

Cloud Computing Research

Manchester Business School

Commissioned by Rackspace



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Economic Study

Original Thinking Applied

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1. Foreword

“By using cloud technology we were able to provide a very reliable and scalable solution to our enterprise customers.” Christian Reitz, Chief Technology Officer, Netbiscuits

You just need to make a conscious decision that you want to save money and move into the cloud.” Darren Robertson, Digital Communications Officer – Data Scientist, Action for Children

In difficult economic conditions businesses need to maximise all the advantages they can.

Evaluating the potential benefit of a shift to cloud services for infrastructure and/or software and platform purposes can seem daunting to a business.

How do we go about evaluating what’s out there, what’s relevant to our businesses and how we should implement it? Isn’t it easier just to stick with what we’ve got? After all, if it ain’t broke, don’t fix it.

And can we rely on anecdotes and stories from our peers? Who really knows how cloud services can benefit us and our bottom lines?

Together with Rackspace, a leading provider of cloud services, and the Manchester Business School at the University of Manchester, we undertook research to find out how UK businesses are using the cloud and what the benefits are.

We asked 1,300 companies in the UK and the US, across a variety of sectors, businesses small, medium and large, a series of questions.

The team at Manchester has analysed the data, which, together with a series of qualitative interviews, have helped produce a fascinating snapshot of how businesses are using the cloud now.

We have found that:

- Cloud computing saves money.
- Cloud computing helps increase competitiveness.
- Cloud computing offers exciting possibilities for businesses of all sizes.

2. Introduction

What do we mean by cloud computing?

Cloud computing is the delivery of infrastructure – including but not limited to servers, platforms and software – via the internet on demand.

This means that businesses can change the focus of their spending, moving it away from IT infrastructure capital spending and the costs of maintaining that infrastructure on to operational issues.

Small and medium-sized enterprises (SMEs) particularly stand to benefit from a move to the cloud: there's no need to spend a lot of money buying on-premises IT infrastructure, and cloud services can be scaled according to need.

In this report we analyse how small and large companies in the UK and US, across multiple sectors, are dealing with cloud computing. Specifically, we report on:

- Are there differences in adoption trends?
- What are the reported benefits (if any) and how are these benefits achieved?
- What sized businesses are seeing the greatest benefits from cloud computing?

3. The economics of cloud computing

“Without the ability to run our infrastructure on the cloud, we just simply couldn’t afford to start up” Garry Prior, Co-founder of Taxi for Two

[Cloud] has opened up so many more doors before us and given us the ability to make real, big savings across the organisation – not just on technology.” Darren Robertson, Digital Communications Officer – Data Scientist, Action for Children

“Going the traditional managed hosting route would have been a non-starter for us, because you’re looking at several hundred pounds’ commitment from day one.” Gary Prior, Taxi for Two

Cloud computing means greater profitability

Most of the companies we spoke to (85%) had increased their profits by up to 50%. This was particularly the case in the US, with almost one third noting an increase in profits of between 10% and 25%, and a further 19% noting an increase of between 25% and 50% in profits which they said was directly attributable to their cloud computing investments.

Of SMEs, a quarter of the respondents said they had increased profits by at least 25% and by up to 75% as a result of using cloud computing.

- 66% of companies surveyed have benefitted from a reduction in IT costs.
- 74% of large enterprises and 64% of SMEs agree that cloud computing has reduced their IT costs.
- 60% of companies have more time to focus on strategy and innovation.
- 60% of large enterprises have achieved an increase in profits.
- Almost three quarters of retailers surveyed have reduced IT costs enabling them to invest more money back into the business.
- 70% of large enterprises and 59% of SMEs surveyed have been able to reinvest more money back into their business.

3.1. Are there cost savings?

“When I started this company I made a mental note that we would avoid using any desktop software and do all of our collaboration through web software as much as possible.” Andrew Montalenti, Chief Technology Officer at Parse.ly

Cloud means lower IT costs

“If you wish to implement your own system and network servers then you will need to hire technical administrators. Although the system may cost less, the human resources hired are going to be very expensive.” Prem Sharma, Chief Technology Officer at Ubicab

“The alternative is you have to get \$5 million investment just to buy your servers. And then you find out no one wants your product anyway, so now you have just wasted all this money on servers.” Andrew Montalenti, Chief Technology Officer at Parse.ly

Cloud means more focus on strategy and innovation

The biggest and quickest win for businesses is on IT spend.

Big companies make the biggest savings. Nearly a quarter of those we spoke (23%) to they were saving between £500,000 and £4 million a year.

SMEs – organisations with fewer than 250 employees and turnover of under £50 million – also noted a reduction in IT costs. More than a fifth said they saved between 25% and 50%, and a further 41% said their savings were between 10% and 25%.

More than half – 58% - of SMEs said that they can focus more on strategy and innovation as a result of not needing a dedicated IT team. Of large businesses, 66% said that was the case.

Cloud means savings on office costs

“Because our environment is entirely on the web, we can actually work on our environment from our home office, from our head office or from any far flung-city that we decide to have our team retreat in ... it has not only reduced office costs, but also reduced data centre costs.” Andrew Montalenti, Chief Technology Officer at Parse.ly

“Our software development tools, our code repositories - all that stuff is all in the cloud. So our developers can be flexible: maybe they’re feeling a little sick one day or they need to take their kid to a soccer game at 3:00 in the afternoon and want to work later when they get home. That flexibility has really allowed our employees to work where and whenever they want.” David Fruhling, Chief Operating Officer, Fisoc

“We wouldn’t be where we are today without having the ability to use the cloud.” Darren Robertson, Digital Communications Officer – Data Scientist, Action for Children

Cloud computing means that employees can work remotely. Nearly three quarters (71%) of the companies we spoke to said they had been able to cut their spending on offices.

- 58% of companies benefit from avoiding IT infrastructure costs.
- 63% of large enterprises are able to scale up their IT infrastructure cost effectively.
- 34% of SMEs have saved between £5,000 and £30,000 on IT spend by implementing cloud computing.
- On average, companies reduced IT costs by 10% and 25% by implementing cloud computing.

3.2. Improving success rates

Cloud frees up cash to be reinvested in the business

This is especially true in the US, where more than half (58%) said that it had been a key factor. In the UK, 40% said this was the case.

American companies plough more money back into the business than UK companies as a result of cloud computing, while SMEs reinvest more than their bigger cousins.

What do businesses spend that saved money on? Almost half (48%) of companies said they plough cash into product and service innovation, while almost as many said they put the savings into product or service offering. More than a third (38%) spend the cash they've saved on boosting sales efforts and almost one third (35%) in marketing.

Smaller businesses put a greater proportion of the cash saved into marketing, with 36% saying that's the area they reinvest in, compared to 30% of large enterprises.

Large enterprises tend to reinvest in staff, with more than one third (36%) of companies reinvesting in headcount, compared to less than a fifth (18%) of SMEs.

Big businesses prefer to reinvest in boosting profitability (43%), compared to 30% of SMEs.

Cloud means that IT projects can happen faster

Marketers particularly reported that this was the case, with 70% of marketers agreeing.

- 62% of large enterprises and 51% of SMEs surveyed have been able to accelerate IT projects such as application development and deployment as a result of cloud computing.
- 59% agree that cloud computing has improved their disaster recovery and business agility.
- Cloud computing has allowed 90% of large enterprises and 84% of SMEs to increase their investment back into their business by up to 50%.

Inspiring entrepreneurs

"Don't be hesitant about using cloud technology. I think that's maybe the best advice that I can give." Christian Reitz, Chief Technology Officer, Netbiscuits

"Without the ability to run this on the cloud, we just simply couldn't afford to start this up. We're running this on a shoestring, so the ability to just pay a small amount per hour is critical." Garry Prior, Co-founder of Taxi for Two

Cloud encourages new businesses

Cloud computing has helped start-ups get off the ground, particularly in the US. 83% of American companies said this was the case, compared to 62% of UK companies.

Not having to spend scarce money on on-premises IT infrastructure makes it easier to set up a business. Overall, 91% of businesses that had launched within the past three

years said this was the case. 93% of US businesses agreed, compared to 86% of UK start-ups.

Indeed, without cloud computing, some businesses might not have started at all: 20% of new companies said they wouldn't have been able to afford the IT costs. And a further 35% said it would have taken them longer to get off the ground without cloud services.

Cloud helps small businesses think big

"If the demand grows all of a sudden, we would just provision more capacity instantly, so we can spin up resources as and when we need them." Garry Prior, co-founder of Taxi for Two

"You've got to be in the cloud so that when the day after you launch your application, 10 million people can sign up." David Fruhling, Chief Operating Officer, Fisoc

58% of SMEs agreed that cloud helps small businesses punch above their weight so that they can compete with bigger companies. 52% of large enterprises agree, too.

- 73% of SMEs and 70% of large enterprises agree that cloud computing is a key factor in the recent boom of entrepreneurs and start-ups in the UK and US.
- 20% of SMEs would not have been able to afford on-premise IT resources required to set up the business.
- 35% of SMEs would have taken longer to afford to set up the business.
- 45% of SMEs benefitted from cloud computing by only having to buy what they needed, and not having to pay for additional services.

4 Future forecast

Britain to embrace the cloud

The key message from our survey is that cloud presents an opportunity that British businesses have yet to make the most of.

Cloud demonstrably saves money and is making it easier for small businesses to set up shop. We have shown that businesses adopting cloud technology cut their spending on hardware, staffing and office space.

In return, they reap the benefits of a flexible workforce, more cash to invest in more productive areas, and a much wider pool of talented people to choose from.

US businesses are leveraging this potential better than UK businesses, and are showing the way.

However, those leaner, more efficient businesses are also rivals: British businesses could become much stronger competitors by embracing the cloud.

Cloud adoption is set to grow in the UK, across all sectors and in all sizes of business.

5 Contributors and methodology

5.1 Contributors

Dr Brian Nicholson is a Senior Lecturer at Manchester Business School. Dr Nicholson he has been involved in teaching, research and consultancy projects in global outsourcing of software and other business processes since 1995. This has involved work in India, China, Costa Rica, Iran, Egypt, Malaysia and Bangladesh.

Dr Ali Owraq is a Research Associate at the University of Manchester holding a PhD in Computer Science. His interests lie in the requirements for service-oriented software and web services with a focus on the socio-technical issues that can impact their application. He has experience in systems modelling and simulation, capturing user requirements, and compiling and analysing evaluation results. He has worked on a number of European projects where his role was to collect qualitative and quantitative data through focus groups and interviews with both system stakeholders and end users, analyse the results and deliver comprehensive reports of the findings.

Dr Lucy Daly is Client Development Director in the Executive Development Centre at Manchester Business School. She has led many projects, including business and market research, strategy development and product evaluation. She has extensive research experience in a number of areas, including strategic development and supply chain management.

5.2 Methodology

The Manchester Business School team conducted qualitative interviews with senior executives from twelve organisations involved in using cloud technologies. The sample included SMEs and large multinational enterprises from a range of sectors including commercial organisations, charity organisations, SMEs and multinational organisations.

5.3 Vanson Bourne

Rackspace commissioned Vanson Bourne to survey 1,300 organisations split between the UK and US. 1,000 of these were SMEs and the remaining 300 were enterprises with in excess of 1,000 employees. Participating companies were evenly split between Financial Services, Retail, IT/Technology, Manufacturing, Business and Professional Services, Media, Logistics, and Mobile Telecommunications sectors, with a further small representative group from other sectors.

6 About Rackspace

[Rackspace® Hosting](#) (NYSE: RAX) is the [open cloud](#) company, delivering open technologies and powering more than 190,000 customers worldwide. Rackspace provides its renowned [Fanatical Support®](#) across a broad portfolio of IT products, including [Public Cloud](#), [Private Cloud](#), [Hybrid Hosting](#) and [Dedicated Hosting](#). The company offers choice, flexibility and freedom from vendor lock in. Rackspace has been recognised by Bloomberg BusinessWeek as a Top 100 Performing Technology Company and is featured on Sunday Times list of 100 Best Companies to Work For. Rackspace was positioned in the Leaders Quadrant by Gartner Inc. in the “2011 Magic Quadrant for [Managed Hosting](#).”

Rackspace Limited, the UK subsidiary of Rackspace Hosting®, is headquartered in San Antonio with offices and data centers around the world. For more information, visit rackspace.co.uk.

7 About the customers included

Taxi for Two

Founded in 2011, Taxi for Two is a mobile phone-based service that helps customers find and make contact with other people looking to travel in the same direction as them.

Action for Children

Action for Children is a UK children’s charity that works with over 50,000 children and young people whose families need support, who are in care, who are disabled or who experience severe difficulties in their lives through 480 projects, services and schools.

Signagelive

Signagelive provides digital signage software as a service; no servers, fixed pricing and all support and updates included. Its Digital Signage Software is used globally everyday to deliver digital signage in a diverse range of sectors and applications, including retail, corporate and hospitality.

Netbiscuits

Netbiscuits is the world's leading cloud platform for the development and delivery of next generation web apps across all mobile and connected devices.

Fisoc

fisoc leads the merchant funded loyalty space with its Buzz Points platform for banks and credit unions. Buzz Points rewards banking customers for shopping and spending, with even more rewards for spending locally at our network of local merchants.

Parse.ly

Parse.ly is a technology company that provides web analytics and content optimization software for online publishers.

Ubicab

ubiCabs offers a convenient and safe way for customers to book licensed minicabs (PHVs) in London using their mobile phones based on their location.