interxion[®]

THE EVOLUTION OF THE EUROPEAN **CLOUD MARKET**

Defining success: best practices by hosting providers



decision-makers at hosting providers and cloud service providers

INTRODUCTION

If you're a European provider of web, managed or dedicated hosting services, you know that the hype around cloud computing often comes with a US perspective, and that Europe's market landscape is very different from the US one. There are still many unanswered questions about how to successfully capitalise on the cloud opportunity in Europe. This whitepaper shares our thoughts on this complex issue, based on best practices shared with us by hosting providers across Europe.

Interxion has been a leading provider of data centre services to Europe's hosting market since our founding almost 15 years ago. In working with a broad cross-section of hosting providers and talking to them about their experiences and business plans, we've learned a lot about what drives success in the market, how European service providers compete, and the nature of their differentiators. As cloud computing has taken off, we've worked closely with them to understand the implications and help them respond.

With so many players in the laaS and PaaS market, its rapid growth creates fierce competition. There are two main battlegrounds: the provision of IT infrastructure services - compute, network and storage - and the delivery of valueadded services such as database, security, disaster recovery and business applications. The global industry leaders - Amazon, Microsoft, Google - aren't limiting themselves to the former but are continually developing their offerings to address enterprise needs at all levels, leading to increased competition in the hosting market.

The challenge for hosting providers, especially if you're targeting small and medium businesses, is to work out how to grab your share of the cloud market without being drawn into a price war against these global giants. Instead, you need to find a way of providing cloud services that make you stand out against your competitors.

Hosting providers that don't rise to the challenge risk being left behind as the global market leaders rapidly seize market share and dominate the cloud landscape. But we believe that, for hosters that address the challenge, the competitive threat can be turned into a significant opportunity - fuelled by the marketing, development and innovation budgets of named market leaders. Differentiating yourself through customer knowledge, flexible solutions and premium quality of service - and not competing head on - is the key to taking advantage of this opportunity.

This whitepaper offers our insights into how cloud services could fit into the business plan of any hosting provider. We hope it helps you reflect on what the 'cloud era' means for your business and how best to exploit the opportunities.

HOSTING **VERSUS CLOUD**

A GLOBAL GLANCE

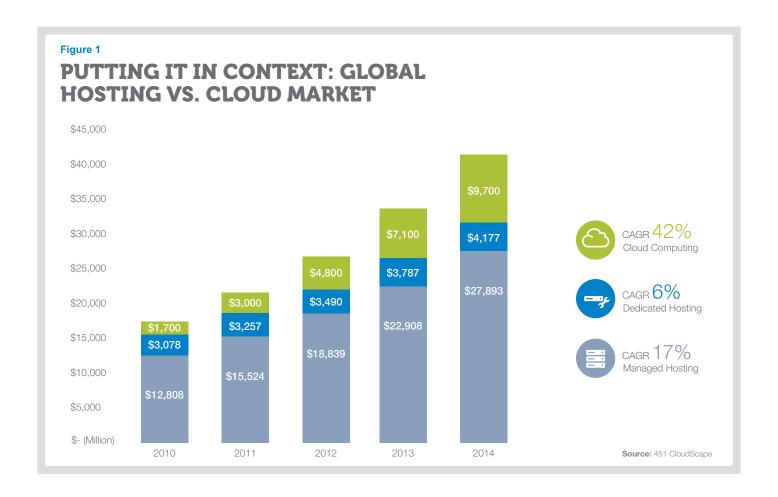
The market for cloud services is growing rapidly, with 451 Research predicting a CAGR of 24% from 2011 to 2015. When talking about the cloud market in this whitepaper. we define it as Cloud as a Service, which includes laaS. PaaS and SaaS. To be able to make a comparison between cloud and the hosting market we have chosen to leave out SaaS and designate cloud computing as laaS and PaaS. The hosting market consists of dedicated hosting and managed hosting.

When zooming in on cloud computing compared to the traditional hosting market, figure 1 shows that although cloud computing's share is growing rapidly (CAGR of 42%), with a total value of \$4.8bn in 2012, it is still a relatively small share (18%) compared to the hosting market.

The provision of infrastructure services is still dominated by hosting providers offering traditional hosting services. but cloud growth figures raise the expectation that cloud-based technologies will start to overtake the traditional market. Clearly, this opens up an opportunity for existing hosting providers to capture a significant part of the cloud computing opportunity by leveraging their existing experience and customer base. But once the shift in the market starts to accelerate, it will become urgent for hosters to act quickly.

THE EUROPEAN LANDSCAPE

The global cloud market today is dominated by the US, according to 451 Research (2012). The US accounts for 63% of global cloud revenues, while Europe accounts for just 23%; and only 6% of cloud vendors are European, compared with 88% from the US.

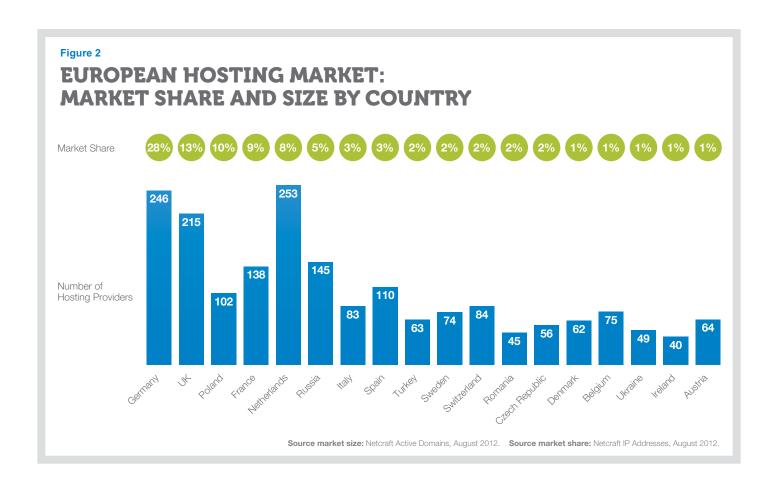


The absence of a single European hosting market contributes to this situation: each European country has its own – often highly fragmented – market (see figure 2). Despite similar customer requirements, there are significant local differences, including market size, cultural background and IT buying behaviour.

The fragmented European market is characterised by a large number of players relative to market size, mostly with a relatively low number of customers. Addressing the cloud opportunity requires hosters to make a significant investment in technology and service innovation, but not many companies have been able to do so over the past few years.

Hosting providers face the twin challenges of needing to make this investment in innovation in order to seize the cloud opportunity, while dealing with increased competition in their legacy services and revenue base.

Competition comes from a wide range of companies with an IT and telecommunications background, including 'pure-play' cloud service providers, e-commerce platform providers, IT distributors, telecoms operators, hardware manufacturers and systems integrators. And among these competitors are very large companies with seemingly endless budgets to spend on expanding their cloud offerings and entering the traditional IT service delivery market.



AMAZON: FRIEND OR FOE?

Among the major players in the cloud arena, AWS remains the biggest, with a continually expanding set of services and hundreds of thousands of customers in close to 200 countries. Analysts such as Macquarie Capital and Gartner estimate the AWS market share at 50% or more.

The major differentiator of AWS is its ability to lower prices, thanks to its scale. At a recent AWS summit Amazon CTO Werner Vogels pointed out that AWS has reduced prices 31 times since its launch in 2007. "And," he added, "We will continue to do so." In parallel, the company is creating an ecosystem of service providers around its core laaS and PaaS capabilities, with the clear ambition of making its platform the default for enterprise laaS deployments.

Microsoft and Google are certainly moving to compete with AWS in the laaS space, but AWS isn't standing still either. At the same summit Werner Vogels explained Amazon's strategy of enriching its services to incorporate some of the differentiating features of its competitors, and steadily developing its services beyond basic IT infrastructure services. This forces hosting providers to reconsider their core competencies and the value they deliver to their customers, and to adopt business plans that will enable them to capitalise on the cloud opportunity, without competing head-to-head with the large-scale platforms.

"The big hosting providers that corporates typically use tend to have lots of customers and complex support processes. Gigas is different: we are the cloud hosting company with the personal touch, and we resolve around 85% of customer issues and questions at the first point of contact - a very high level for our industry."

Diego Cabezudo

CEO

Gigas (Spain)



"Thanks to our data centre provider's local knowledge we've gained a valuable understanding of customer mind-sets in these markets which has helped us ramp up quickly,"

Rus Foster

Managing Director VPS (UK)



CLOUD IS NOT AS GLOBAL AS YOU MIGHT THINK

It is often argued that the value of the cloud comes from achieving economies of scale. This argument would suggest that the best way to compete is to build or source a single, mammoth data centre to which all traffic is fed. Indeed, US providers coming to Europe typically choose one base of operations – but this is hardly surprising when a company is entering a new market.

However, Joe Weinman, author of Cloudonomics, points out that the economies-of-scale argument for cloud computing is terribly overblown. The value of the cloud has to do with pay-per-use dynamics, not with economies of scale. Indeed, a dispersed architecture has huge advantages such as proximity and latency reduction, not to mention the ability to address data sovereignty issues and local service delivery.

The national hosting providers we talk to recognise that they can make their local knowledge, presence, cultural fit and existing customer base count in the successful development and delivery of cloud services.

SIX EMERGENT STRATEGIES: ADDRESSING THE CLOUD OPPORTUNITY

The challenge is to grab your slice of the cloud pie, while avoiding a price war that cannot be won. At its core, cloud computing has an element of commoditisation. This puts pressure on hosting providers - especially those catering to the SMB market - to launch cloud services that enable them to differentiate themselves from the competition and justify higher margins than large-scale commoditised services can typically support.

Conversations with hosting providers across Europe reveal that, to maintain margins, many successful hosters have adopted a combination of the six strategies outlined below. We've found that these strategies tend to be emergent and ad-hoc, driven by customer requirements.

GEOGRAPHIC EXPANSION: DELIVER A GEOGRAPHICALLY DISTRIBUTED HOSTING SERVICE

The market for cloud services presents an opportunity for European hosting providers to expand geographically and deliver cloud services internationally. For example, we've recently seen Swiss company CloudSigma entering the US market, and Spanish company Gigas expanding to South America.

On the face of it, it doesn't matter where cloud services are delivered from, because they're accessible from anywhere. Indeed, larger hosting providers typically target customers in new countries with their existing product offering, without necessarily building a local platform, allowing them to leverage their economies of scale.

But location is actually crucial, for two reasons: performance (low latency) and data sovereignty (European data privacy laws). A good example of a hosting provider that's adopted a multinational approach is VPS.net, which currently maintains 20 cloud data centre locations worldwide.

"Our data centre provider's focus on helping its customers grow is a real differentiator. They foster thriving communities of interest that enable easy connection to a business ecosystem, and are always ready to explore new business opportunities and facilitate partnerships."

Nick Scott

Director Blend IT Group (UK)



DEVELOP A PARTNER CHANNEL: CREATE A SERVICE PLATFORM FOR RESELLERS

Some hosting providers offer IT infrastructure for cloud services to other service providers such as value-added resellers, software vendors, other hosting companies and systems integrators. This opens up a partner channel, addressing those who don't want to build their own cloud infrastructure, but do want to offer or integrate cloud services. Usually the offering is branded as the reseller's own white-labelled solution.

We've found that while many smaller hosters would like to go 'asset light', few have yet adopted this approach. Typically they're reluctant to buy service from other hosters (perceived competitors) or feel that the product they need isn't yet available. However, we've seen the channel strategy used successfully by Netherlands-based Amsio and Germany-based Quality Hosting, both of which have built highly flexible, highquality cloud platforms for a partner channel.

3 UP THE VALUE CHAIN: OFFER CLOUD-BASED **APPLICATIONS**

The primary reason for a hosting provider to go up the value chain is to differentiate itself by providing value-added services. These services are typically cloud-based applications targeted at enterprises that lack sufficient expertise and resources to migrate on their own or to manage applications in the cloud.

The biggest opportunities lie in applications and services that haven't yet been commoditised or that are inherently more complex to migrate or manage, such as hosted/virtualised desktops, security or middleware services. UK-based Fifosys and Switzerland's Bloosite are examples of service providers that have successfully used a hosted desktop approach to move into the cloud arena, while UK-based Gloo IT Cloud has differentiated itself by specialising in cloud security services.

Of course the landscape will continue to shift, with commoditisation moving up the value chain as the leading global cloud providers expand their service offerings. Hosters adopting this business strategy are likely to be able to capture a larger – and more strategic – part of their customers' IT budgets and to develop the economies of scale and expertise that they can use to preserve margins.

SERVICE: MAKE IT EXCEPTIONAL; USE YOUR **LOCAL ADVANTAGE**

This strategy focuses on attracting customers by demonstrating exceptional flexibility, responsiveness and customer knowledge, as well as offering first-class service quality and SLAs. Providers who focus on this approach ensure that they invest in people who can understand customer needs and solve customer problems. For European enterprises, hosting providers with local presence and knowledge are the natural choice, if they can provide the right level of personal support and value for money.

5 HYBRID CLOUDS: INTEGRATING MULTIPLE CLOUDS

Today, most enterprises wanting to take advantage of cloud services are opting for a hybrid model – a mix of public cloud, private cloud services and on-premises housing. This provides an opportunity for hosting providers to move away from pure infrastructure provision and become trusted advisors and orchestrators of cloud services. Like a systems integrator, the hosting provider can offer design and implementation of hybrid cloud services, support for migration with minimal risk, and end-to-end responsibility for service operation.

In other words, cloud computing is disrupting traditional roles, blurring the roles of service provider and systems integrator. Many traditional hosting providers are adapting themselves accordingly. They're moving towards a new business model as 'boutique' providers with a strong focus on customer service and the ability to deliver solutions that solve problems for their customers. They're giving customers choices about where to put their applications and what mix of IT service delivery models to employ.

For example, Netherlands-based Amsio has combined its 'new channels' strategy, described above, with investment in its own private cloud platform based on Microsoft's Windows Azure platform. This enables its customer base of resellers and systems integrators to deliver seamless hybrid cloud services through a single management environment.

6 CUSTOMISATION: OFFER THE MOST EFFICIENT AND FLEXIBLE CLOUD MODEL

The defining characteristic of any cloud service is that it allows customers to consume compute resources as and when needed on a usage-based model. However, there is a market for hosting providers to differentiate themselves from the global cloud providers in terms of flexibility in how the service is delivered, enabling it to be customised to the specific needs of each customer. For example: non-bundled resource sizing, choice of operating system, and short billing cycles.

This strategy, usually adopted by pure-play cloud providers, enables customers to purchase the computing resource they need, only when they need it. Customers can configure CPU, RAM, storage and bandwidth independently and create their desired customised solution. We've seen, for instance, Gigas and CloudSigma use this strategy effectively.

"It's about more than having enough capacity, it's also about ensuring a quality experience. Connecting to several different carriers creates a more efficient network with shorter paths to eyeballs. And if there's ever a problem, we can easily switch traffic to an alternative carrier to maintain service levels.'

Christer Hasse

CEO

Solido (Denmark)



SEVEN KEY SUCCESS FACTORS

We've found that across the variety of business models adopted by European hosting providers described in the previous section, seven key factors are shared by most successful companies:

1 DON'T COMPETE ON PRICE

Unless you have the scale or deep pockets to compete in a race to the bottom, stay away from price competition. The way to differentiate is to provide advice and support, and to use the insight into your customers' IT strategy to assist with more complex workloads or business (continuity) processes where price is not the main issue.

REMEMBER THAT THE REALITY IS HYBRID

Most customers will source diverse cloud services from multiple providers. You can differentiate through cloud integration capabilities, rather than competing head-on. Embrace the global cloud providers; your customers will feel comfortable consuming some workloads from a big public cloud platform, while other workloads need to remain within a local public and/or private cloud environment. Look beyond your own platform. Use industry or open standards and enable federated usage, allowing multiple clouds to act as one.

FOLLOW THE IT LIFECYCLE; MONITOR THE **OPPORTUNITY**

Don't expect IT departments to give up on their existing infrastructure before its lifecycle has ended, especially when budgets are tight. Success depends on understanding your customers' technology and economic lifecycles, and identifying disruptive technologies that will help them build their business case for cloud migration.

OFFER THE HIGHEST POSSIBLE AVAILABILITY

Customers expect 100% guarantees, even when that's unrealistic. This is particularly the case when applications have been moved to the cloud. So how do you ensure that your service is as close to 100% available as possible?

The basis of your SLA starts with the physical location: the data centre. Choose a provider with first-class in-house design and engineering skills, and a proven track record of delivering availability and resilience under all conditions over time. Check that they regularly audit their sites to the most stringent standards. To cater for disaster recovery you also need to offer redundant solutions for critical systems and data.

5 CUSTOMER FOCUS

Make customer service a top priority. This requires investing in people who can understand your customers' needs and business processes and solve their problems. Customers want to know who they're talking to, so put a face to the name.

Your customers will also expect technological and commercial flexibility, so make sure your suppliers and partners offer the same flexibility.

6 INVEST IN AUTOMATION

Hosting providers tend to use a variety of open-source and in-house management and monitoring tools. In the interests of time and cost they push these as far as they can, but as enterprise cloud management requirements become more sophisticated, more advanced management and monitoring tools become vital. The initially inexpensive or free tools quickly become too complex and expensive to manage, scale and maintain.

Cloud services demand investment in cloud orchestration services such as Flexiant or Eucalyptus that not only provide automation and rapid provisioning, but intelligently scale on demand and deliver significant operational efficiency and agility.

RESPOND TO AN INCREASINGLY MOBILE WORLD

Enterprise IT departments need to support staff using a wide variety of mobile devices (BYOD) as they work from multiple locations or on the move. The fact is that there can be no mobility without cloud. With the world increasingly operating on a mobile business model, customers require mobile-friendly access to their data anywhere, anytime. By enabling and offering them such services, you can ensure your future growth.

"The partnership with our data centre provider will play a vitale role in enabling us to deliver everything from desktop as a service through to online backup, with the guarantee of high service levels and the best possible uptime."

Mitesh Patel

Managing Director Fifosys (UK)



THE CLOUD **UNDER ONE ROOF**

The key component underpinning all of the business strategies we've outlined in this whitepaper is the data centre (or centres) from which the services are delivered. It's the data centre that supports the whole edifice of cloud computing: determining availability, performance and commercial flexibility at the most fundamental level. These qualities depend on characteristics of the data centre such as design and operation, connectivity options, proximity to business and consumer centres, and scalability of power and space.

The majority of hosting providers find that the most effective way to address these requirements is to colocate in a cloudand carrier-neutral data centre. Run by experts in design and operation, these pure-play data centres don't offer services that compete with hosting providers.

The five factors below are key to determining the extent to which a data centre is suitable for supporting the successful delivery and growth of cloud services.

1 COMMUNITY

A carrier-neutral data centre is the ideal location in which to build and manage your customers' hybrid cloud solutions. It operates as a hub where you can directly interconnect your private cloud environment with your choice of global cloud providers, resellers, customers and networks, guaranteeing network performance, low latency and the highest availability for customer workloads and applications.

CONNECTIVITY

Carrier-neutral data centres offer a wide range of connectivity options including national and international carriers, ISPs, CDNs and Internet exchanges. This marketplace allows you to work with your connectivity providers of choice to achieve flexibility, cost-effectiveness and the ability to offer highly redundant and resilient services. So make sure any data centre you choose offers the best in connectivity options.

3 AVAILABILITY

Availability is an obvious, but extremely important criterion. as business-critical processes increasingly depend on applications that are delivered from the cloud. Cloud services must be delivered from data centres offering 'five 9s' availability and a proven track record over time. Don't just believe what a data centre provider tells you; dig into their operational procedures, talk to their customers and inspect their data centres.

4 PERFORMANCE

The acceptance and uptake of SaaS is as dependent on responsiveness as it is on functionality and user-friendliness. The responsiveness of a cloud service and the customer experience it delivers is highly dependent on connectivity and physical proximity to business and consumer centres. Ask your connectivity providers how many hops it takes to reach your target customers. And ask potential data centre providers about opportunities to connect directly with connectivity providers, partners and other cloud platforms.

SCALABILITY

A data centre should have the necessary high-density power supply in place, the physical space required for expansion, and the commercial flexibility to allow you to scale with ease. In other words, it will enable you, both commercially and technologically, to deliver ever more agile and efficient 'IT as a service' and keep your costs in line with the revenue opportunity.

"To build a successful cloud service you need a scalable high-density environment, of the highest quality and reliability, with great connectivity and reach. That's exactly what our data centre provider delivers"

Ruben van der Zwan

Amsio (Netherlands)



CONCLUSION

The European market for cloud services is growing rapidly, with a predicted CAGR of 24% from 2011 to 2015. This rate of growth presents hosting providers with a great opportunity to enter the cloud services market, where their experience, local knowledge and existing customer base will all boost their chances of grabbing their share of the cloud pie.

However, competition is fierce: as well as the many regional players who may have their own plans to enter the cloud services market, there are also the global cloud giants - such as Amazon, Microsoft and Google – to contend with, whose sheer scale lets them offer cloud as a commodity service at low prices. To succeed in the cloud services market, therefore, hosting providers need to be able to differentiate themselves - moving away from provision of pure infrastructure services and avoiding price-based competition.

From what we observe, the hosting providers who're enjoying the greatest success in the cloud services market have generally adopted a combination of six emergent business strategies for differentiation: geographic expansion; development of cloud infrastructure for a partner channel; a move up the value chain with value-added services; exceptional service quality; the ability to offer hybrid clouds; and customisation of the cloud delivery model. They're also strengthening their market position through the application of a number of key success factors, the most important of which are maintaining a sharp focus on customer service, and ensuring they understand their customers' economic and IT lifecycles.

Successful execution of your business plan for entering the cloud market also depends on having firm physical foundations for your service offering – the right data centre (or centres) in which to build and operate your cloud platforms and your customers' hybrid cloud environments. Quality (availability and performance), scalability of power and space, and the opportunity to interconnect with multiple carriers and global cloud service providers are all essential criteria to consider when selecting a data centre provider.

SEVEN KEY SUCCESS FACTORS

- 1 Don't compete on price
- 2 The reality is hybrid
- 3 Follow the IT lifecycle
- 4 Offer the highest availability
- 5 Focus on your customers
- 6 Invest in automation
- 7 There's no mobility without cloud

"Our customers look upon Digital Planet as a trusted advisor - we're in a position of enormous responsibility. Their production platforms, websites, and ultimately their businesses are in our cloud. Downtime is not an option, there's a knock-on effect: our customers lose revenue - even customers. So we have to be able to rely on our data centre operator to keep us up and running all the time."

Hugh Dawson

Head of Managed & Outsourced Services Digital Planet (Ireland)



"The services that we offer to clients change over time. We are confident that our data centre provider will be able to meet those needs and adapt to those changes."

Michele Neylon

Founder and CEO Blacknight (Ireland)



AUTHOR BIOGRAPHIES

Vincent in't Veld has over 17 years of experience in the international communications industry, holding a variety of product management, marketing and business development roles at leading service providers such as KPN, BT, Qwest and Unisource. As Director of the Cloud Segment at Interxion, he is focused on adding value to the community of cloud service providers delivering application and infrastructure services from our data centres.

Jelle Frank (JF) van der Zwet manages the pan-European marketing and product development programme for Interxion's cloud community. He has over 14 years of experience working in ICT product and business development. Prior to joining Interxion, he was responsible for product management and marketing of managed services at Imtech ICT, and was Senior Product Marketing manager at UPC. Jelle Frank began his career working in marketing management positions for KPN and Amsterdam Schiphol Airport.

ABOUT INTERXION

Interxion (NYSE: INXN) is a leading provider of carrier and cloud-neutral colocation data centre services in Europe, serving a wide range of customers through over 35 data centres in 11 European countries. Interxion's uniformly designed, energy efficient data centres offer customers extensive security and uptime for their mission-critical applications. With over 500 connectivity providers, 20 European Internet exchanges, and most leading cloud and digital media platforms across its footprint, Interxion has created connectivity, cloud, content and finance hubs that foster growing customer communities of interest

For more information, please visit www.interxion.com

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