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1. Executive Summary

The purpose of this study is to determine the best sustainability model for the outputs of the EPIC project, namely, how to package the:

- EPIC Platform
- EPIC Services
- EPIC Roadmap

The Consortium decided that in order to define EPIC's future commercial approach in an established marketplace (the smart city concept is too immature commercially) it was important for the team to (a) be satisfied that the cloud computing trend for smarter working in the public domain was a growing sector, (b) understand customers areas of concern around the adoption of cloud computing for smarter working and (c) understand the business models and actions that competitors are providing. Armed with this knowledge the Consortium could then create the most appropriate sustainability model that would have the best chance of take-up and success.

To this end qualitative research was conducted by undertaking (a) a literature review of the many related studies and reports in this field, and (b) an observation of competitors business models.

The study found that cloud computing is a high profile sector. Europe expects significant market growth, with the public sector in particular as a high growth area, although at a slower rate than the USA and Asia. The disparages in the growth predictions are possibly due to the variables in language, culture and business and privacy rules that occur between European countries.

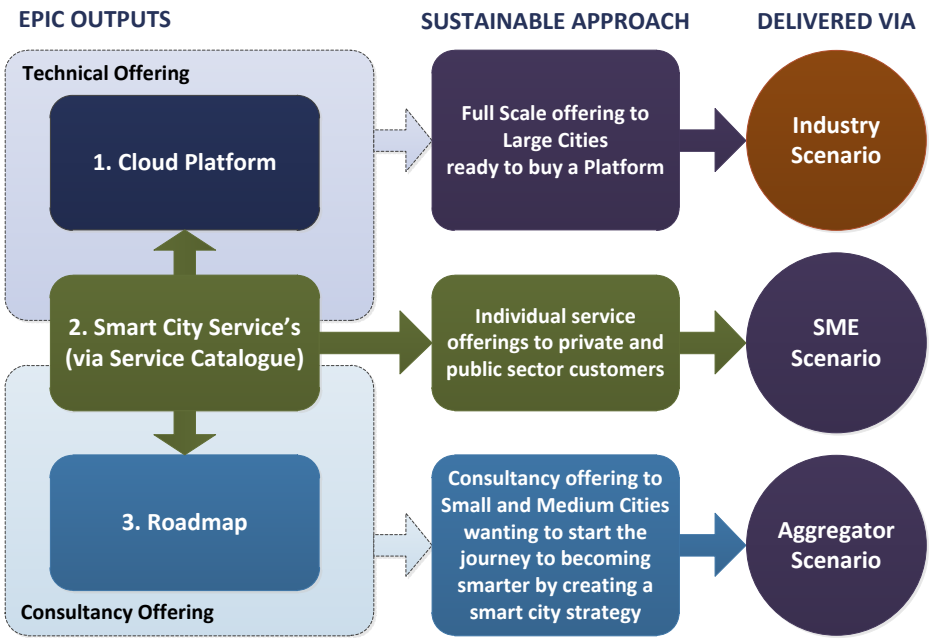
The European Commission recognises that a shared cloud computing strategy is needed to fully leverage the value for Europe from cloud computing and is in the process of creating a set of strong industry regulations in this area. In the meantime government pressure to save money is providing the key driver for the adoption of this technology at a local and national level.

Other barriers that may be contributing to the slower growth of Europe compared to its regional counterparts include organizational resistance to change and the fear that administrations will lose control of their data and operations. In addition SME's on which economic growth relies are unaware of the power of cloud computing and need education around how the benefits of new technology can help them better deliver services and make money.

Whilst there are many large organisations offering cloud computing and smart city working (not always explicitly linked) most organisations in the market place are offering solutions that focus on hosting and back office solutions only. Most offerings are not tailored to the public sector and none are linked to the value of the 'smart city' concept of creating and sharing innovative public services.

EPIC has the potential to occupy a unique niche in this marketplace however the market research indicates that EPIC is ahead of the current market place. At present, many public sector organisations across Europe are only just beginning to explore the introduction of cloud computing. At the same time, many are also beginning to examine new 'Smart City' concepts for improving public service delivery. EPIC is unique in that it combines these two concepts to deliver front and back office service innovation in a pan-European, shared service context. This being the case, the marketing challenge for EPIC is to generate sufficient stakeholder awareness of and confidence in EPIC's pioneering solution, particularly in relation to the more narrowly defined cloud computing and smart city solutions currently on offer. In short, our research shows that to be successful EPIC must not only enter the market, it must also help to create it.

Therefore, rather than adopt a 'one size fits all' sales strategy, EPIC has devised through a series of workshops and teleconferences a more tailored go-to-market approach that is designed to accommodate the varying needs of cities across Europe in a manner that compliments the core marketing and delivery strengths of project partners (see diagram below).



Summary Fig: *Proposed EPIC Sustainability Model*

The next deliverable to be created as part of the sustainability strategy will be the business case, which will examine the sustainability model in granular detail with the input of additional market research from a potential customer survey and lessons learned from the project pilot phase.

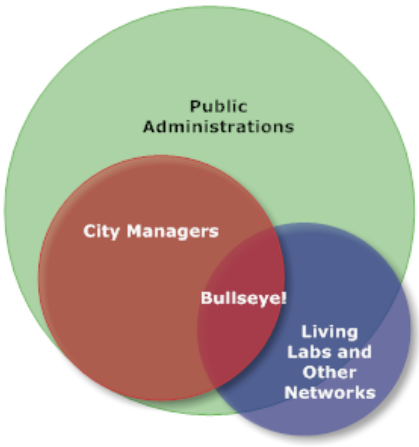
2. Background

2.1 Introduction

In its simplest form EPIC is a project about the use of cloud computing combined with other innovative technologies to deliver new city services that deliver effective smart city working. The cloud platform is the vehicle for the exchange and delivery of all the innovative new services that are developed within EPIC and is the backbone of the project. Therefore, whilst there are three key outputs from the EPIC project, (1) Cloud platform, (2) Services and (3) Roadmap, the Market Research will focus on the key delivery vehicle for the EPIC solution - the Cloud. The outcome from this research will be the identification of the most appropriate business model to sustain EPIC's outputs after the end of the European Commission project funding.

2.2 Target Audience

EPIC was designed with a very clear target audience in mind – the Public sector, namely City Administrators, and in particular those with strategic influence and procurement power. EPIC ensured these links to market were embedded within the Consortium when designing the project team (see diagram left and table below).



These networks cover the whole of Europe and provide the project with a great first base in accessing the type of customers who will be looking to start their smart city journey. With the newness of the 'smart city' concept and the use of cloud and other technology to achieve smart city goals, the EPIC Consortium recognised that a technical solution alone would be daunting for many cities that have only just started to explore this field. Therefore, EPIC decided to develop a strategic Roadmap that cities could use to plan and launch their own smart city initiatives - providing added value beyond the deployment of just lone technical solution.

Audience	Linking Partner	Network
Chief Executives and Chief Technology Officers	• IBBT • ENoLL • 21c • IBM • Deloitte	• Apollon Living Labs (IBBT is leader of network) • ENoLL – European Network of Living Labs • SOCiTM – Professional association for IT managers • LOLA – Linked Organisation of Local Authority ICT Societies • Eurocities • IBM and Deloitte Customer Base
Mayors and Politicians	• 21c	• Global Cities Dialogue • Hansard Society

Table 1: *EPIC Links to Market*

2.3 Consortium

To recap from the Description of Work (DoW) the EPIC Consortium unites world leading Living Lab, municipality and technology partners with innovative SME's and subject matter experts in order to ensure that end-of-project results help European cities become smarter and more innovative in the way they deliver services. It consists of a balanced mix of state-of-the-art technology innovators, advanced 'Smart Cities,' academic research centres and dissemination and business planning experts from across Europe. Each partner brings relevant, high quality experience to the team, ranging from in-depth 'Smart City' technical design and deployment through to an extensive understanding of European project requirements and first-hand knowledge of modern city life, trends and needs. However, each partners' needs must also be accommodated in the final sustainability model.

The table below highlights the various types of organisations who have to be accommodated in the sustainable offering. The needs of the various types will be taken into consideration during the building of the solution in the Conclusion section of this document.

	Organisation	Country	Type of Org	Need
1	IBBT iLabs Brussels	Belgium	Nor for profit	Management
2	IS-practice BVBA	Belgium	SME'S	Management
3	21c Consultancy	UK	SME'S	Strategic
4	European Network of Living Labs	Belgium	Network	Strategic
5	Deloitte Consulting	Belgium	Corporate	Strategic
6	National Technical University of Athens	Greece	Academic institution	Research
7	ATC	Greece	SME'S	Technical solution provider
8	IBM Germany	Germany	Corporate	Technical solution provider
9	Fraunhofer Institute FKIE	Germany	Academic institution	Technical solution provider
10	Issy Media	France		Pilot
11	Manchester City Council	UK	Government	Pilot
12	City of Tirgu Mures	Romania	Government	Pilot
13	Navidis	France	SME'S	Technical solution provider
14	Brussels Regional Informatics Centre	Brussels	Government	Pilot
15	BCU Centre of Excellence	UK	Academic institution	Technical solution provider
16	Immoweb	Belgium	SME'S	Technical solution provider
17	Hildebrand Technology Ltd	UK	SME'S	Technical solution provider

Table 2: *EPIC Consortium Overview*

3. Study Objectives

When detailing the primary objectives of this particular study it is important to go back to EPIC's Description of Work (DoW) to be reminded of the overall key objective that this deliverable contributes to (see table below).

Objectives	Measurement	Success Criteria	MS
Create a sustainable offering that will provide a wide range of opportunities for new, higher quality, sustainable services for citizens and businesses after the funding ends	• Involves realistic future costs/pricing models • Roadmap • Availability of the platform • Availability of the services	• Validated future business plan • Future improvements highlighted • Platform retained by pilot cities • Roadmap taken up by minimums of four other cities	MS6

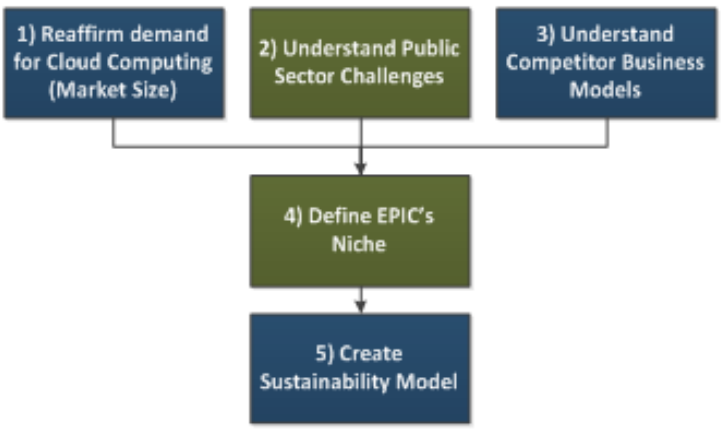
The table shows that the key objective is to create a sustainable model for EPIC that will continue to deliver benefits long after the end of the project. This objective has been extrapolated in more detail within the EPIC Vision Statement:

> *"To be the first choice service innovation and delivery platform (with Roadmap) for medium sized (50,000 – 500,000 habitants) cities across Europe, where any city can cost-effectively share, access and adapt a range of services to work smarter to meet the needs of most, if not all, their citizens, visitors and a wide range of business/social relations"*

This report provides a first step in delivering the DoW objective to help achieve the EPIC vision by collecting and analysing data that will help define the first version of EPIC's sustainable offering. This model will then be further developed in conjunction with WP6 (Roadmap Development) and WP5 (Pilot/Proof of Concept Validation) to provide more granular financial and operational details during the creation of the projects business plan.

In order to deliver the required information for this report, a number of sub-objectives were put in place:

- Reaffirm the demand for public sector cloud computing solutions in Europe
- Understand the challenges that public sector customers are facing in this domain
- Understand business models of competitors selling cloud computing platforms in the public sector



- Re-evaluate EPIC's niche in this fast moving domain
- Create a sustainability model for EPIC to adopt once the initial project funding ends

4. Methodology

To best meet the study sub-objectives listed in the previous chapter EPIC selected a standard set of research techniques commonly used in studies of this nature, as shown in the diagram below.

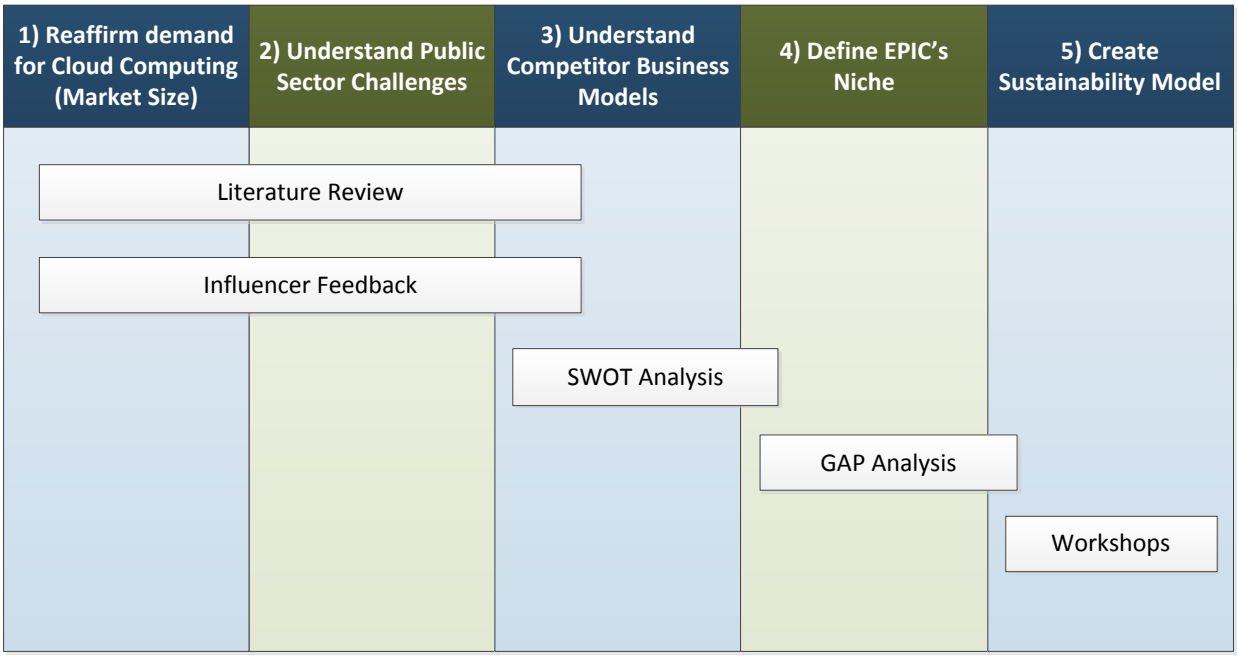


Fig 1: *Study techniques*

Literature review

To achieve objective 1 and 2 as shown in the graphic above, the EPIC Team reviewed relevant Cloud Computing studies and literature to understand the potential future market growth of cloud computing for smarter public sector working, as well as the challenges the domain faces. By combining the findings from the literature review with an understanding of what European influencers are doing in this field (see Influencer Feedback below) EPIC can extrapolate solution gaps in the market that EPIC may potentially be able to exploit.

Influencer Feedback

The purpose of engaging influencers directly was to gather first hand qualitative information about their experiences of smart cities and cloud computing to determine the challenges they face in this area and whether they are using any specialist strategies to make adoption easier. This direct data was collected via ad-hoc interviews during dissemination events at conferences across Europe. See Appendix C for list of influencers met.

SWOT Analysis

By analysing the corporate websites and related online documentation from other commercial providers in the field, the EPIC Team were able to get an idea of the differing business models that already exist in the market. This information was then examined to determine if EPIC could benefit from the lessons learned in the findings.

GAP Analysis

The information collected through the research techniques above were put through an internal SWOT and gap analysis to help determine EPIC's strengths and weaknesses in the market place so potential threats could be minimized and opportunities grasped.

Workshops

Workshops were held with project partners both face-to-face and via teleconference to discuss and shape the final sustainability model that will be taken forward to create the business case (D9.4).

Further research techniques such as the sending of online surveys to potential customers via EPIC project networks will take place in conjunction with WP6 during the creation of the business case D9.4. This direct feedback from potential customers around our potential business model will help create the most tailored business plan possible for the project. A summary of how the market research and business case links is provided in the figure below:

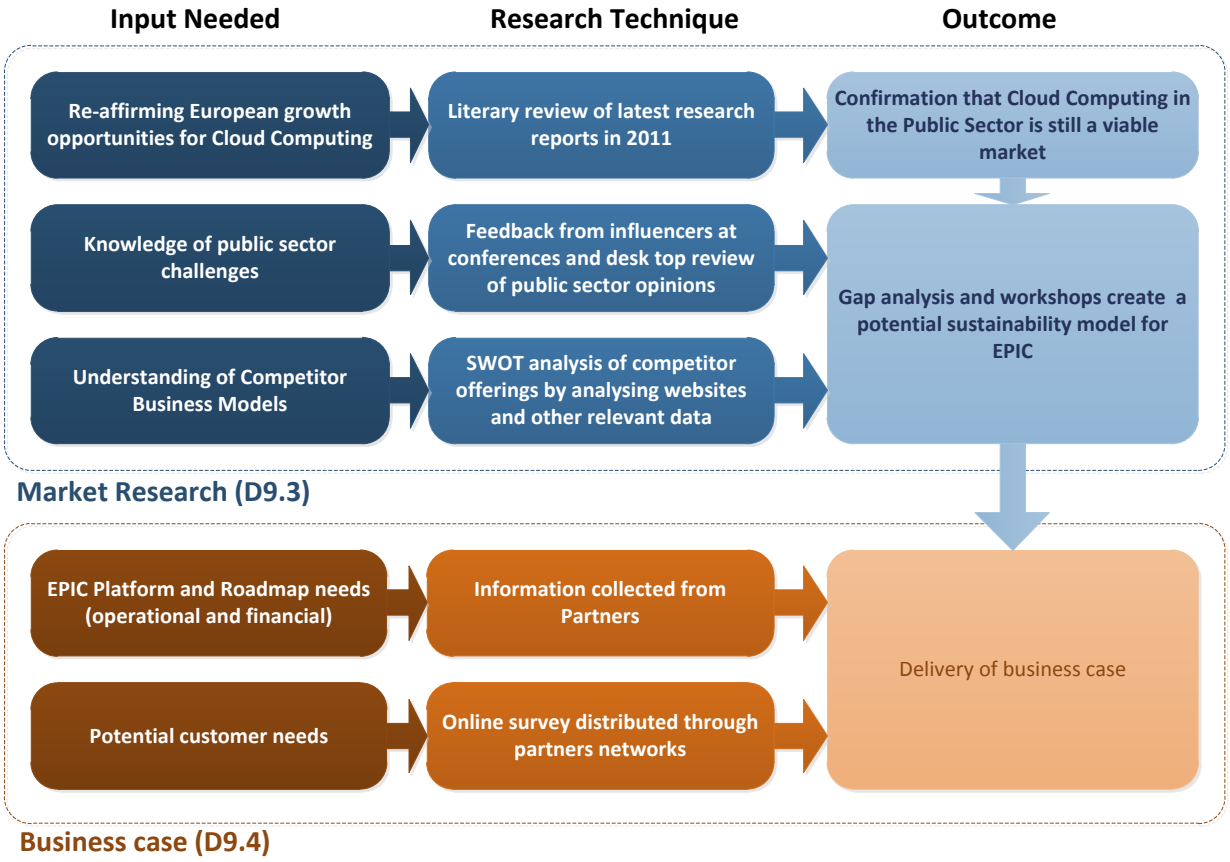


Fig 2: *Link between market research and the business case deliverables*

4. Key Findings

4.1 Market Demand/Size

Many organizations across the globe are predicting huge market growth for cloud-based services worldwide, as demonstrated by a selection of recent studies in the table below:

Organisation	Study	Prediction
Analysis Mason	Forbes Report	Global market for enterprise cloud-based services will grow from $12.1 billion in 2010 to $35.6 billion in 2015. The year-on-year growth rate will be 43% in 2011, but will decrease to 13% over the next five years. Software-as-a-service (SaaS) will account for 70% of revenue in 2010, while 30% will be related to infrastructure-as-a-service (IaaS).
Gartner	Forecast: Public Cloud Services, Worldwide and Regions, Industry Sectors, 2009-2014	Worldwide cloud services revenue will reach $68.3B in 2010 (includes public and private cloud services) reaching $148.8B in 2014. The report also states that 60% of cloud services revenue over the last twelve months is from North America alone.
Global Industry Analysts	"Cloud Computing: A Global Market Report"	Open Source Cloud Computing will be a major factor in driving the growth of Cloud Computing Services to a predicted $222.5B by 2015.
International Data Corporation	IDC Worldwide and Regional Public IT Cloud Services 2010-2014 Forecast	Worldwide revenue from public IT cloud services exceeded $16 billion in 2009 and is forecast to reach $55.5 billion in 2014, representing a compound annual growth rate (CAGR) of 27.4%. Source: International Data Corporation Worldwide Enterprise Server Cloud
Computing	2010-2014 Forecast	Cloud computing will grow from an $8.4 billion opportunity in 2010, representing over 600,000 units, to a $12.6 billion market in 2014, with over 1.3 million units.
WinterGreen	Cloud Based Office Productivity Software Market Shares, Strategies, and Forecasts, Worldwide, 2010 to 2016	Cloud productivity office computing markets at $3.3 billion in 2009 are anticipated to reach $17 billion by 2016. IaaS, PaaS and SaaS software and services sales globally accounted for $20.3 billion in 2009, predicting a market size of $100.4 billion by 2016.

Table 3: *Cloud Growth reports for 2015*

The recent research from Gartner is of particular interest as their calculations show that the forecast of the public cloud services market is predicted to be worth (worldwide) by 2015 around €136.2 billion, achieving a five

year compound annual growth rate (CAGR) of 18.9%[1]. This prediction is based on defining the public cloud services from market revenue generation, not an IT spending perspective which is an interesting viewpoint for EPIC as the project foresees take-up of cloud services in the public sector being driven by efficiencies and cost savings, rather than budget availability.

The same report goes on to split the market share by Industry sector (see table below) which clearly pinpoints the Public sector along with manufacturing, financial services and communications and High tech industries as the areas that will be the most aggressive adopters of cloud services through 2015. Great news for any solution providers like EPIC who would be launching cloud based services during this time.

Industry Sector	2010	2011	2012	2013	2014	2015
Government	15.0	15.0	15.0	15.0	16.0	16.0
Financial Services	20.0	20.0	20.1	20.7	20.7	20.7
Healthcare	4.0	4.1	4.7	5.0	5.0	5.2
Communications and High Tech	15.0	15.2	15.6	16.0	16.2	16.5
Energy	5.0	4.9	4.8	4.7	4.7	4.5
Media and Entertainment	4.0	4.0	4.0	4.0	4.0	4.0
Retail/Wholesale	10.0	10.0	10.0	10.0	10.0	10.0
Manufacturing	20.0	20.0	19.7	19.5	19.2	19.0
Transportation and Infrastructure	3.0	3.0	3.1	3.1	3.2	3.3
Other	4.0	3.8	3.0	2.0	1.0	0.5
Total	100.00	100.00	100.00	100.00	100.00	100.00

Table 4: *Cloud services, Worldwide, Share by Industry Sector, 2010-2015 (Gartner 2011)*

However, an interesting viewpoint comes from the AMD 2011 Global Cloud Computing Adoption, Attitudes and Approaches Study[2] conducted by Redshift Research who interviewed over 1,513 businesses in the United States, Asia and Europe during March 2011 (in both public and private sector). The study found that whilst the public sector is indeed an area of growth, Europe lags behind its US and Asian counterparts in both (a) numbers currently using cloud computing and (b) numbers not even considering cloud computing – see graphic below:

[1] The Gartner report, Public Cloud Services, Worldwide and Regions, Industry Sectors, 2010-2015, 2011 Update, was published on June 29, 2011. www.gartner.com/login/loginInitAction.do?method=initialize&resume=/idp/resumeSAML20/idp/SSO.ping&spentity=gartnersp

[2] http://www.amd.com/us/Documents/Cloud-Adoption-Approaches-and-Attitudes-Research-Report.pdf

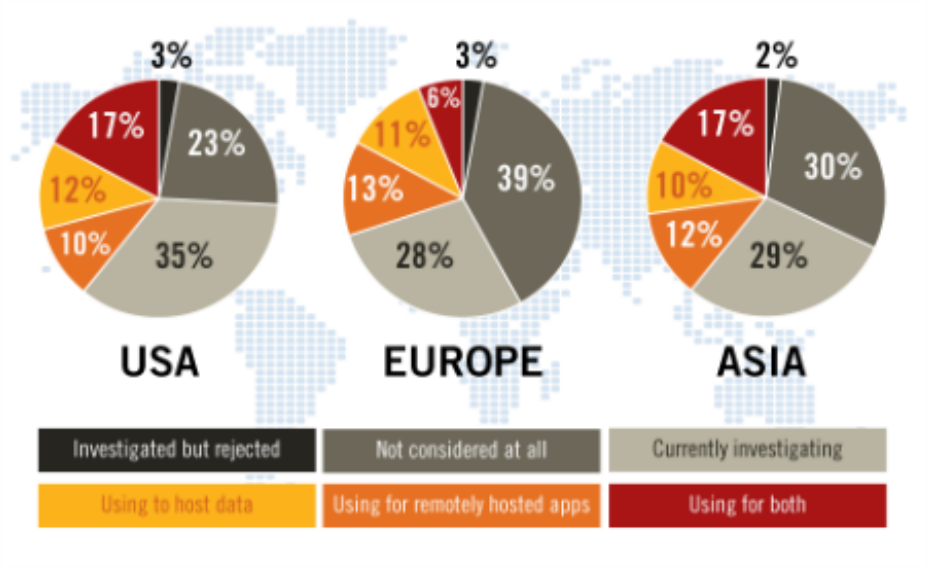


Fig 3: *Organisations position in relation to cloud computing by region (source: AMD 2011 Global Cloud Computing Study)*

Therefore whilst there is a significant public sector (and indeed private sector) market opportunity for new cloud service vendors to take advantage of, there are also particular barriers in Europe that need to be identified and overcome by any new provider before the market can reach its full potential.

The AMD study, and others like it, offers no explanation for the gap between Europe and other world regions but conversations by the EPIC Team at industry events and conferences across Europe have led the EPIC Team to believe that the fracture of the European market into separate countries, languages, tax systems and business rules dramatically reduces the efficiencies of the technology providers attempting to service the EU community. The EPIC vision aims high to try and overcome some of the cross border issues for sharing public services, however the Team recognize that these are only small first steps and that these pan-European barriers need to acknowledged and addressed during the creation of the EPIC Roadmap and business plan. Please see Appendix C for a list of the influencers the EPIC project has met with during 2011.

Conclusion: The public sector along with manufacturing and financial services will continue to be the most aggressive adopters of cloud services through 2015. However, Europe is behind other regions therefore there are specific challenges that need to be identified and overcome to truly drive take-up.

4.2 Market Readiness

In the previous section EPIC identified that industry experts believe there is a significant market size for cloud computing in Europe; however is there really a demand for a pan-European cloud computing solution for smarter city services?

The 2011 Digital Agenda scoreboard shows that the use of Internet in the EU continues to rise. 65% of citizens now use it at least weekly. Day-to-day activities traditionally carried out offline are increasingly performed online. For example, one third of citizens now use internet banking and read the news online. Not only have nearly all kinds of online content, like web radio or posting messages, become more popular, but the difference in popularity between the different kinds of content has also reduced. Citizens in many countries now expert personalized and co-created services and content from private sector services and are beginning to expect the same from the public sector.

4.2.2 Public Sector

At the start of the EPIC project, the Consortium identified a number of National public initiatives/strategies in the projects pilot countries that signal the readiness for the adoption of the cloud for delivering smart services.

Pilot Country	Digital Agenda Score 2011*[3]	Key Cloud Related Initiative	Objective/Aim or Principle
Belgium	Progress has been made in the provision of online services for citizens, with online availability at 73%, and uptake, with 45% of the population making use of these services. Less progress has been made on the businesses side with online availability still at 88% (almost at EU average) and take-up at 77%.	National Government Policy Strategy (2009)	Develop cross-government standards, frameworks, projects and services that are necessary to deliver the eGovernment strategy.
France	Both availability and take-up of eGovernment services for businesses are close to the EU average in France (at 88% and 78% respectively). Take-up by citizens is quite advanced at 18 percentage points above the EU average while online availability for citizens is slightly above average at 83%.	Digital Economy 2012	Make France a major digital power by 1) encouraging the development of new digital content,
Romania	In the area of eGovernment Romania is lagging behind, especially in take-up, being at the lowest place in the EU for both citizens (at 8%) and businesses (at 50%). In online service provision, Romania is greatly below average in services for citizens (50%) and businesses (at 75%).	eGovernment Program 2009+	Build a national integrated system for online public services designed for citizens and businesses.

[3] http://ec.europa.eu/information_society/digital-agenda/scoreboard/countries/fr/index_en.htm

UK	The UK shows high online availability of public services for both citizens and enterprises; respectively at 97% and 100%. Usage by citizens is also relatively high, at 48% of the population. However, the use of eGovernment by businesses, at 67%, remains low when compared with other Member States.	Government ICT Strategy –Key Drivers	A government cloud infrastructure to enable public bodies to host their ICT systems from a secure, resilient and cost-effective service environment. (G-Cloud)

Table 5: *Digital readiness and key related cloud initiatives of the EPIC pilot countries*

Looking at the Digital Agenda Scores for 2011 it is no surprise to see that the UK, Belgium and France who all show EU average or above use of the internet for citizens and businesses, are advancing their existing digital infrastructure to deliver more efficient services. Whereas Romania who lags behind at the bottom of the online service provision, they are in the process of starting to build a national integrated system.

At the European level the Commission has adopted a pro-European stance on cloud computing with visible champions like the EU Commissioner Neelie Kroes, the vice president for the Digital Agenda. However, Kroes has outlined her belief, that cloud computing needs stronger regulations in order to ensure its continued growth. In a March 2011 blog post[4] Kroes said, that the European Commission and governments need to work together to create the necessary laws for cloud computing to give it the protection of the "real teeth only public authorities have". "Freedom of expression, the protection of privacy and personal data, net neutrality and the preservation of an open internet - these and other issues are fundamentally public policy issues," she said. "Who will be liable if something goes wrong in the cloud and data is lost or compromised? Which rules and which jurisdiction will apply? These are not questions that 'codes of conduct' on their own can answer in a satisfactory way.

Kroes also said that stronger regulations would help governments to scale up pilot projects in the use of cloud computing to emulate how the US authorities are using the technology. This would drive the cost savings that cloud computing can offer, while clarifying the rules around governance would ensure that innovation could thrive. "The internet has grown to be wonderful and useful because it has not suffered from undue regulation. But an internet without rules can also hold back users and investors if they lack confidence," Kroes warned.

Since that statement the Commission officially launched between May and August 2011 a public online consultation into cloud computing through a survey that was specifically designed to capture and collate the opinions of businesses and public bodies across Europe, prior to the release of a European Cloud Computing Strategy in 2012. The survey results will form the basis of a number of elements related to European policy on cloud computing and aims to gain clarity on the issues and barriers affecting the adoption of cloud infrastructure and services.

[4] http://blogs.ec.europa.eu/neelie-kroes/public-authorities-and-cloud/

At the time of writing this report, the results of the online survey have not been published, however when they are made publically available, EPIC will analysis the impact of the statements and will incorporate the findings into the EPIC business plan.

In the meantime other recent consultations, such as Unit 4 report (surveyed 123 public sector organisations across Europe) found that despite a current low level of cloud adoption, 25% estimate that cloud will account for between 25 and 50% of their back-office cloud applications in ten years from now, and 17% estimate it will be between 50 and 75%. These results indicate an acceptance from the public sector that the adoption of cloud computing will definitely be a key route forward in more efficient working practices.

The AMD study result also confirms that public sector organizations are primarily moving to cloud computing to cut costs, often driving by local and national mandates. Some 32% of organizations in the AMD Study[5] stated that government policies are accelerating cloud adoption and that the financial benefits are the most significant driver in the adoption of technology. Some 27% of public sector organisations view the shift as a financial necessity, which is high compared to the 18% in the private sector.

Conclusion: Government pressure to save money is accelerating the drive to cloud computing which should allow for the development of a strong industry in this sector within Europe. Many Governments are ready to adopt cloud technology to increase back office efficiencies and deliver more effective services to citizens, however a set of pan-European regulations need to be established to truly facilitate growth in this domain.

4.2.2.1 SME's

European SME's could scoop up additional profits of €1.2 billion if they set aside their security fears over cloud computing and adopt the new technology, claimed participants at a Microsoft hosted symposium called 'Building a European cloud by and for SME's that took place in Brussels on October 4, 2011.

The symposium found that many member states are afraid about what will happen to their data once its it is in the cloud, and that SME's are unaware of the business opportunities that the use of cloud computing would give them. André Richier, an official at the European Commission's Enterprise directorate, acknowledged that SME's were cautious in their approach to the cloud. He said that the solution was to embark on effective education schemes, which DG Enterprise had already undertaken, targeting business school students in Europe.

Cloud computing requires careful consideration by an SME's owner of the kind of services the firm is able to buy, the interoperability of these with current software, the pricing of bolt-on services, the differences between providers and the risk behind each option. Ensuring that small business owners are able to make these informed choices will involve a coordinated approach from the industry, business advisers and regulators to ensure that companies are able to access objective, comparable and relevant information when choosing services and

[5] http://www.amd.com/us/Documents/Cloud-Adoption-Approaches-and-Attitudes-Research-Report.pdf

providers. This is especially pertinent in light of the fact that some 60% of UK small firms recently surveyed admit that they do not know what cloud computing is (cloud computing is Blundel and Gray 2011).

A 2011 ACCA survey painted a similar picture with just over 50% of respondents saying that SME's have very limited or no understanding of cloud computing

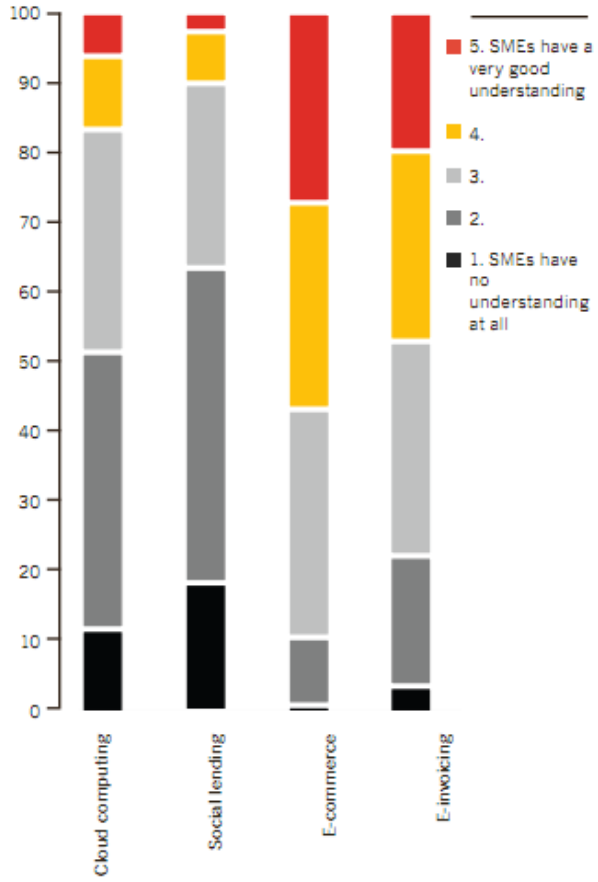


Figure 4: *SME'S understanding of the digital agenda according to the 2011 ACCA Report*

Conclusion: Whilst government pressure provides an impetus for the public sector to adopt the use of the cloud, SME's are mainly unaware of the benefits and opportunities the new technology brings.

4.3 Challenges

This chapter seeks to understand the real barriers to the adoption of cloud computing for smarter working by looking at (a) the findings of a number of high profile surveys that were undertaken in this domain during 2011, and (b) understanding feedback from influencers gathered at European events where EPIC was present.

4.3.2.1 Public Sector

AMD Survey

Findings from the AMD survey showed that 57% of public sector organisations globally that have made the shift to cloud computing actually had the necessary in-house IT skills to deliver that change. However, only 25% of the organisations currently looking at cloud computing in the public sector feel they have the appropriate skills. The figure below highlights the single biggest inhibitor to the adoption of cloud for those considering implementation.



Figure 5: *Biggest reason that inhibits the use of cloud technology* ***(source: AMD 2011 Global Cloud Computing Study)***

In Europe fear of the unknown, coupled with loss of operational control and resistance in the organisation were the top reasons why organisations looking at implementing the cloud were worried about doing so.

UNIT4 Survey

The top three perceived disadvantages of cloud computing among the 700 public sector respondents to the UNIT4 2011[6] survey are:

- Reliance on the Internet (59%)
- Loss of control (47%)
- Difficult to customize (29%)

Influencer Feedback

Despite the EU's best efforts, laws to protect and store data are out-dated and cannot cope with the legal problems presented by cloud computing, such as determining who owns data which is no longer handled in situ. When a company processes data in the UK, stores it on a server in Ireland but sends it via France – as it may have a subsidiary there – it is not yet clear which country's law would prevail in a legal dispute. Regulators who have recognised this maze of unanswered questions are busy consulting industry and data protection authorities, while industry is busy trying to make its mark on an as yet unformed legal framework.

DG Information Society has been researching cloud computing and how it differentiates from other IT systems and its opportunities for European industry over the past two years. This research culminated in two reports, one by the expert group on the future of cloud computing and another by the European Network and Information Security Agency (ENISA) on cloud security.

Conclusion: Fear of loss of operational control of data appears to be the biggest factor affecting the take-up of cloud computing for smart service delivery, alongside organizational resistance to change. On an influencer level the confusion around the use of data privacy laws is a top concern.

4.3.2.2 SME's

AMD Survey

The survey also looked at organisations that have rejected a move to the cloud. The results found that over half (51%) have done so because of security/privacy concerns, whilst 35% felt that the technology is still too immature. Whilst larger organisations were concerned with the maturity and reliability of the technology (39%), SME's been more worried about loss of operational control (33%).

ACCA Survey

The 2011 ACCA Survey found that increasing awareness of and confidence in cloud services among the SME sector is an important educational challenge. In the survey of European SME perspectives on cloud computing, the security of corporate data and potential loss of control featured highly among the concerns for SME owners (ENISA 2009), even though 49% of SME's already exchange data in an automated fashion with other ICT systems

[6] http://www.unit4.com/about/news/art/aid/4352

outside their own enterprise (Giannakouris and Smihily 2010). The issue of confidence also featured prominently among survey respondents. Overall, SME's with a greater understanding of cloud computing cited security concerns as the major obstacle to adoption, followed by a lack of awareness. Compared with less knowledgeable colleagues, they were also more likely to emphasise a lack of advice. SME's with little experience of cloud computing were much more likely to cite lack of awareness and complexity as the main obstacles to adoption. The survey results suggest that a two-step approach is needed in the process of raising awareness; improving the general knowledge of the cloud services available while at the same time building confidence in the services on offer. The cloud computing industry needs to have a better understanding of the nature of the reported security fear so that any 'myths' might be dispelled and other more genuine issues appropriately addressed. European industry therefore needs to take steps to take the 'cloud' to a greater level of familiarity and proximity to the SME's sector, so that it is not seen as a remote or unsafe concept, but something that can be an integral part of the operational management of small firms.

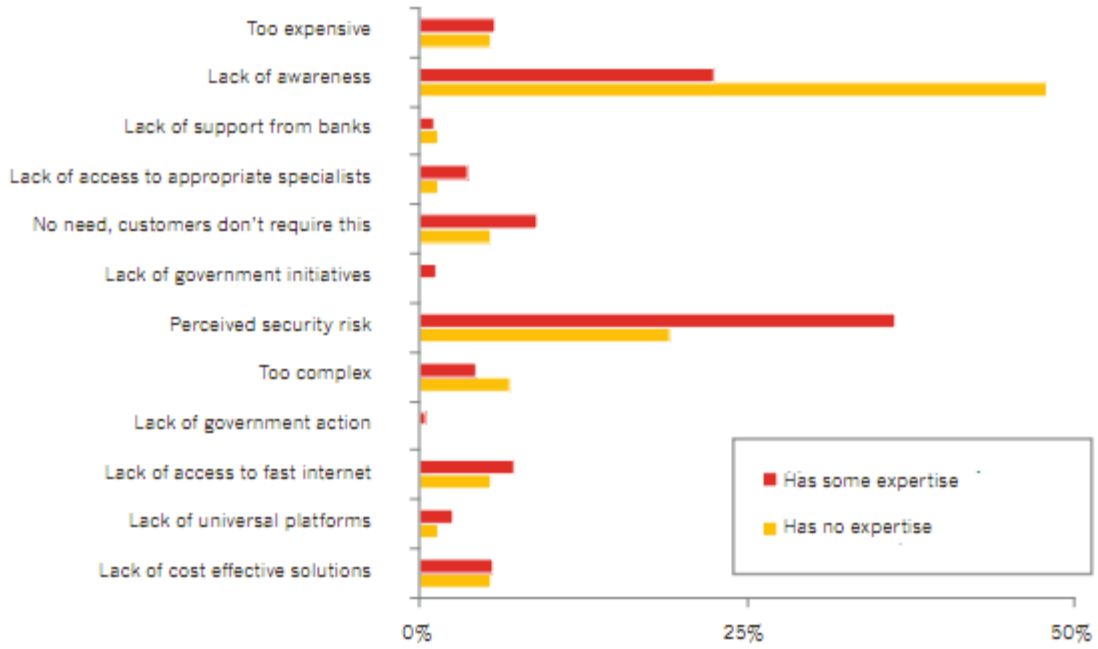


Figure 6: *Issues cited by SME'S's as the greatest obstacle to cloud computing adoption, by level of expertise*

Conclusion: SME's need to be better educated in how they can harness the benefits of cloud computing for delivering innovative city services and Europe needs to recognize and address their security concerns.

4.4 Competitor's Models

This phase of EPIC's market research is to identify and analyse organisations providing a similar services to EPIC. Performing a SWOT analysis of potential competition helps the project to understand the relative strengths and weaknesses of potential competitors as well as the types of business models and techniques that they deploy. Lessons learned from this analysis can help EPIC understand its market niche and where to position itself in the market. The SWOT analysis (see Appendix B for the full result tables), has been divided into two categories:

- Large corporate organisations offering cloud products – chosen because they are recognised and used by public sector across Europe *(Please note that IBM are not listed here as they are included in our consortium and therefore not categorised as a competitor to EPIC)*
    - Oracle
    - Cable and Wireless
    - HP
    - Microsoft
    - EMC2

- Smaller niche organisations offering cloud products – chosen because they are competing at the same events as EPIC
    - Salesforce
    - HSO
    - Huddle
    - LuxCloud
    - Rackspace

A third category looking at other pan-European platforms (not necessarily using Cloud) for smart service delivery was considered but rejected due (a) to the immaturity of the solutions available, and (b) the fact that there were no business models in place. Many of these platforms are in early project stage like EPIC.

4.4.2.1 Large Corporate Organisations

Organisation	Website	Key Findings
ORACLE	www.oracle .com	• Create customized cloud solutions for clients • Offer a wide range of public sector solutions • However not overly strategic in packaging of products • Offers high levels of training for customers

Cable&Wireless Worldwide	www.cw.com	• Has reach to over 150 countries • Do not need to sell via the website • Focused on large projects only • No strategic advice available online
hp	www8.hp.com	• Offer workshops to help customers plan strategy • Offer financial services for organizations with limited resources • Services not tailored to the public sector • High potential to extend solutions into the public domain
Microsoft	www.microsoft.com	• Clear focused sales strategy highlighting financial benefits • One business model (subscriptions) only • Huge variety of ways support is offered • Brand familiarity gives credibility
EMC²	www.emc.com	• Worldwide network to draw upon • Many specialist online communities for support • Offers training to customers • Wide range of solutions for customers to draw upon

Table 6: *Large corporations SWOT findings*

Lessons:

- Large competitors have a wide range of products/services from – mostly focused on the back office
- They offer multi-channel support and training for all their customers
- They are usually able to provide a local/regional base to manage customers projects through partnerships
- Generally focused on large scale deployments
- None of the organisations link their cloud services to smarter city working

Conclusions: EPIC cannot compete with the larger scale organisations due to their size, locations and broad scope of products and services. However, EPIC does have a three-fold niche to exploit that these organisations do not, which is (1) a focus on using cloud to deliver innovative front-end services for smarter city working, (2) an ability to be flexible in the scale of the solution deployed, and (3) a start small entry point into becoming a smart city (i.e. discrete trial of one or more smart services using the cloud) through the use of the EPIC Roadmap – no one else appears to be linking the use of cloud computing to deliver smart city services and working.

On the other hand, EPIC can learn from the Multinationals and ensure that the sustainability model created by the project builds in customer support to give potential clients a strong comfort factor when using EPIC services.

4.4.2.2 Smaller Niche Organisations

The organisations chosen for SWOT analysis were picked because they were visible at events across Europe that EPIC was present at, and have been trying to tap into the public sector market.

Organisation	Website	Key Findings
	www.salesforce.com	• Great friendly and welcoming image • Has a trusted user base of customers • No public sector tailoring in commercial material • Offers 30 day free trial as an incentive to take-up their services
	www.hso.co.uk	• Offers tailored solutions in the public sector • Has a strong focus on telecoms • However use's to much jargon to explain services • Appears to be focused on UK market
	www.huddle.com	• Speaks to Government in public sector language • Provides multi-channel support to customers • Shows they have a huge trusted user base globally • Position themselves as the government platform of choice
	www.luxcloud.com	• Communication material focused on the private sector • Has credibility through partnership with IBM • Provides onsite training • Delivers both business and technical support
	www.rackspace.co.uk	• Position themselves as world leader in hosting and cloud solutions • Offer pay as you go services • Compliant to industry standards • Tailors solutions to customers problems

Table 7: *Smaller Niche Organizations SWOT findings*

Lessons:

- Organisations focus on delivering back office services not innovative frontline public services like EPIC
- Most organisations are still private sector focused and speak in private sector jargon
- Smaller organisations show credibility through partnerships or linkages with larger corporate entities
- All deliver online training and many provide free before you buy service trials

Conclusions: EPIC's niche detailed in the previous subsection is further strengthened by the examination of the smaller competitors. Lessons that EPIC can take and use to enhance its offering within its sustainability model is to (a) leverage the credibility of the larger industry partners (IBM and Deloitte) in its market positioning, and (b) to ensure to use public sector language in all communication material so potential customers are not turned off by private sector jargon.

5. Gap Analysis and Conclusions

Based on the market research findings, EPIC performed an internal SWOT analysis, followed by a competitive comparison matrix to determine the projects position in the marketplace and help define the most appropriate sustainability strategy for the project.

5.1 SWOT Analysis

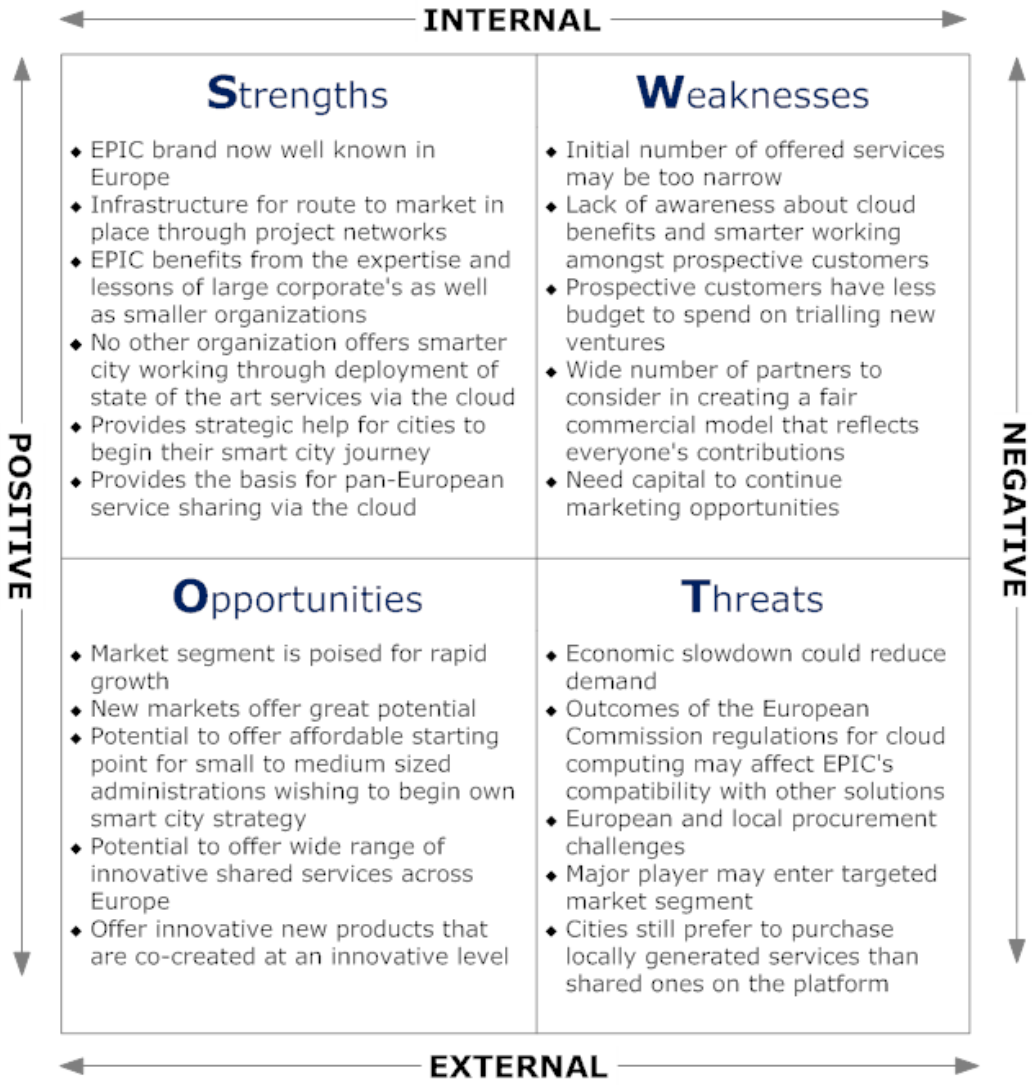


Figure 7: *EPIC SWOT analysis*

Whilst the SWOT highlights the key strengths and opportunities that EPIC can benefit from, it also lists the issues (weaknesses) and risks (threats) that need to be considered when creating the sustainability model and business plan for the future of EPIC.

5.2 Competitive Comparison

The competitive comparison matrix compares EPIC's unique selling points against market competitors.

	EPIC's Unique Selling Points						
	Focus on innovative Front end Services as well as backend	Flexible in size of solution deployment	Links cloud community and smart working	Benefits from Corporate and SME's expertise	Pan-European service delivery platform	Shared Services	Brings together public sector and Business
EPIC	✓	✓	✓	✓	✓	✓	✓
Oracle	×	×	×	✓	×	×	×
C&W	×	×	×	✓	×	×	×
HP	×	×	×	✓	×	×	×
Microsoft	✓	×	×	✓	×	×	×
EMC2	×	×	×	×	×	×	×
Salesforce	×	×	×	✓	×	×	×
hSO	×	×	×	×	×	×	×
Huddle	×	×	×	✓	×	×	×
LuxCloud	×	×	×	✓	×	×	×
Rackspace	×	×	×	×	×	×	×

Table 8: *Competitive Comparison Chart*

The competitive comparison matrix indicates that whilst EPIC's niche is unique it is actually ahead of the current market place in terms of meeting future government policy as well as city administration needs and demands.

However when placed on a traditional Market Share Matrix (right) it is clear to see that EPIC fits into the first quadrant. This section indicates that whilst EPIC currently has a low market share there is high market growth in the area and therefore real opportunities to establish a market presence and sell a solution.

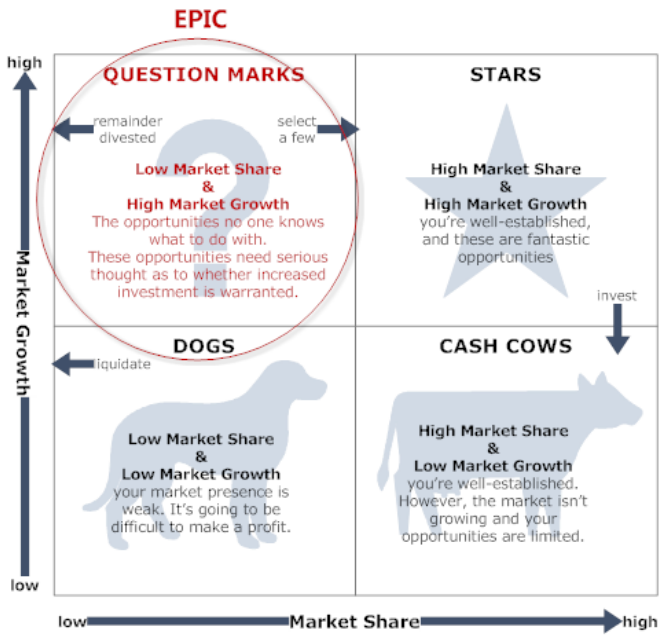


Figure 7: *EPIC position on the Market Share Matrix*

5.3 Conclusion/Sustainability Model

Based on the findings in this report, EPIC believes that to achieve sustainability and far reaching impact EPIC needs to create a model that:

Builds upon the projects unique selling points by:

- Leveraging the link between cloud computing and smart city working
- Highlighting the creation of innovative front office services
- Bringing together public sector and SME's to deliver innovative services (living lab model) via the cloud
- Providing a flexible solution for public sector orgs at different points on their smarter working journey
- Facilitating the educational aspect of the solution, not just the technology

Meets partner needs and requirements by:

- Recognising each Partners IPR contributions
- Freeing partners from the restraints of a rigid commercial venture
- Offering partners freedom to work individually and separately to fully ensure EPICs impact is achieved

Meets potential customer requirements by:

- Recognising smart city and cloud computing are new eGovernment concepts for the public sector
- Enabling customers to access, build and share innovative public services for smarter working
- Helping the public sector to work with SME's to create the innovative smart services
- Creating deployment options that are affordable for clients
- Ensuring that services built on the EPIC cloud can be used within other clouds and vice versa
- Taking into account future European standards around interoperability and the cloud
- Addressing the challenge of privacy issues when sharing services

Rather than adopt a 'one size fits all' sales strategy, EPIC has devised through a series of workshops and teleconferences a more tailored go-to-market approach that is designed to accommodate the varying needs of cities across Europe in a manner that compliments the core marketing and delivery strengths of project partners:

Option 1: Cloud Platform

Option 1 offers a full service solution for cities wishing to migrate all of their eGovernment services to the cloud. Under Option 1, cities will use the EPIC platform to provide integrated 'one-stop eGovernment' to citizens. Option 1 will help cities to work smarter by integrating and rationalising existing front and back office functionalities whilst at the same time enabling them to add-on additional Living Lab generated innovations via the Smart City Service catalogue. Option 1 is designed for advanced cities with the budget and vision to transform their eGovernment delivery in one procurement step. Given the scale and scope of the offering, it is envisioned that EPIC's large industrial partners will take the lead in driving these sales.

Option 2: Smart City Services

Option 2 provides a platform for selling 'smart' locally created applications on a pan-European scale. Under Option 2, cities will be able to purchase discrete SME-generated innovations via the EPIC platform and Smart City catalogue, and tailor them for their own use. Option 2 is designed for cities that wish to examine and test smarter ways of working, but are not yet ready to migrate to a full-service 'Smart City' solution. Given the smaller size and scale of projected sales, it is envisioned that EPIC's SME partners – consultants and application developers alike – will collaborate to drive sales.

Option 3: Roadmap

Option 3 offers a consulting solution for cities that wish to get started on their 'Smart City' journey but do not know where to begin. Under Option 3, 'novice' cities will be able to engage EPIC partners for advise and consultation on how to work smarter. Option 3 will use the findings and recommendations of the EPIC roadmap as the foundation for consultancy services. Given the varied nature of potential sales inquiries in this area, it is envisioned that an aggregate of EPIC partners will deliver this option as appropriate.

A graphic depicting the proposed sustainability model can be found below.

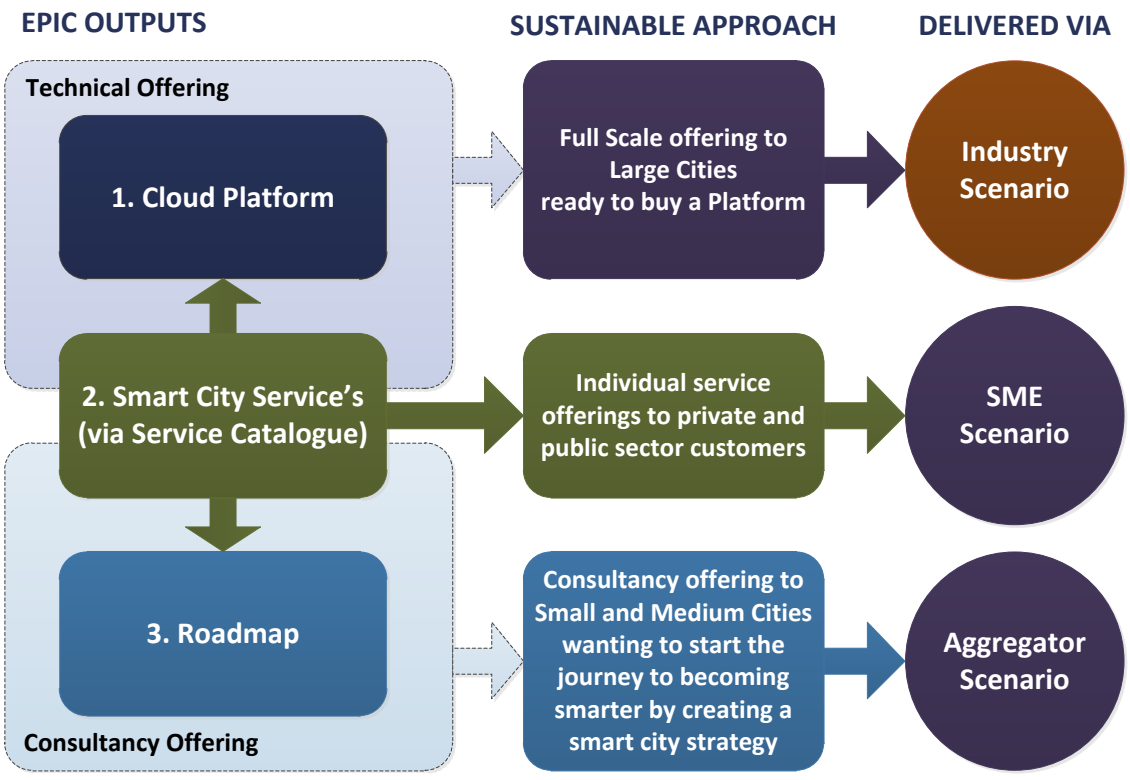


Figure 8: *Potential Sustainability Model*

5.4 Next Steps

The business case in conjunction with the EPIC Roadmap will define a model to identify the 'starting point' of a customer city before adopting the EPIC solution. This starting point will help the Team extrapolate the specific routes to market and provide further detail on EPIC's market positioning by (a) incorporating user information, feedback and lessons learned from the project pilot phase, and (b) sending out a joint survey to potential customers in collaboration with WP6. Both of these activities are needed in order to help detail:

- Operational needs for the sustainability model
- Financial needs for the model
- Marketing needs for the solution

The business case will also:

- Outline specific partner involvement in each of the sustainability scenario models
- Set a pricing structure for EPIC services
- Create a specific public sector eGovernment sales strategy
- Review and select an appropriate payment model(s) for EPIC's services
- Create sales/pipeline targets
- Mitigate risk and issues

6. Glossary of Acronyms

EPIC – European Platform for Intelligent Cities

ENoLL – European Network of Living Labs

RFID – Radio Frequency Identification

WP – Work Package

DoW – Description of Work

SaaS - Software as a service

IaaS - Infrastructure as a service

CAGR - Compound annual growth rate

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Annex A: European City Administration Figures

EU Country	Administrative division
Austria	Around 2,400 municipalities in nine federal states
Belgium	589 municipalities in three regions
Bulgaria	264 municipalities in 28 administrative regions
Cyprus	33 municipalities (urban) and around 350 communes (rural) in nine administrative districts
Czech Republic	Around 6,200 municipalities in 14 regions
Denmark	98 municipalities in five regions
Estonia	39 cities and 202 municipalities in 15 counties
Finland	415 municipalities in six provinces
France	36,569 municipalities (communes) in 22 regions
Germany	Around 14,000 municipalities in 16 federal states
Greece	900 municipalities (urban) and 131 communities (rural) in 13 regions
Hungary	Around 3,100 units of local government: upper-tier counties, cities, towns and villages
Ireland	80 towns and boroughs and five cities in four regions
Italy	8,101 municipalities (communes) in 20 regions
Latvia	530 municipalities in 26 regions
Lithuania	60 municipalities in 10 provinces
Luxembourg	116 municipalities (communes) in three regions
Malta	68 municipalities
The Netherlands	443 municipalities in 12 provinces
Poland	2,478 municipalities in 16 provinces
Portugal	308 municipalities
Romania	319 cities and 2,686 communes in 41 counties
Slovakia	2,891 municipalities in eight regions
Slovenia	210 municipalities
Spain	8,109 municipalities in 17 regions
Sweden	290 municipalities in 21 counties
United Kingdom	England 284 municipalities and 124 single-tier authorities in nine regions (from 2009); Scotland 32 municipalities; Wales 22 municipalities; Northern Ireland 26 municipalities

Annex B: Competitor SWOT Analysis Tables

Salesforce: http://salesforce.com



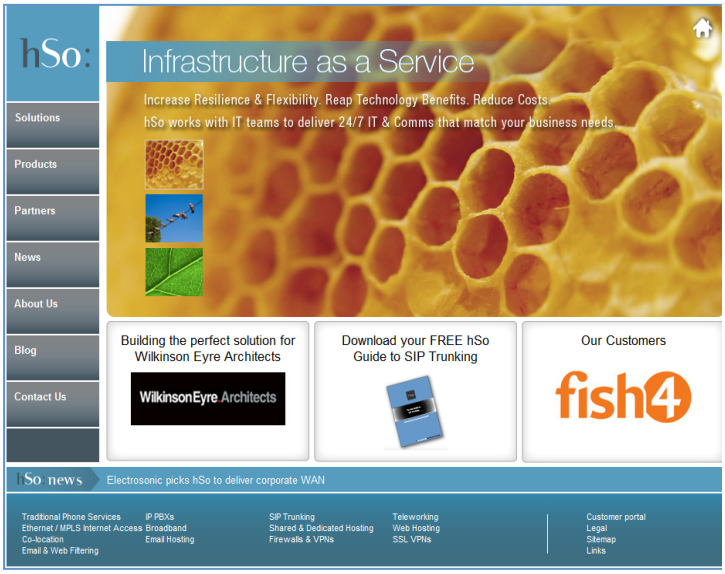
Salesforce.com is the enterprise cloud computing company that is leading the shift to the Social Enterprise—helping companies connect to customers and employees like never before. Our trusted cloud apps and platform include:

- Chatter, a private social network for your business
- Sales Cloud, for sales force automation and contact management
- Service Cloud, for customer service and support solutions
- Radian6, for social media monitoring and engagement
- App Exchange for enterprise cloud apps

Strength	Weakness
• Engaging and friendly website look and feel • Established base of 104,00 customers • Large focus on social enterprises • Provides a 30 day free trial for new customers • Conveys trust by including video testimonials from high profile clients such as CEO of Burberry • Offers training through webinars and face-to-face events to help support customers • Provides developer environment and tools to enable them to build in the cloud • Offers a partnership model for rapid growth and expansion	• Focused more towards the private sector which could put public sector off • Messages are around sales rather than cost savings and high quality service delivery • Contact is through an impersonal web form • Poor logo and use of the world 'sales' sounds very commercialised • Not well known in the UK and Europe just yet • No information on pricing models
Opportunity	**Threat**
• Could easily tailor their products to create a public sector brand • They have already started sponsoring public sector conferences in the Cloud domain	Maybe too American in culture to successfully slot easily into the European public sector market

Quick Score Card	
First impression	★★★★★
Availability of Public sector information	★★
Strategic help	★★

hSo: www.hso.co.uk

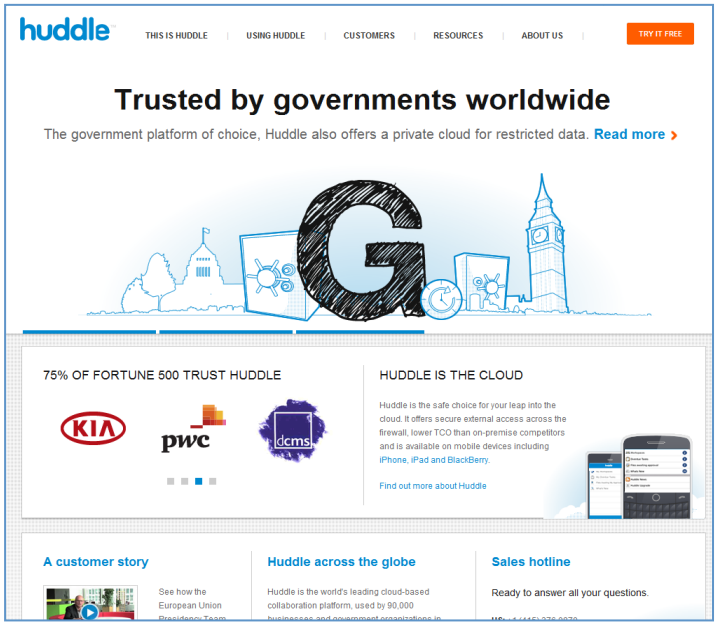


hSo brings together IT & Telecoms services to build a package expressly designed to match your needs. We offer a complete range of competitively priced solutions for business - powered by best-of-breed technology. Our solutions increase the productivity, mobility and security of your business. hSo's services help you to communicate with staff and customers whenever and however you need to, whilst keeping your data secure and protected. hSo delivers scalable solutions so you can expand or contract as fast as you like. Your communications can evolve with you – so your system is effectively future proof. We provide it, service it, and give you the option for us to manage it.

Strength	Weakness
• Offers tailored solutions to customers • Works in the public sector evidenced by NHS as a client • Brings together IT and telecoms • Blog is full of latest news in the field	• Uses much unexplained jargon • Products and services are confusing to someone who is new to the technical terminology • Website is dull and dry • No information on pricing models • Focused on UK market only
Opportunity	**Threat**
• Has a focus on telecoms which is integral to much of the current public sector service delivery model – this expertise may be appealing to local authorities who don't want to take on a lot of risk	• Not very public sector friendly so may find it difficult to grab a share of the new local authority market

Quick Score Card	
First impression	★
Availability of Public sector information	★
Provision of strategic help	★

Huddle: www.huddle.com



Huddle is the safe choice for your leap into the cloud. It offers secure external access across the firewall, lower TCO than on-premise competitors and is available on mobile devices including iPhone, iPad and BlackBerry.

Huddle is the world's leading cloud-based collaboration platform, used by 90,000 businesses and government organizations in more than 180 countries.

Adoption is key to introducing any new technology. Huddle is a cloud-based collaboration and content management application that is easy to deploy, administer and guarantees user adoption.

Strength	Weakness
• 75% of Fortune 500 companies trust huddle • Claim they are trusted by government worldwide • Shows they know the problems government face • Explains the benefits of Cloud for government • Uses local government terminology • Provides multi channel support for customers • Provides useful case studies • Support multiple languages (twelve)	• No apparent weakness in the model they present
Opportunity	**Threat**
• Large public sector growth opportunities throughout Europe due to extremely tailored offering	• Could become too large and therefore less flexible in the services they offer

Quick Score Card	
First impression	★★★
Availability of Public sector information	★★★★
Provision of strategic help	★★

LuxCloud: www.luxcloud.com



LuxCloud operates a software services distribution platform allowing reseller partners to rapidly launch and profitably deliver cloud services. An increasing number of SMBs are opting for cloud services moving from a traditional and expensive on-premise licensing model to a new and affordable SaaS (Software as a Service) or "pay as you go" model.

Instead of resellers needing to set up their own infrastructure to participate in the cloud boom, they can utilize the LuxCloud platform. This modern cloud infrastructure provides fast time-to-market, greater flexibility and low investment risk.

Strength	Weakness
• Enables SAAS business • Only vendor independent SAAS distributor in Europe • No contract or start up fees for small businesses • Has credibility through partnerships with IBM • Provides onsite training to help build strategy • Provides both technical and business support	• Looks as though they currently only cover a few countries • Use jargon so expects customer to be familiar with cloud computing • Focuses completely on the private sector • Sales window (website) a little old fashioned
Opportunity	**Threat**
• They work with a wide range of resellers and are always looking for new opportunities to expand • Opportunity to launch a public sector service area	• May put off new private sector customers who don't understand the jargon and want a softer approach into exploring opportunities

Quick Score Card	
First impression	★★
Availability of Public sector information	
Provision of strategic help	★★

RackSpace www.rackspace.co.uk



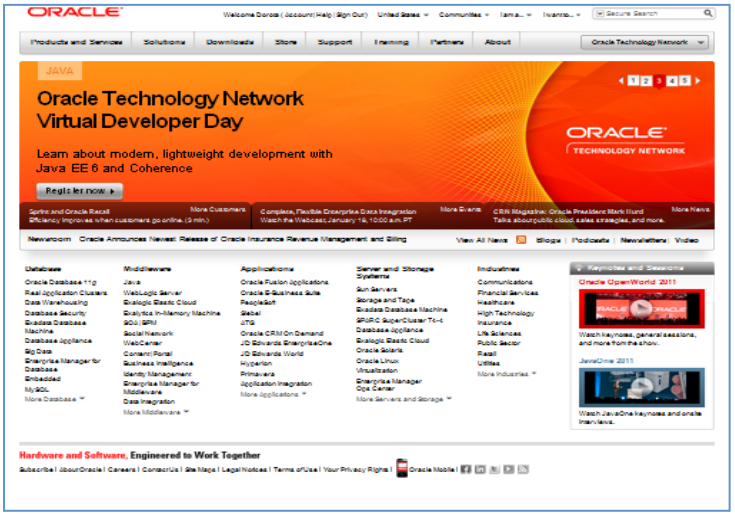
Rackspace® Hosting is the World's leader in Hosting and Cloud Computing. Since 2001 Rackspace has been hosting and supporting mission critical websites, internet applications, email servers, security and storage services for 6,000 customers.

Rackspace is totally focused and experienced in managing hosting solutions for customers, from simple web servers to complex online applications and email solutions. We help our customers forget about their online infrastructure through providing Fanatical Support for their hosted applications.

Strength	Weakness
• Claim to be world leader in hosting and cloud computing • Offer pay as you go on demand services • Range of cloud products including SaaS • Offers specific public sector solutions with recommendations from transport for London • Compliant to ISO27001 and SAS70 standards • Organizes solution by organizational business issues	• Reliance on understanding basic jargon • Focuses on hosting and not on specific services • Feels very sales orientated
Opportunity	**Threat**
• Opportunity to offer a more hand-on consulting services to first timers	• May not attract as many public service customers due to extremely commercialized approach

Quick Score Card	
First impression	★★
Availability of Public sector information	★★
Provision of strategic help	★★★

Oracle: www.oracle.com

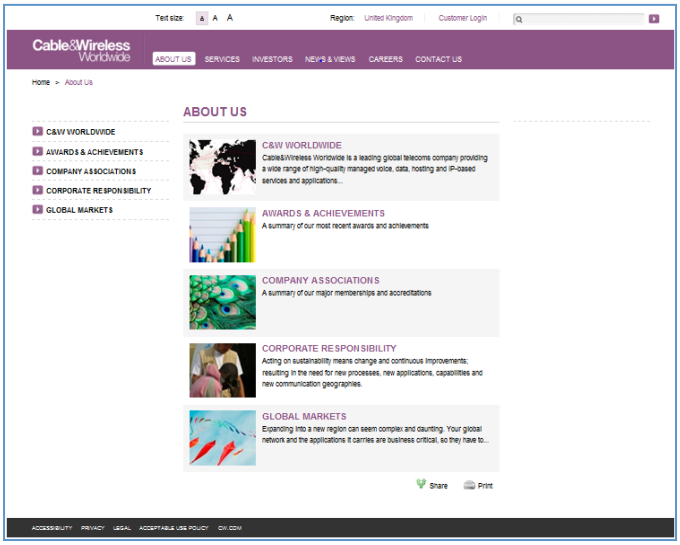


Oracle engineers hardware and software to work together in the cloud and in your data center. It is the world's leading supplier of software for information management, and the world's second largest independent software company. With annual revenues of more than $10.1 billion, the company offers its database, tools and application products, along with related consulting, education, and support services, in more than 145 countries around the world.

Strength	Weakness
• Offers Consulting Cloud Services to create customized solutions • Offers wide range of products and services (applications, Platform as a Service, Infrastructure as a Service, consulting services) • Huge database of partner companies (over 19,000) • Well known for high level of data security • Offers variety of trainings (e.g. virtual, in class, on CD-ROMs) for people with various levels of knowledge about cloud computing	• Time-consuming registration required to get access to more detailed information about services • Description of advantages of the products is not supported by presentation of relevant facts or case studies • Although they have some clients from public sector, Oracle is mainly focused on private sector companies • Website content presented in monotonous way
Opportunity	**Threat**
• They have already launched Oracle Social Network which forms communication forum • Strategy based on offering a broad portfolio – possibility to tailor their offer more to Public sector needs	• Not focused on public sector thus not competitive in this area

Quick Score Card	
First impression	★★
Availability of Public sector information	★★
Strategic help	★★★

Cable & Wireless Worldwide: www.cw.com

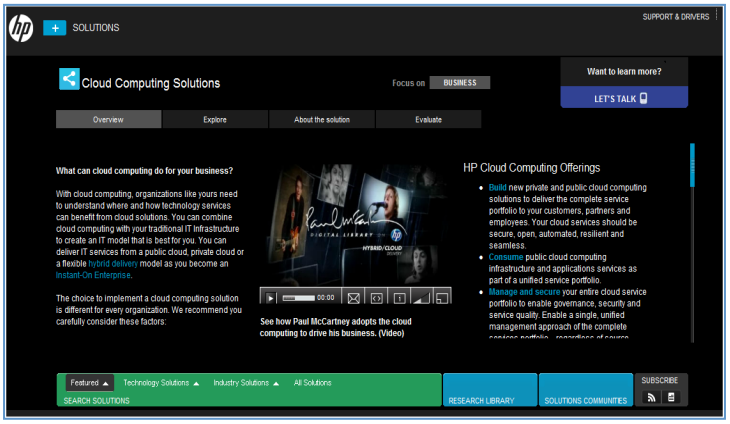


Cable&Wireless Worldwide is a global telecoms company providing a wide range of high-quality managed voice, data, hosting and IP-based services and applications. Established in the 1860s, Cable&Wireless helps more than 6,000 organizations deliver their goals. Our vision is to be the first choice for mission critical communications.

Strength	Weakness
• They have connects to more than 150 countries • Particular strength in the retail, financial services, utilities, government and media sectors • Content of the website written in easy and non-technical language • Brand recognizable in many countries	• Website contains more information about cloud computing in general than about services offered by Cable & Wireless • Only very basic and general information about the services and benefits of utilization of their products provided on the webpage • Focused on services for large companies only • Lack of information about prices and business models
Opportunity	**Threat**
Continuing to expand their network and technologies to improve both margin and capability to meet customer demands	Company specializes in delivering services for sectors that are highly dependable on communication infrastructure, thus serious difficulties may occur in adjusting their offer to the needs of public sector

Quick Score Card	
First impression	★★
Availability of Public sector information	★
Strategic help	★

HP: www.hp.com/go/cloud-computing

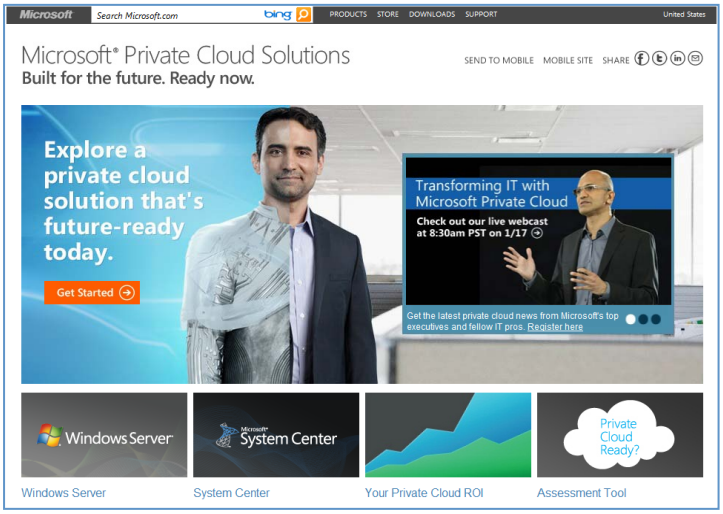


HP is a cloud solutions provider of infrastructure as well as business services and solutions for thousands of clients in more than 100 countries. Cloud Computing is a better new way of doing what we've been doing for more than 45 years.

Strength	Weakness
• Cloud assesSME'snt online form available for potential customers to help them in initial identification of their needs • Workshops for businesses and governments that help to develop optimal path for leveraging the cloud • Offers financial services for companies with limited resources • Possibility to chat online with a sale person to get more detailed information about cloud computing solutions offered by HP • Oriented in delivering services tailored to clients' needs	• Cloud computing is not the main area of company's activity • Very general and limited information about services on the company's website • Website difficult to navigate • Information about the services mixed with general information about cloud computing • No names of clients mentioned on the website which decrease reliability of offered solutions • Focused on businesses, no offers tailored to public sector's needs presented
Opportunity	**Threat**
High potential to extend offered solution due to the high funds invested in Labs: one of HP labs located in Singapore is third research site in the Asia Pacific region and seventh worldwide.	Limited offer of cloud solutions developed so far results in low competitiveness on the public sector market

Quick Score Card	
First impression	★
Availability of Public sector information	★
Strategic help	★★★

Microsoft: http://microsoft.com/readynow



Microsoft is the clear leader in cloud computing with software, services, and tools that are familiar to people around the world. Our vision for cloud computing offers a holistic approach that enables organizations to determine what they need from the cloud and how it fits into their environment. Cloud computing should not be an all-or-nothing decision, but rather, another set of tools to accomplish your goals and meet the requirements of your organization. This is why Microsoft provides offerings to support public, private, and on-premises solutions

Strength	Weakness
• Offers 30 days free trial period • Website contains information about prices • Offers support in choosing relevant product (possibility to talk to sale consultants) • Highlights financial benefits from choosing particular services (facts and figures presented) • Presents examples of successful implementation of offered products • Contains many information about cloud computing for public sector (case studies, white papers, videos, webcasts, articles) • Offers online trainings for clients • Offers variety of support plans for large and international institutions • High brand recognition	• Based on one business model only (subscription model) • They do not offer the most advanced solutions on the market • Services that build third-party website are not available
Opportunity	**Threat**
• Offers solutions that have been already tailored to public sector's needs and successfully implemented	• Some competitors offer more advanced solutions in cloud computing arena

Quick Score Card	
First impression	★★★★
Availability of Public sector information	★★★★★
Strategic help	★★★★

EMC²: www.emc.com



EMC2 can help you transform IT to deliver results. The journey to your cloud starts with virtualization and extends to a transformation of how you power your business. EMC can accelerate you to higher efficiency, rock-solid capability for mission-critical applications, and new ways to drive business value with a comprehensive approach to infrastructure, applications, and user access. EMC's products, services, and solutions are designed to help you build your cloud, better.

Strength	Weakness
• Partner network established with companies all over the world • Offers support for existing and new customers via e-mail and via phone • Offers a broad range of trainings, about various issues related to cloud computing and at all levels (some of which are free of charge) • Website very easy to navigate • Awarded many times for technical solutions • Offers wide range of solutions and services	• It seems like the website is available in almost 100 languages, but only very limited parts of content are translated in local languages • Website not visually not attractive • Many tabs at the company website are not active • Website text-heavy • The whole content of the website organized like in a dictionary – many short mini-articles related to particular terms and services, which is discouraging for visitors who look for general information only
Opportunity	**Threat**
They have already created online communities networking EMC specialists and clients by providing them with a virtual space for discussions, sharing opinions etc.	May lose some parts of business because of perceived costs and complexity

Quick Score Card	
First impression	★★★
Availability of Public sector information	★
Provision of strategic help	★★

Annex C: Influencer Meeting Table

Name	Title	Description	Location & Date	Impact
Andy Smith	Head of EMEA, Public sector, Oracle	Discuss EPIC in relation to the Oracle cloud solution and public sector strategy	Socitm Conference, Brighton, England, October 2010	Asked EPIC team for help ensuring that Oracle Smart City concepts reflect EU priorities
Andrew Stott	Former Director of Digital Engagement, UK Cabinet Office	Discuss the EPIC project and ways to include the UK in future Smart Cities initiatives.	British Embassy, Greece, March 2011	Agreed to serve as adviser to a follow on Smart City initiative
David Landsman. OBE	British Ambassador to Greece	Discuss the role of UK and Greek partners in the EPIC project	British Embassy, Greece, March 2011	EPIC to help inform his ICT discussions with Greek civil servants
Geert Mareels	Head of eGovernment, Flanders, Belgium (Corve)	Discuss ways in which to build upon the EPIC Smart City solution in a Flemish context	Corve offices, Brussels, Belgium, April 2011	Spearheaded a follow on Smart City project – Citadel on the Move
Richard Kerby	Top UN advisor to Europe, Middle East and Africa on ICT and eGovernment to	Discuss EPIC and the new EU smart city initiatives in Europe and its influence on the future eGovernment strategies in the Gulf.	Qatar ICT Conference and Exhibition (Qitcom) May 2011	Presented EPIC and EU Smart City thinking to the Qatari eGov Authority and their counterparts in Oman
Mohamed Al-Qaed	CEO, Bahraini eGov Authority	Discuss EPIC in relation to the Bahraini Cloud Computing strategy	Bahrain International eGovernment Forum May 2011	Arranged for EPIC project team to meet with University of Bahrain officials to discuss introduction of Living Labs in Bahrain
Ebrahim Mohammed Janahi	President, University of Bahrain	Discuss EPIC in relation to the wider introduction of IOT in the Gulf and future collaboration with European Universities	University of Bahrain, May 2011	Invited EPIC team to present EU Smart City initiatives involving IOT to specialist academics at the University in April 2012
Abdulla Ishaq	General Manager of Gulf Business Machines (GBM)	Discuss translating the EPIC solution to the Gulf	21c Offices, London, England July 2011	Introduced EPIC and Smart City concept to colleagues across the Gulf at annual regional meeting in Dubai
Mike Baldock	Head of Cloud Computing & Smarter Cities, IBM Global Technology Services, Middle East and Africa	Discuss translating the EPIC Smart City focus to the Gulf	21c Offices, London, England, July 2011	Is linking IBM work on EPIC in Europe to nascent cloud computing initiatives in the Gulf

David Burrows	Head of EMEA Public sector, Microsoft	Discuss collaborative opportunities between Microsoft and Smart City initiatives including EPIC	21c Offices, London, England, August 2011	Is potentially interested in participating in future Smart City projects
Dr. Zakareya Ahmed Al-Khajha	Director, Directorate of Policies and Business Processes Re-engineering, Bahraini eGovernment Authority	Discuss introduction of Living Labs to the Kingdom of Bahrain in relation to EPIC	ICEGOV 2011, Tallinn, Estonia, September 2011	Has invited EPIC to present follow up speech on Cloud Computing at forthcoming eGov Forum
Christophe Leclercq	EurActiv Founder and Publisher	Discuss EPIC in relation to wider Smart City initiatives	World eGov Forum, Issy -Les-Moulineaux, France, October 2011	Will promote EPIC in relation to EU Cloud Computing policies via EurActiv Network
Bill McCluggage	UK, Deputy CIO, Cabinet Office	Discuss EPIC in relation to the UK's G-Cloud Strategy	Polish Ministerial Conference, Poznan Poland November 2011	Has asked for follow up meeting prior to assuming his new role as Consulting for Cloud Computing at EMC
Graham Colclough	Vice President for Global eGovernment, Cap Gemini	Discuss EPIC in relation to Cap Gemini's Smart Cities strategy	21c Offices, London, England December 2011	Has asked to work collaboratively on promotion of Smart City concept
Jeremy Millard	Danish Technology Institute	Discuss and Smart Cities in relation to Asian initiatives	21c Offices, London, December 2011	Has invited EPIC to participate in forthcoming Asian Smart City Network
Ms. Dr. Scheermesser	Ministry of Innovation, Science and Research of North Rhine Westphalia	Discuss opportunities for future collaboration and funding of research projects.	Fraunhofer Offices, Wachtberg/Bonn, January 2012	Noted the EU Project EPIC as a prime example of beneficial research collaboration

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