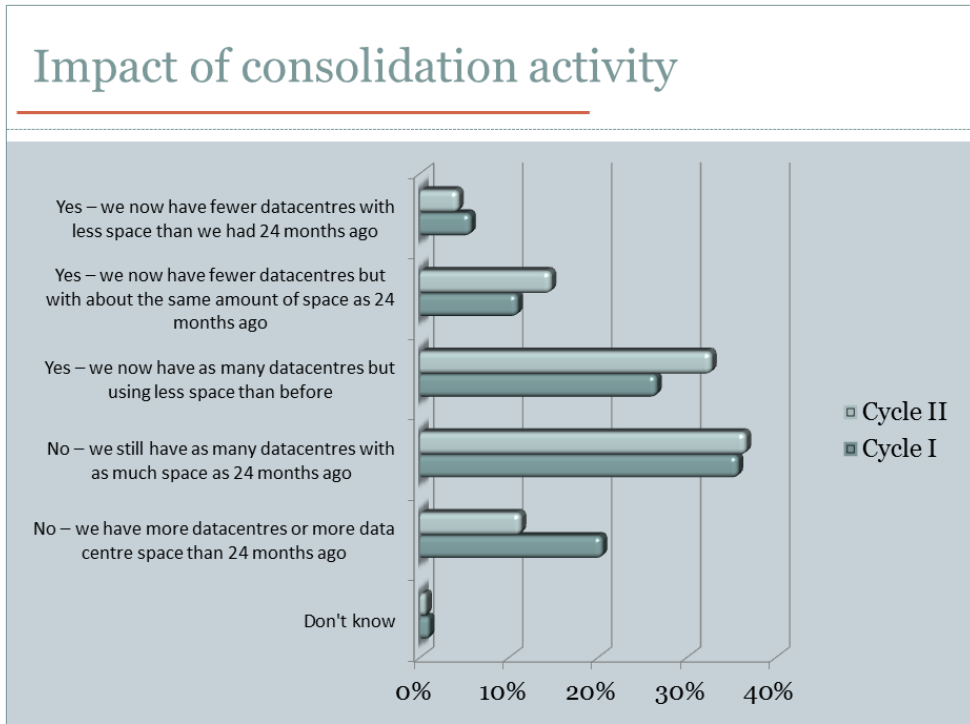
Expanding on the reasons provided for datacentre investments and the biggest driver being towards consolidation, the responses here shows how virtualisation is seen as being the biggest growth area between the two Cycles of research (growing from 19% to 26%). This has been met with a slight growth in rationalisation of multiple workloads to existing hardware assets and builds on the existing work that has been carried out on rationalising multiple instances of the same application. The Cycle II research identifies that such work has been accelerated, with those not having carried out any level of rationalisation, virtualisation or consolidation falling from 23% to 13%.

Again, while it is unlikely that these changes have been carried out to create a more ‘elegant’ IT environment, Quocirca believes that the changes will have been made in response to the organisation’s continued pleas for ‘doing more with less’. Such activities not only put off any need for a new facility, but also lower energy, licence and software costs along with the number of technical staff required to manage a highly complex, underutilised IT estate.



Continuing on from this theme, interviewees were asked whether their level of consolidation activity had any impact on datacentre facility growth.

Question: Has consolidation had any impact on the overall datacentre?



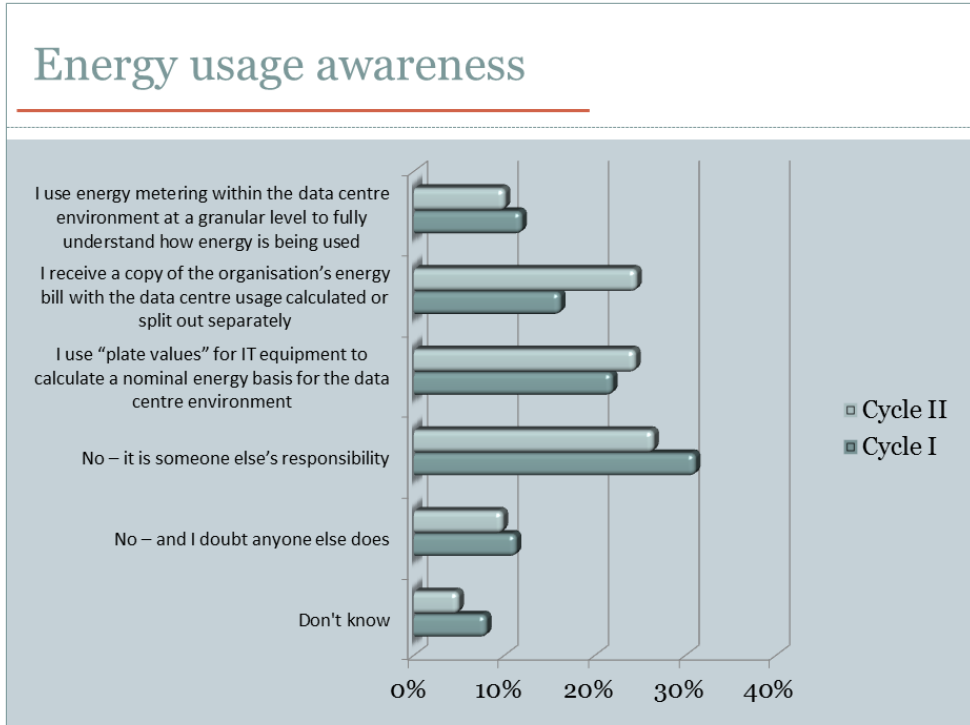
The number of people responding that the activities have had no discernible impact has fallen from 20% to 11%. Those who have got more datacentres, but less data space being used, have grown from 26% to 33%, reflecting the move towards greater use of external datacentres as well as the use of more remote (but owned and run by the organisation) datacentres for availability reasons.

The number of those with the same amount of space in fewer datacentres has also increased from 11% to 15%. Quocirca believes that this again reflects the use of outsourced facilities. The capability to move existing multiple datacentres into one consolidated space has a lot going for it, and Quocirca expects to see many from the “we have as many datacentres, but using less space” to move into this category over time.



A core part of being able to apply a true sustainability plan against a datacentre is to have full visibility of its existing energy usage.

Question: Do you know the energy usage for your datacentre environment?



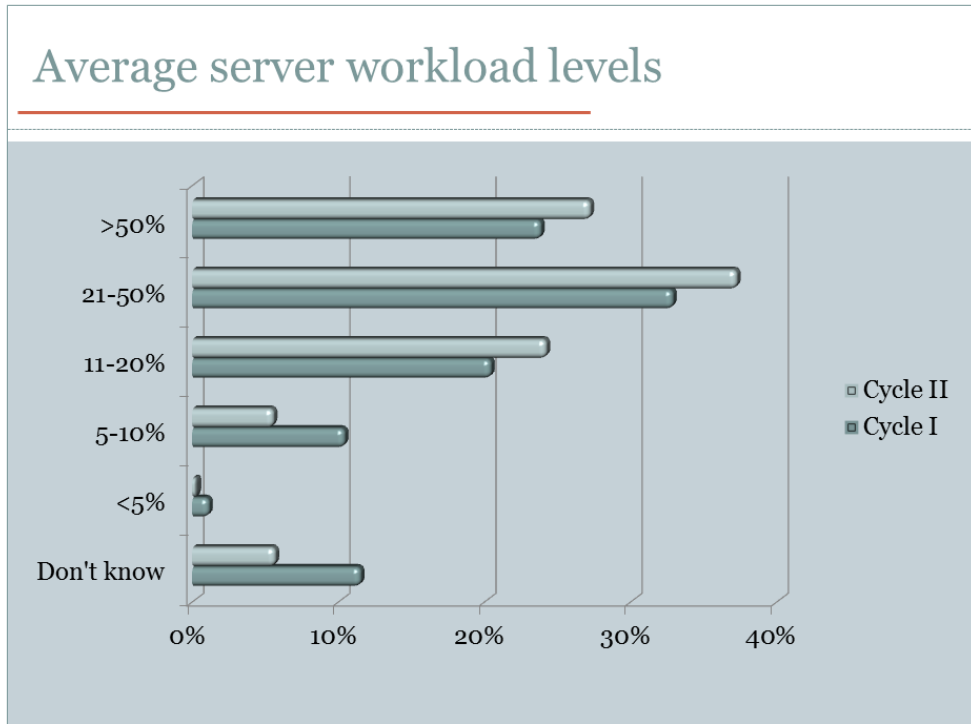
The growth in the numbers of respondents getting to see the actual energy bill and with the datacentre energy usage split out is encouraging – up from 16% to 25%.

However, the number of respondents stating that they don't see any details on the datacentre's energy usage remains stubbornly high – it has only fallen from 42% to 36%. Attempting to support a corporate sustainability plan when there is little knowledge of energy usage in such an energy-hungry facility such as a datacentre is not possible. Datacentre managers should be insisting on having visibility of the datacentre's energy usage – and should be implementing monitoring and measurement systems so that they can identify where savings can quickly and effectively be made. They should also look to the American Society of Heating, Refrigeration and Air-conditioning (ASHRAE), which has recently reviewed its advice on the temperatures that datacentres should be run at, advising much higher overall temperatures. Each higher degree means less cooling is required, which means less energy required to drive chillers – or even a move to free-air cooling. Quocirca recommends that datacentre managers look to current best practices to see if these can provide immediate cost savings without the need for much up-front investment.



A further measure of how effective a datacentre can be is around knowing the existing utilisation rates of assets within the datacentre.

Question: What is the average server workload utilisation level in your datacentres?



The research shows that overall server utilisation levels have climbed. The first finding is that datacentre managers are now far more aware of their server utilisation rates, with the number of “Don’t knows” having dropped from 11% to 6%.

Those running at between 5% and 10% overall server utilisation rates have dropped from 10% to 6%, with growth in all levels above this. At the highest level, those stating that they are running their servers at greater than 50% utilisation have grown from 24% to 28%. While this may not seem like a significant growth, it reflects the slow but steady growth of virtualisation and means that average server utilisation rates overall will have grown by around 5% points across the board. For those who were running at between 5% and 10% utilisation rates, this will mean a reduction in server needs of between 30% and 50%: even for those running above 50% utilisation rates, they will now require 10% fewer servers.

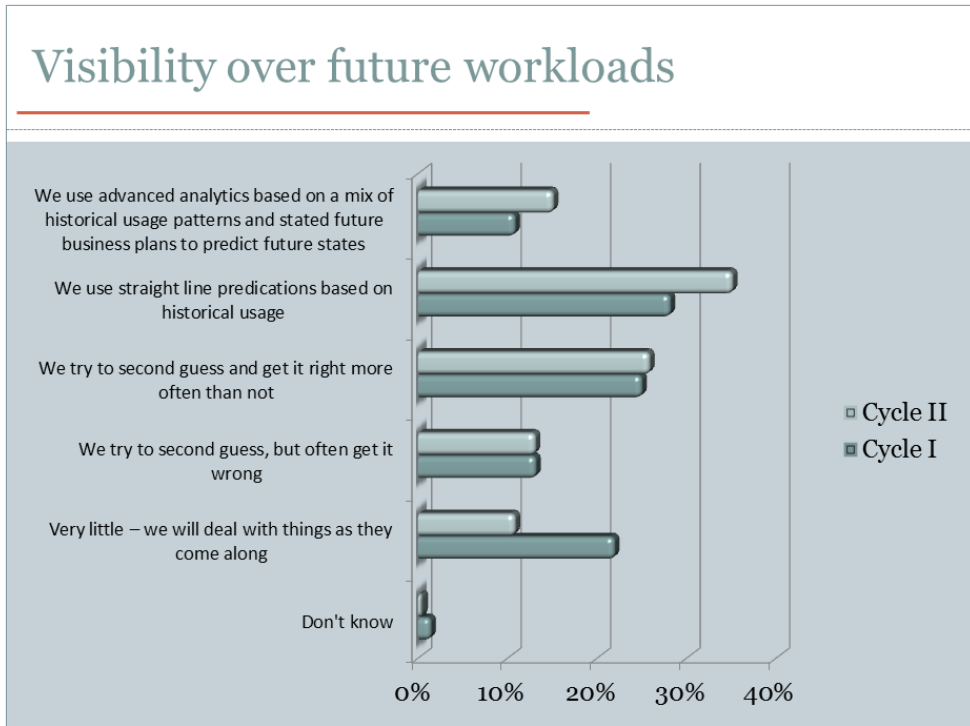
Such consolidation has obvious savings to the business at the many levels already discussed around consolidation.



Datacentre supportability

A series of questions were asked around what level of support the interviewees' datacentre facilities can provide to the business.

Question: What visibility do you believe you have on future workload requirements?



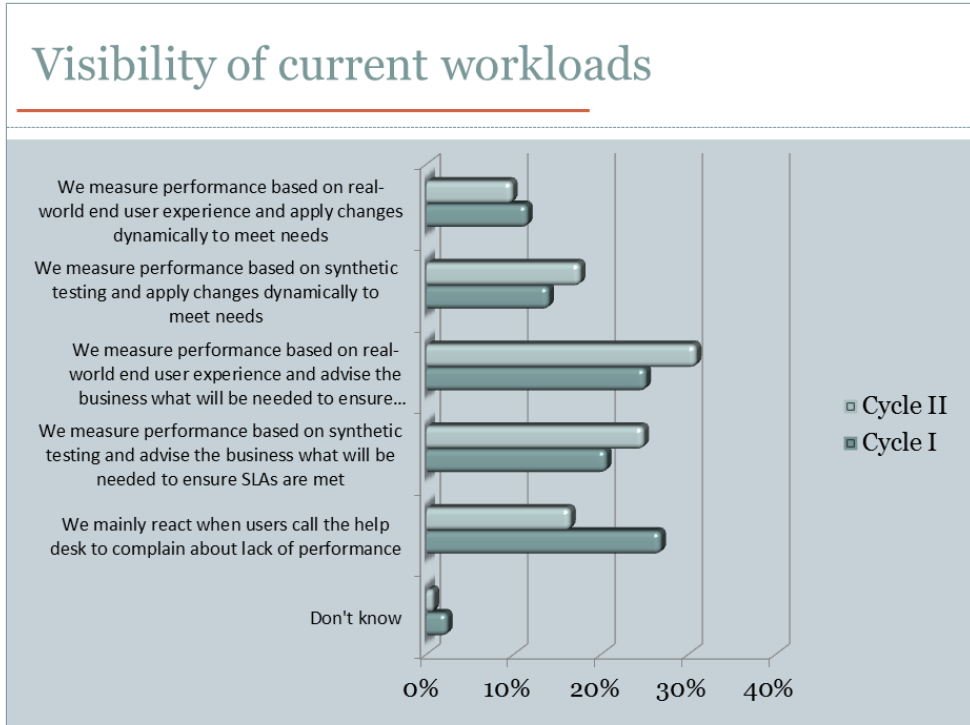
There has been a marked improvement in organisations planning for the future. The number of respondents dealing with issues as they come along has fallen from 22% to 11%, whereas those using straight line predictive methods have increased from 28% to 35%. Those using more complex methods have also increased from 11% to 15%.

Quocirca welcomes this improvement – the lack of being able to plan for future workloads means that IT is not supporting the organisation properly, and it makes it far easier for the organisation to choose to outsource a greater proportion of its IT – often as far as outsourcing the IT strategy.



In Cycle I, the problem was further compounded when looking at the visibility that organisations had on their existing workload performance.

Question: What visibility do you have on overall workload performance in the business?

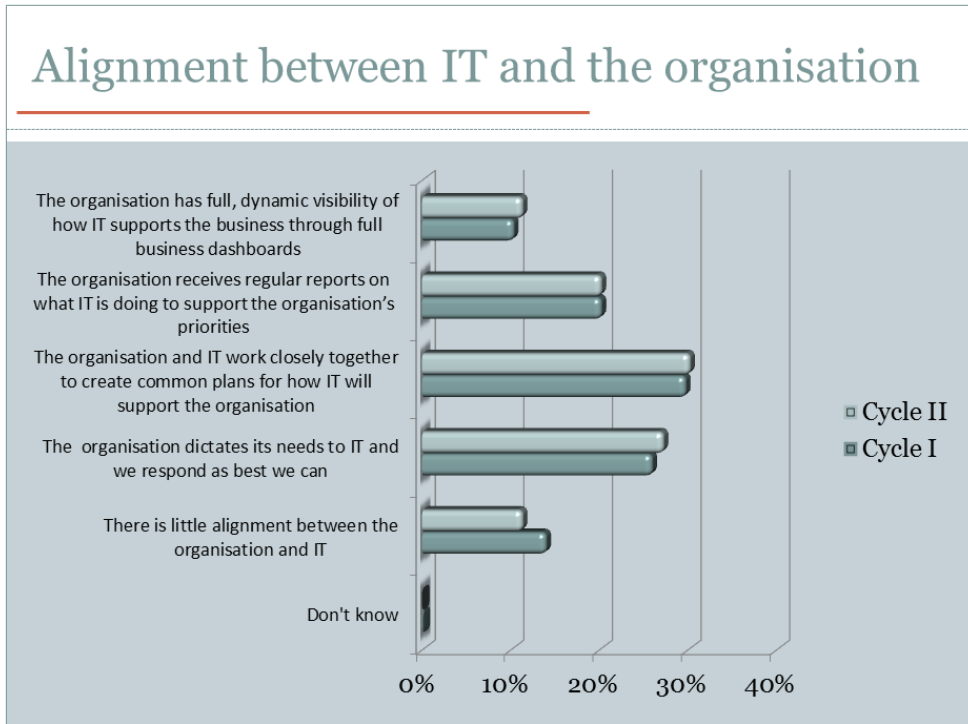


In Cycle II, a similar pattern to that on future workload is seen. Those reacting based on how loudly the users complained has fallen from 27% to 16%, whereas those using real world and synthetic testing has increased from 71% to 83% overall. However, there is still a lack of automated means of responding to current workload needs – it is hoped that, as cloud computing becomes more of a mainstream approach, the elasticity of resource provisioning will rapidly change this.



Historically, IT has often divorced itself from the business by being too technical and not being able to talk to the business in the business' language.

Question: How aligned is IT with the organisation's priorities?

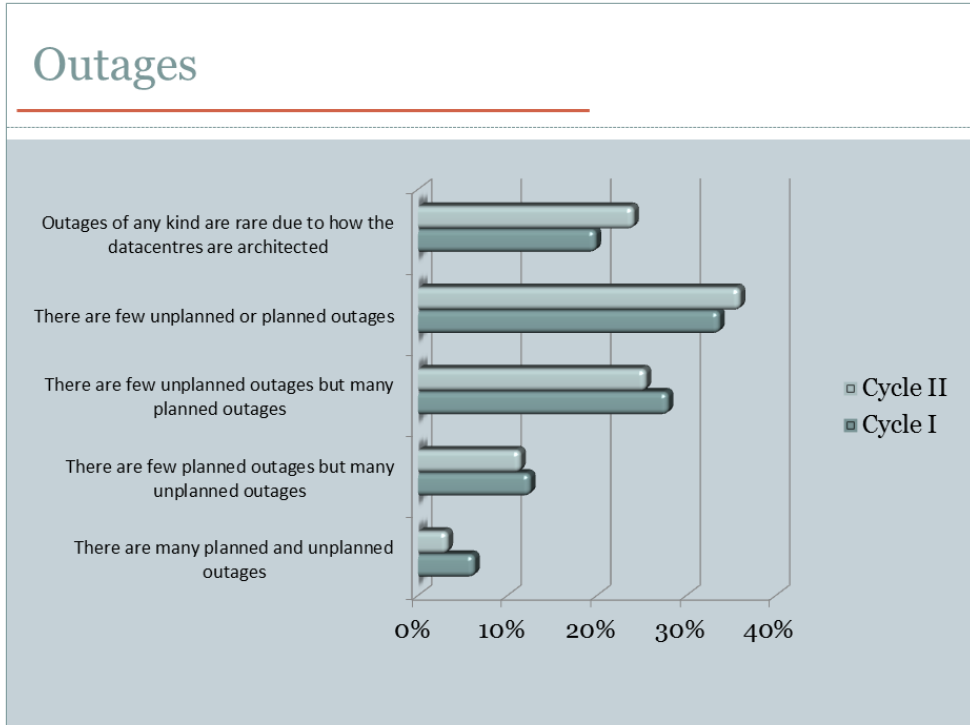


It is interesting to see how things have changed so little between the two Cycles. Whereas 40% of respondents showed that there was little real connection between the business and IT in Cycle I, this has only fallen to 38% in Cycle II. Again, unless IT can show the business that it fully understands the needs of the business and can react accordingly, it runs the risk of being seen purely as an internal supplier, making it easier for the business to by-pass the IT department completely as external cloud-based services mature. Therefore, Quocirca recommends that IT takes the bull by the horns and learns more about the business and ensures that the advice provided is given in business terms. Only through forcing greater alignment between the business and IT can IT ensure that it retains control of the overall technical strategy – and also ensure that datacentre investments are focused on the areas that will benefit the business the most.



Systems availability is now a core requirement for a business. With so much being dependent on systems being up and running, any break in service can have massive direct financial impact on a business.

Question: What level of systems availability does the datacentre environment provide?



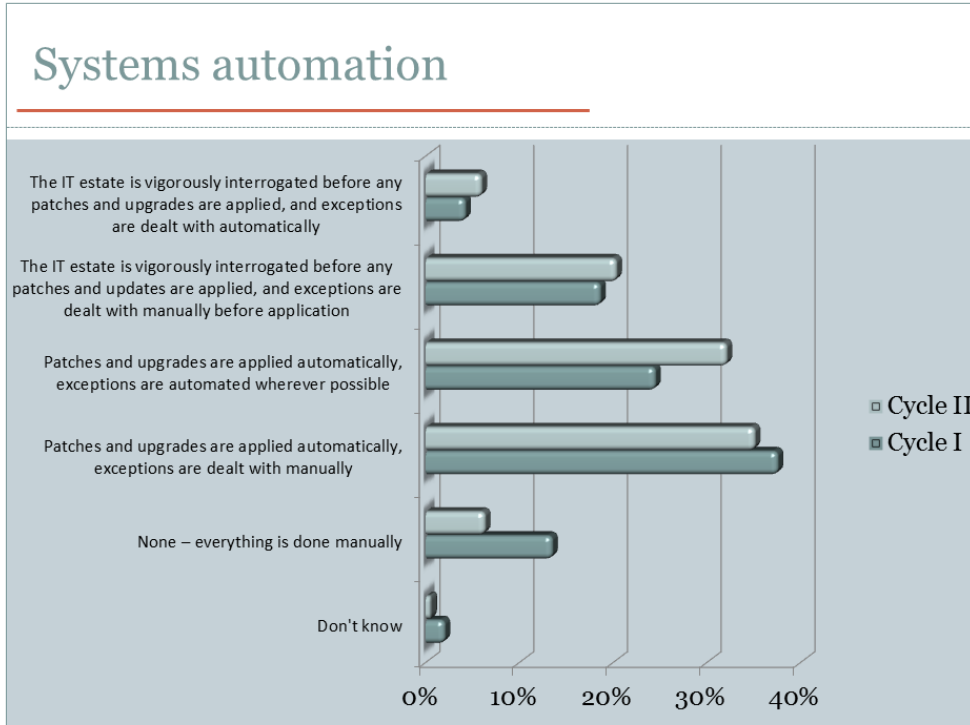
As can be seen, the change in the use of systems management tools has had a direct impact on the levels of outages experienced within the organisation. Although there is no massive swing, it is apparent that the number of outages has reduced considerably – those having a larger number of planned and/or unplanned outages has dropped from 46% to 39% overall, whereas those stating that outages are rare has grown from 20% to 24%.

The impact of this on the business cannot be overlooked – although the graph makes the changes look relatively small, the fact that 25% more organisations now find outages of any sort to be rare means that the business can be far more sure of how its IT platform will support it. IT has moved to where it should be – a facilitator for the business, rather than as a constraint.



Another aspect of availability that tends to be associated with systems management is the capability to automate the patching and upgrading of systems.

Question: What level of automation is in place to manage patching and upgrades?

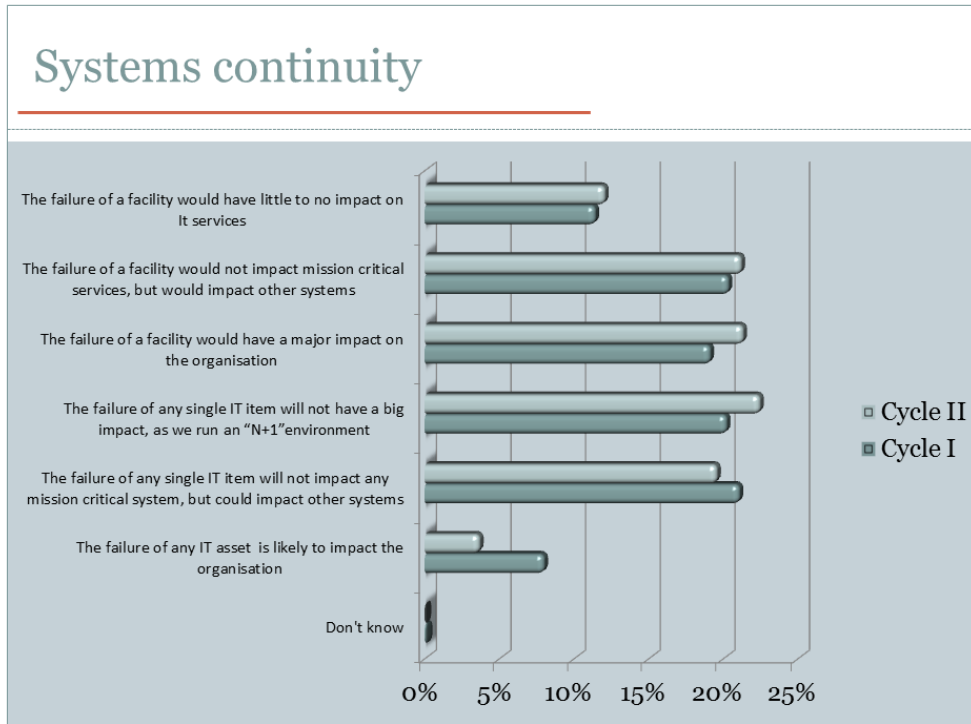


Here, there is a far greater change in the figures. Those taking a manual approach to patching and upgrades has fallen from 13% to 6%, whereas those using automation wherever possible has risen from 47% to 58%. Again, the savings to the business through using automation should not be underestimated. The speed of update is optimised, and remote locations and mobile workers can be fully supported without the need for equipment to be brought in to a central location. By using up-front asset discovery and interrogation tools, manual interventions can be minimised, and only the few instances where something goes wrong will need manual intervention. Even here, the capability to roll back to a known position, so that the user can at least continue with their work while waiting for the manual intervention to take place, means that disruption is minimised – along with costs.



The overall availability of a datacentre is predicated on many different items, and the failure of any single item can result in anything from a slight lowering of overall performance to the total lack of availability of a service.

Question: What level of failure can your IT estate deal with, with minimal impact on the organisation?



Here, in Cycle I it was seen that 8% of respondents stated that the failure of any IT asset would be likely to hit the organisation’s IT capability. This has now dropped to 4%, and the Cycle II results also show that there has been a steady improvement in being able to provide better levels of systems continuity to the business.

Index results

Once the research results had all been analysed, a score was applied to each response to create the three basic sub-indices and the overall next generation datacentre index score.

Overall main and sub-index results

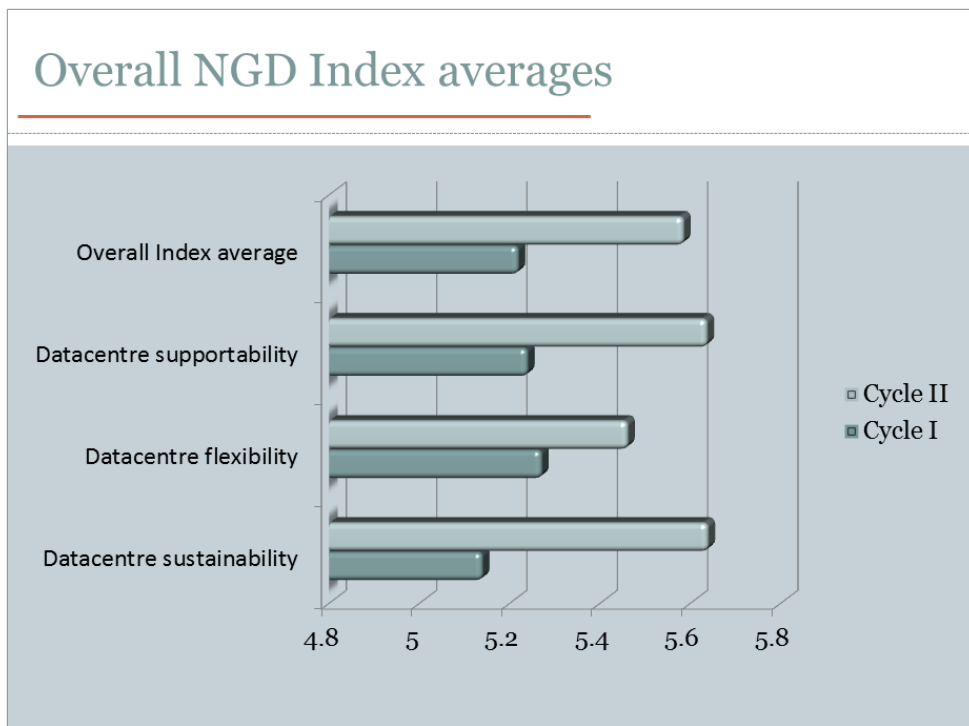
The overall index has improved from a score of 5.21 in Cycle I to 5.58 in Cycle II. This reflects improvements across each of the sub-indices as well. Datacentre supportability improved from 5.24 to 5.64; datacentre flexibility improved from 5.27 to 5.46; while datacentre sustainability rose from 5.14 to 5.64.

The largest improvement was in sustainability – Quocirca believes that this reflects a greater focus on the energy requirements of datacentres. Therefore, it does not necessarily reflect an improvement in organisations wishing to be more sustainable, but is more likely to reflect the fact that, by optimising the energy requirements of datacentres to reduce costs, a by-product is being able to position the organisation as more sustainable.

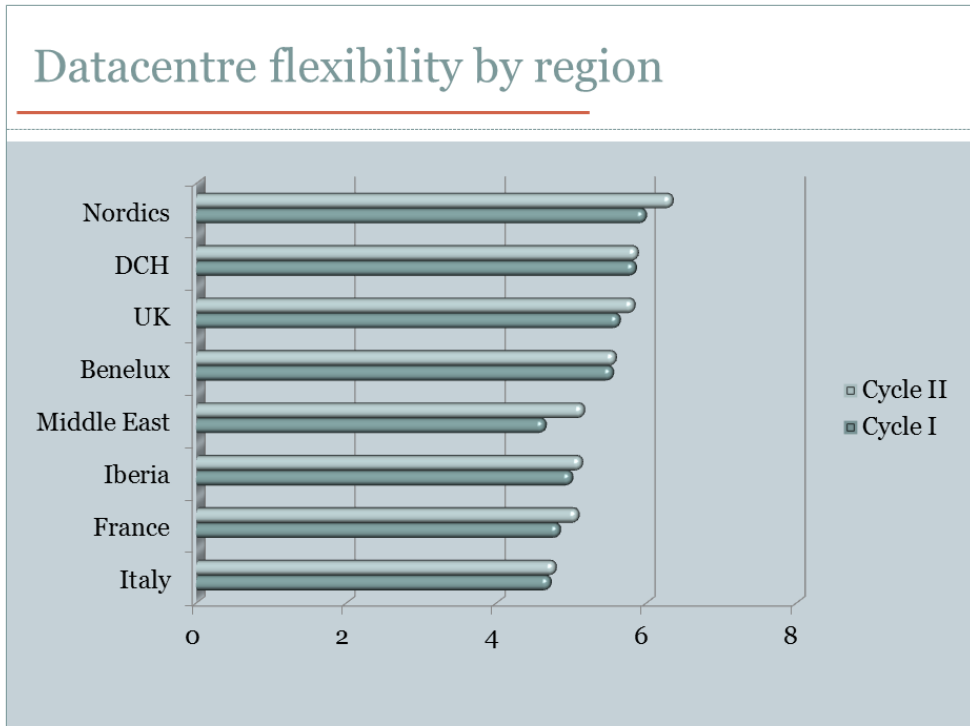


The lowest improvement is in flexibility. This is worrying, as the current economic climate drives a need for organisations to be extremely flexible and capable of changing business strategy to meet highly volatile market drivers. If the IT platform is insufficiently flexible, then IT will still remain a constraint on the business overall – even if the IT platform is highly energy-efficient and all the tools are in place to be able to support the platform.

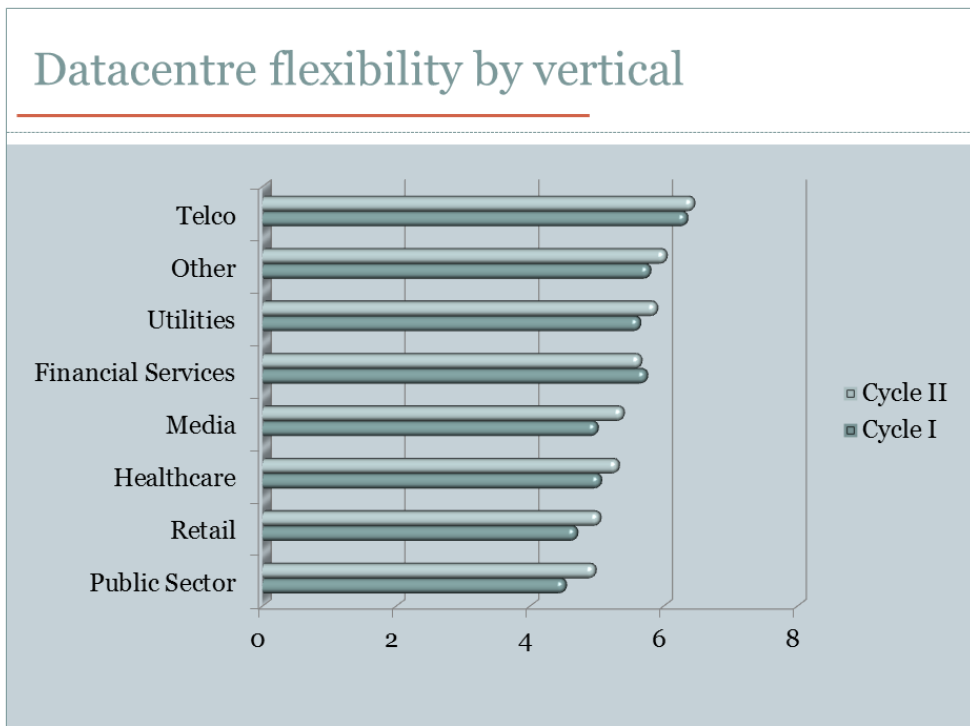
Quocirca advises that organisations look toward the increased use of virtualisation and cloud computing, along with the use of external datacentre facilities, in order to gain the IT platform flexibility that will be required to provide the levels of IT capability the organisation demands.



Datacentre flexibility sub-index



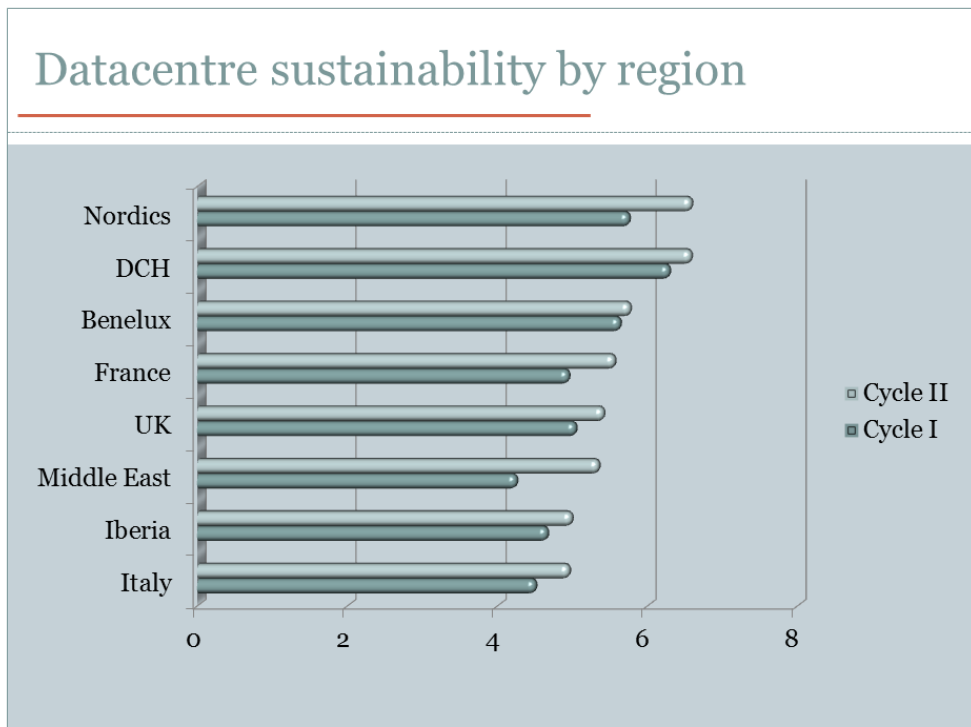
There has been little change between Cycle I and Cycle II in how each region is positioned. The Nordics still lead, and have extended their lead over Germany/Switzerland. The UK has caught up with Germany/Switzerland, and although France and Iberia have managed some growth, the only region to improve its position in the table is the Middle East, which has improved from last position in Cycle I to fifth in Cycle II.



At a vertical level, there is again little overall change. All verticals have shown improvement (apart from Financial Services), but Telco is still the leader – albeit with a low level of growth. Quocirca believes that the Telco vertical was always going to be well positioned for flexibility – datacentres in this vertical have to be able to deal with peaks and troughs in an effective and efficient manner, and the majority of workloads are reasonably predictable. Therefore, maintaining any level of growth in this area is difficult. However, Quocirca sees Telcos moving to embrace new technical architectures such as cloud computing – and this will provide greater flexibility for them.

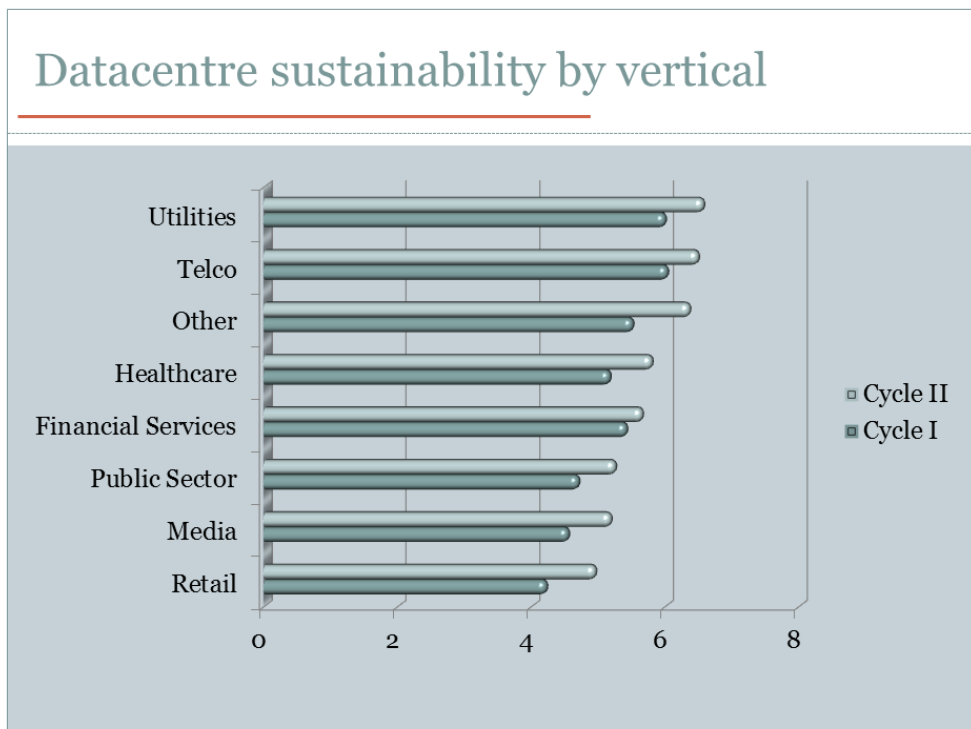
The anomaly of Financial Services actually falling in its score between Cycle I and Cycle II demonstrates how Quocirca believes Financial Services has been slow, in many areas, in adopting new technical architectures. As an environment where IT platforms have long been highly heterogeneous and a lot of applications remain in-house coded, it is only as new approaches are tried that the problems with the existing platform become apparent. Therefore, as increased use of virtualisation is attempted in Financial Services, the IT department becomes more aware of the underlying issues – and this drop in score shows that whereas Financial Services felt that they had reasonable levels of flexibility in Cycle I, this has proven to be not quite as it seems.

Datacentre sustainability



The Nordics have shown a large growth in datacentre sustainability, and have overtaken Germany/Switzerland at the top of the table. France overtakes the UK, and the Middle East moves from bottom placement to sixth place. The instability of energy prices on a worldwide basis – even in geographies such as the Middle East and France where energy supply and prices have historically been lower than elsewhere – seems to be pushing a focus on ensuring that datacentre energy usage is better controlled.





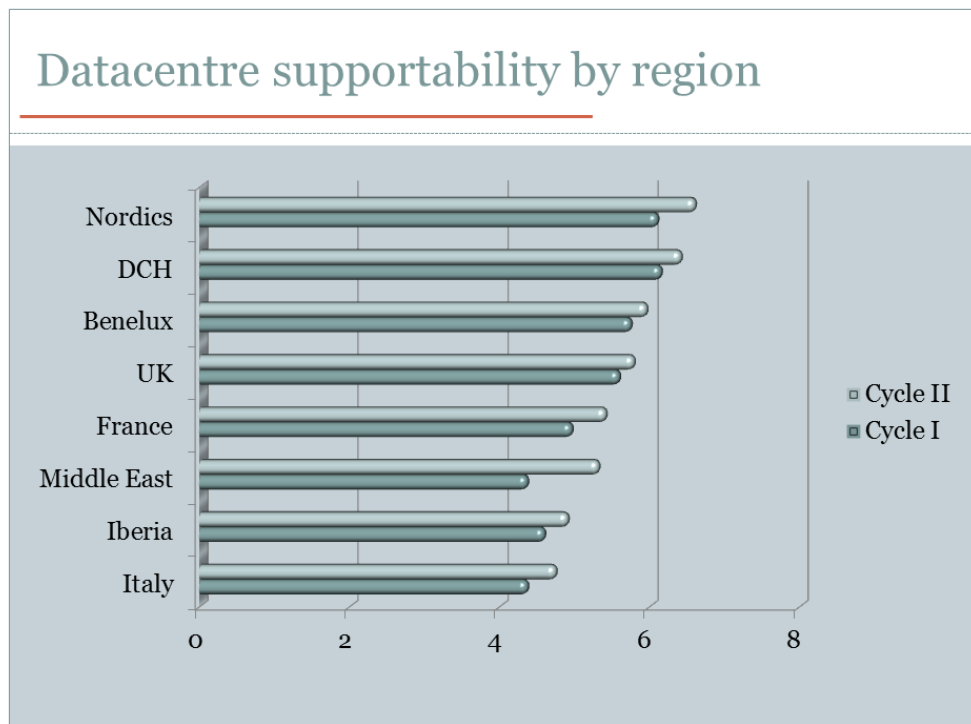
At a vertical level, Utilities and Telcos remain at the top of the table. Although Retail and Media show large improvements, they still remain rooted to the bottom of the table. Healthcare manages to leapfrog Financial Services.

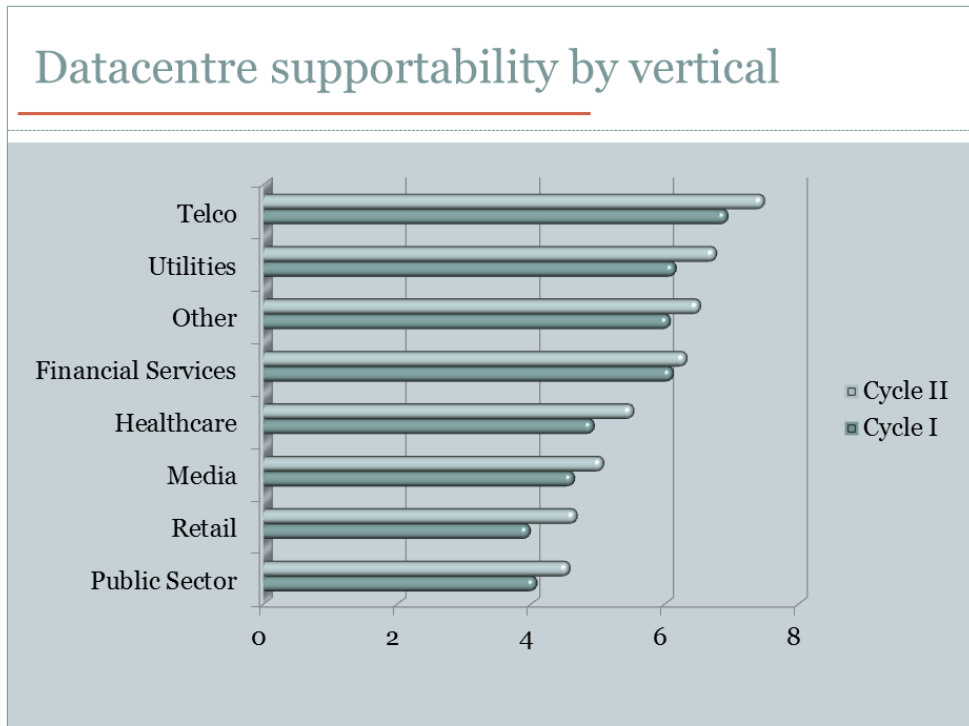


Datacentre supportability

As seen in the other sub-indices, the Nordics lead the way, extending their lead over Germany/Switzerland. Again, the Middle East shows a large improvement, moving from last place to sixth. All other geographies show some level of growth but maintain their positions in the table, with Iberia and Italy falling the one place due to the Middle East's performance.

At the vertical level, Telco leads the way, with each vertical showing good levels of improvement across the board. The order between Cycle I and Cycle II remains the same.

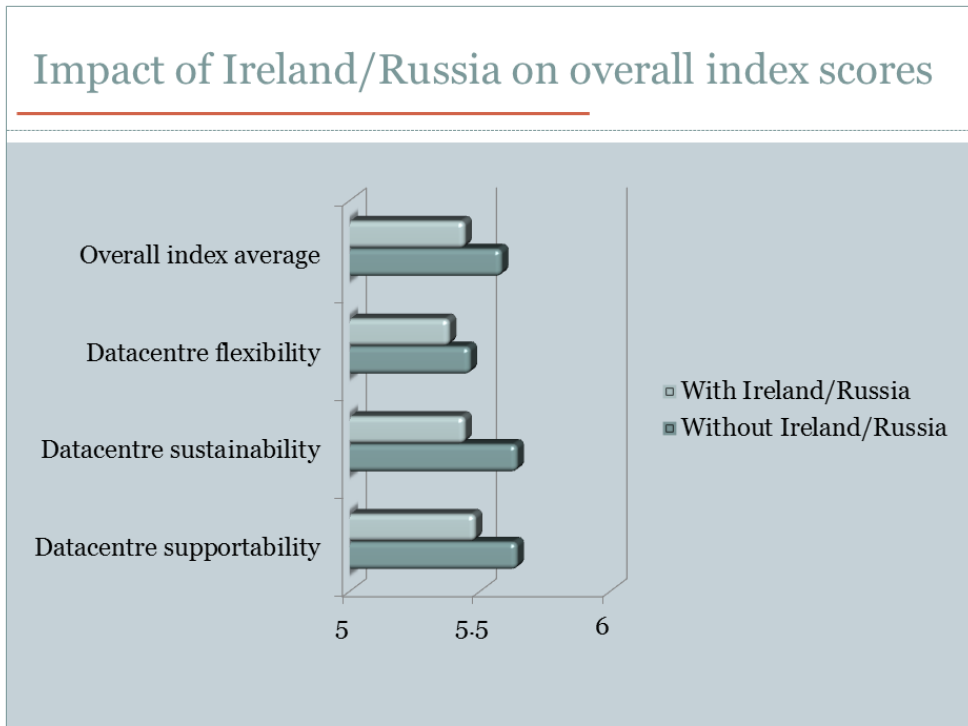




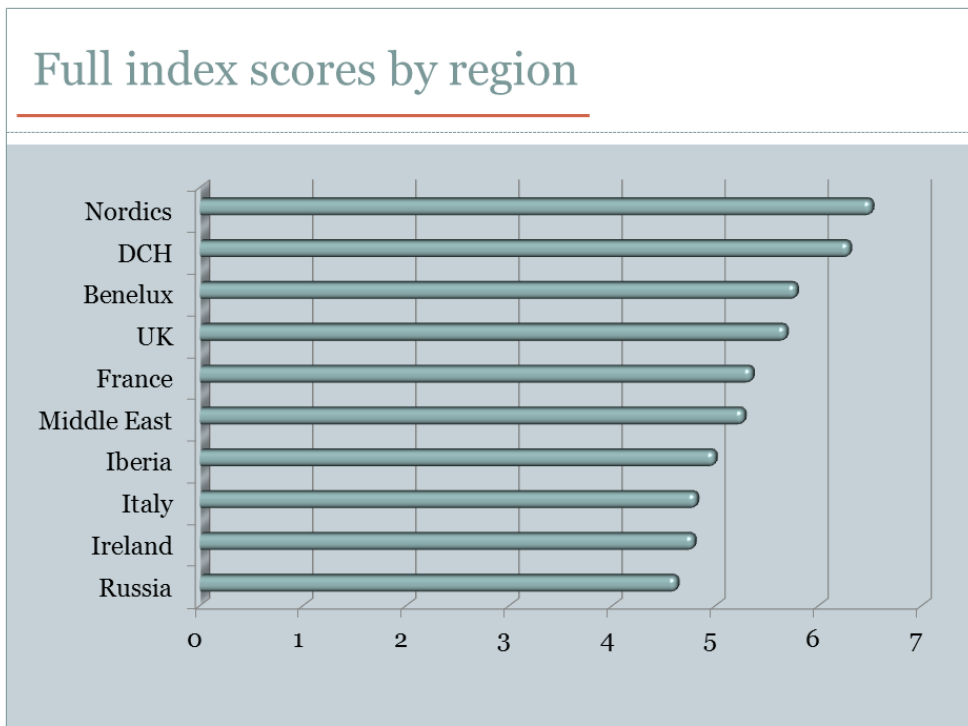
Impact of Ireland and Russia on index scores

In Cycle II of the research, the USA was dropped from the research, while Ireland and Russia were added. Although 100 interviews were carried out in Russia, due to the size of Ireland it was decided to only carry out 50 interviews.

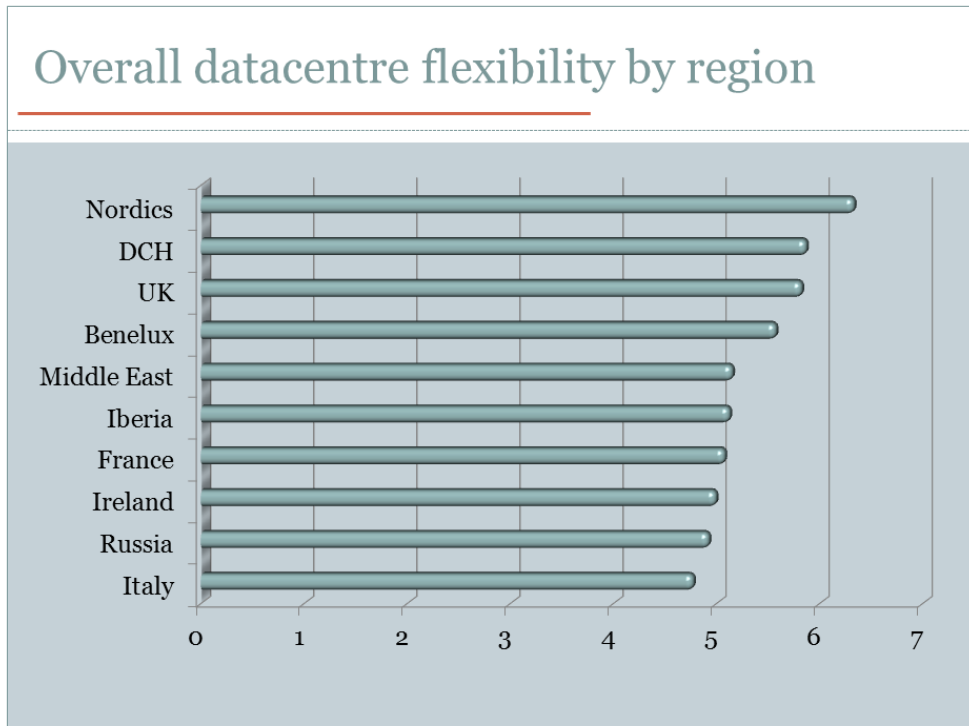
Both countries scored poorly across the indices, as can be seen below, at an overall and sub-index basis.



With Ireland and Russia included in the figures, the overall index and the three sub-indices are lowered by around 5%. If each index is viewed against the other regions, it becomes apparent how poorly Ireland and Russia do perform. At an overall index level, Russia trails at the bottom of the table with Ireland just above it.

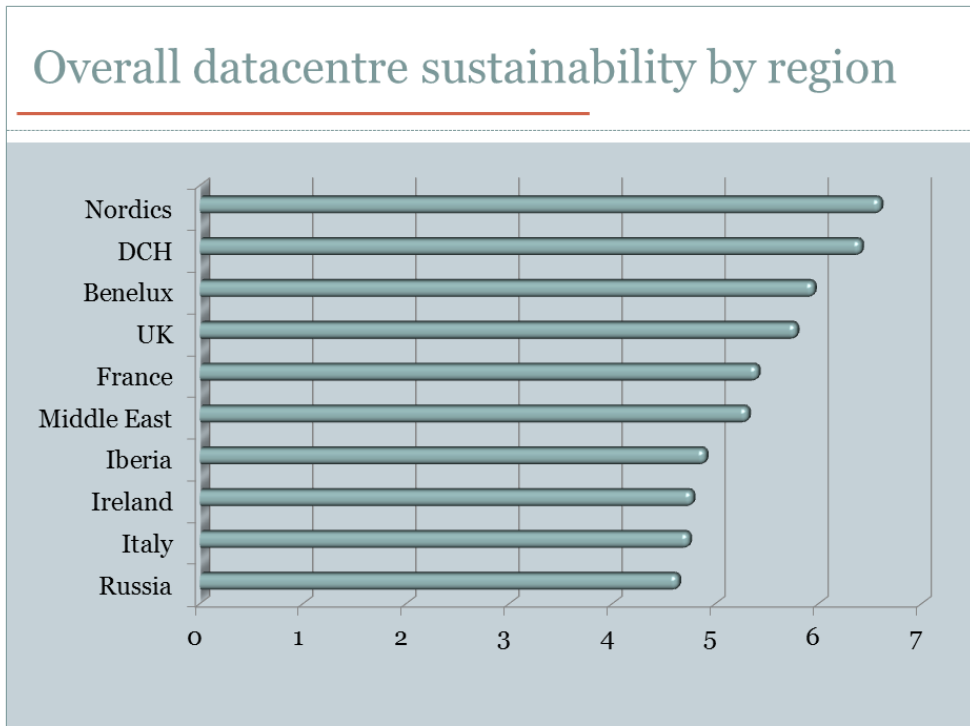


At the datacentre flexibility level, both regions do outperform Italy, but are eighth and ninth in the table.



Still, when compared against the Nordics, it is apparent that both Ireland and Russia have a long way to go to become challengers in how their datacentres provide the flexibility in supporting the business. For Ireland, this is a problem as it tries to come through the financial problems it has been facing over the past two years. For Russia, it presents a bigger problem – as a high-growth market, Russia needs to be able to respond to market changes to maintain this growth level. However, if the datacentres underpinning this growth become constraints rather than facilitators, Russia could rapidly find itself struggling against other countries where datacentre flexibility has been built-in.

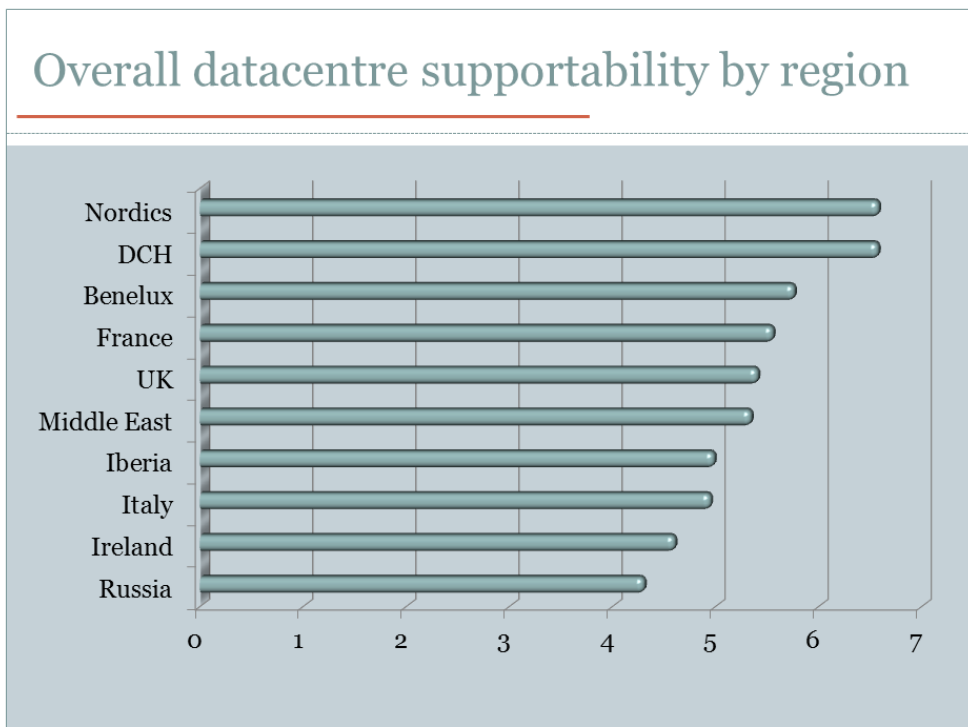




At a datacentre sustainability level, Russia comes bottom again, with Ireland managing to outperform Italy. For Ireland, this is not good – as a centre for inward investment during the 1990s, its datacentres should be relatively modern, but it appears that little has been done to keep these facilities at the forefront of sustainable technology. With little opportunity for large capital investments in their datacentres, Irish organisations may find that this becomes a continuing, worsening problem.

At a supportability level, Russia is firmly rooted at the bottom of the table, with Ireland also performing badly. This is possibly the area for both regions that is most easily remedied – the implementation of processes and tools that can enable supportability should not be a major investment, but will have rapid return on the investment in providing a solid manageable platform for the business to work from. Once the IT platform has been made more supportable, then flexibility can be focused on with all of the changes being put in place aiming to create better controls on energy usage and so upping datacentre sustainability scores at the same time.





Conclusions

Overall, it is good to see that there has been an increase in scores at all sub-index levels and so to the overall NGD index score. However, certain regions and verticals continue to perform relatively badly and, as such, may see themselves overtaken by more dynamic competitors. Certainly, in the current economic climate, governments should be looking at best practices in other regions to see what their regions should be doing to improve their IT capabilities, so as not to see external investments go elsewhere and also see existing internal organisations begin to look to new datacentre facilities (either self-owned or outsourced) in other regions for flexibility and sustainability reasons.

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ORACLE

REPORT NOTE:

This report has been written independently by Quocirca Ltd to provide an overview of the issues facing organisations seeking to maximise the effectiveness of today's dynamic workforce.

The report draws on Quocirca's extensive knowledge of the technology and business arenas, and provides advice on the approach that organisations should take to create a more effective and efficient environment for future growth.

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first-hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to provide advice on the realities of technology adoption, not the promises.

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