Clearing the fog: operators' four steps to cloud success

Cloud isn't only what you do – **it's also how you do it**. For operators everywhere, executing a cloud strategy should cover **these essential phases**.

"For most operators, the reality of cloud is more nuanced than the numbers might suggest"

Cloud has been growing rapidly in recent years – and will continue to do so. The size of the combined public and private cloud market was estimated to be around USD 125 billion in 2015, and is expected to reach USD 230 billion by 2020 [1].

Today, many operators are present in the principal cloud markets: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) and Business Process as a Service (BPaaS). But despite the industry's ongoing growth story, operators' cloud revenues are still modest – typically 0.3 percent to 2.3 percent of their total revenues [2].

This article sets out what is required for operators to become winners in the cloud game. Cloud transformation is complex, and an end-to-end framework – comprising four key steps that can maximize the possibility of operators meeting their business objectives in this area – is presented.

WHY CLOUD?

For operators, the impact of cloud is commonly quantified in terms of reduced churn, increased average revenue per user (ARPU) or average revenue per account (ARPA), revenues from new segments, and improvements in efficiency and profitability. Criteria such as differentiation, time-to-market, customer satisfaction, quality of service and scalability are also important.

With effective bundling and targeting of cloud services, some operators have seen up to 50 percent reduction in churn and have more than doubled the ARPU of their business users in target segments. Some operators have also seen a positive impact on customer acquisition [3].

Many operators are also using the cloud to explore the potential of the Internet of Things (IoT). Global IoT revenues are forecasted to grow to USD 320 billion in 2022 [4], and cloud-based connectivity services are increasingly embedded in operator IoT solutions addressing sectors such as transport, logistics, health care, retail and financial services.

COSTS AND CLOUDS

But for most operators, the reality of cloud is more nuanced than these numbers might suggest.

For example, off-the-shelf cloud solutions are often perceived as cost-effective due to pay-as-you-go pricing models that enable operators to launch new offerings without significant investment. However, the cost of a cloud solution alone does not give a full picture of the broader investment required, and a number of other factors should be considered:

- As cloud complexity increases, new skills and competences are needed.
- Additional effort is required to manage inte-


ERICSSON

"In today's highly competitive cloud marketplace, operators can take concrete actions to increase their chances of success"

gration toward legacy systems and customer environments.

- Implementation of IoT business models and partnerships may need additional development effort. The extent to which clouds can speed up IoT adoption also depends on cloud compatibility with partner ecosystems.
- Launching new offerings will require marketing efforts, incentivizing sales channels, customer care training etc.
- Security management.
- The cost impact of switching cloud providers.

In addition, transformation programs are often platform- or technology-centric, and once they have been completed it can be difficult to prove or quantify business benefits.

WINNING THE CLOUD GAME

An operator increases its chances of winning in the cloud game if it is able to:

- *Build on its strengths:* the cloud market provides diverse opportunities to create a successful business. Operators should carefully select where to play and define the target market based on their own terms. For example, IaaS is about scale, volumes and efficiency, while SaaS can provide up-sell opportunities by leveraging the existing customer base.
- *Define clear business objectives:* operators should set targets and KPIs and follow up progress. Sometimes business objectives are contradictory – for example, it may be necessary to choose between cost efficiency and flexibility. To create an impact, operators need to understand business needs and prioritize accordingly.
- *Target and differentiate:* operators should leverage their customer base and experiences from other markets. Operators who have been present in vertical markets are likely to benefit from their existing customer base, established operations and past experiences. Similarly, a leading operator in specific markets or customer segments can enjoy competitive advantages when building market differentiators.
- *Creating perception as an attractive partner:* to capture new growth opportunities, new services and business models will be needed. These require partnerships and ecosystem development. With the right skills and capabilities in place, operators are more likely to attract premium brands and to provide customers what they want. The key question for every operator to answer is: What makes you special?
- *Leverage operational synergies:* operators can leverage synergies in brand, sales, distribution, customer care, development and local presence. By integrating cloud services with core operator services, they can create differentiators and take the customer experience to a new level.
- *Build and maintain agile organizations:* with skilled and highly motivated people, operators are able to move fast when required.
- *Focus on early time-to-market:* speed is likely to provide competitive advantages.

DEFINE, PLAN, IMPLEMENT AND MONITOR

Operators need to develop an end-to-end cloud strategy that encompasses these priorities. This strategy should be executed according to four structured steps: define, plan, implement and monitor.

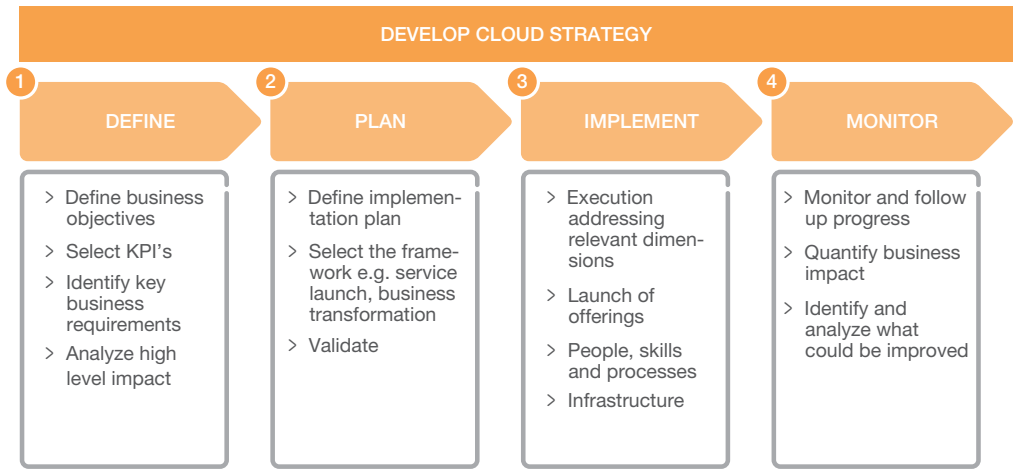

Figure 1: The four steps of cloud strategy execution.

"The cloud market is growing rapidly – and it's time for operators' cloud businesses to do the same"

STEP 0: DEVELOP A CLOUD STRATEGY

But before embarking on these steps, a solid strategy needs to be developed. The cloud space is becoming increasingly crowded, and it is critical that operators carefully choose where to play. Depending on their strategy and business priorities, the implementation and organizational impact will be very different.

When developing this strategy, operators should consider the following:

- In IaaS, market consolidation will continue. The largest five players are expected to capture 77 percent of the market by 2019 [5]. IaaS is a capital-intensive business and operators require deep pockets to compete with dominant players. Operators who chose the IaaS market will need to make significant investments and acquisitions to build a position. It is also a high-volume, low-margin business where strong price erosion is a reality.
- PaaS includes both IaaS and a platform through which IaaS can be outsourced to a cloud supplier or partner. The focus for operators in the PaaS market will be monetizing APIs and providing capabilities for application providers to build customized applications. Many operators see PaaS as a vendor or specialist play, and have chosen not to build a position in this market.
- SaaS is a diverse market where the overall aim is to provide services for both consumers and enterprises. Enterprise SaaS is expected to be a high-growth market, where SMEs are often the early adopters. One operator SaaS strategy is to resell leading cloud services or bundle clouds with other products and services. In addition to direct revenues, bundled SaaS services can contribute to increased ARPU or ARPA, reduced churn and higher subscriber acquisition rates.
- Cloud deployments in the BPaaS market include financial services, billing and e-commerce. BPaaS provides opportunities for operators to monetize organizational assets such as customer care, sales and distribution.

STEP 1: DEFINE

Depending on their strategy, an operator will need to define business objectives, select KPIs, identify key business requirements and analyze how business impact can be created.

For example, if an operator chooses to compete in IaaS, the main focus will be building scale and the customer base. Business objectives will therefore include securing relevant expertise, improving cost efficiency and developing market differentiators. If the strategy is to upsell cloud services to SME customers through SaaS, the priority may instead be to partner with premium brands and launch attractive services.

Once the objectives are defined, operators need to break these down into business requirements supported by KPIs and a robust impact assessment. For example, if the priority is to accelerate time-to-market, operators will need to identify bottlenecks and remove them through process and system simplification.

Business objectives can sometimes be contradictory. For instance, fast time-to- market can increase the risk of service quality problems. Similarly, aggressive efficiency programs can result in an operator not having the right capabilities or flexibility in place when required. To set the right objectives, an operator needs a deep understanding of what their business really needs.

STEP 2: PLAN

Next, the operator needs a cloud implementation plan that addresses all operational levels, including people, business, processes and infrastructure. The plan should be based on the business objectives from Step 1. For example:

- **Objective:** improve process efficiency.
- **Plan:** OSS/BSS transformation that enables simplification and automation of manual processes.

At all times, operators need to look at the big picture. By optimizing resources or specific processes, they may create inefficiencies somewhere else.

STEP 3: IMPLEMENT

Project organization is usually responsible for executing the implementation plan by addressing relevant dimensions such as organization and processes, services and offerings and the impact on infrastructure.

Organization and processes: complexity in clouds is increasing. New skills and competences are required to enable cloud transformation. Although complexity and processes can increasingly be moved to the cloud, new processes will be required to manage these clouds.

Services and offerings: cloud implementation may require new ways of reselling cloud services or packaging cloud services with existing services. Launching new services will require marketing efforts, incentivizing sales channels and training customer care.

Infrastructure: integration toward legacy systems and enterprise applications, compliance with local laws and regulations, and implementation of new security requirements will all be needed.

STEP 4: MONITOR

Once the implementation has been completed, it is important to monitor and follow up on progress, quantify business impact and define what could be improved. Operators need to continually ask themselves questions such as: to what extent are the initial business targets being met? Where are the key gaps? What could be done differently?

CLEARING THE FOG

In today's highly competitive cloud marketplace, operators can take concrete actions to increase their chances of success. They can build on their strengths, define clear business objectives, target and differentiate, create perception as an attractive partner, leverage operational synergies, maintain agile organizations and focus on early time-to-market.

Operators need to develop an end-to-end cloud strategy that encompasses these priorities. This strategy should be executed according to four structured steps: define, plan, implement and monitor.

The cloud market is growing rapidly – and it's time for operators' cloud businesses to do the same. ●

ABOUT THE AUTHOR

MARIETTE LEHTO is a Customer Unit Principal working with Strategy and Business Excellence in Region Northern Europe & Central Asia at Ericsson. Over the years she has driven new business initiatives in areas such as machine-to-machine, the Internet of Things, digital transformation and customer experience management. Before joining Ericsson, Lehto worked at 3 Sweden, Edgecom and Sonera Finland. She holds an MSc in Telecommunications from Helsinki University of Technology, Finland.

REFERENCES

[1] Technology Business Research, *Public Cloud Market Forecast*, January 2016, available at: http://www.tbri.com/capabilities/market-forecasting/; Technology Business Research, Private Cloud Customer Research, Q4 2015.

[2] Technology Business Research, *Carrier Cloud Market Forecast XLS Data*, October 2015, available at: http://tbri.com/capabilities/market-forecasting/

[3] STL Partners, *What is the role of telcos in cloud services in 2015?*, November 2014, available at: http://www.telco2research.com/articles/Cloud2015RoleofCSP

[4] Strategy Analytics, *Who Will Make Money in the Internet of Things?*, September 2015, available at: https://www.strategyanalytics.com/access-services/enterprise/iot/reports/report-detail/who-will-make-money-in-the-internet-of-things#.V07QZjeKRdg

[5] Technology Business Research, *Public Cloud Market Forecast*, op. cit.

284 24-0058 Uen