Title: What are the Advantages of Transitioning BSS/OSS to the Cloud?

Description: Why are telcos afraid of migration to the public cloud? Explore the core prospects and pitfalls of making BSS/OSS migration to the cloud profitable and risky.

BSS/OSS Migration to the Cloud. Benefits and Challenges

Broadband service providers (BSPs) are at a crossroads in the rapidly changing world of technology. Their reliance on traditional BSS and OSS is causing problems. Despite being costly and inefficient, they also struggle to keep up with technology developments, supply chain issues, and sophisticated resource management. A lot of businesses chose Cloud BSS and OSS migration as an alternative. Keep reading to explore why such a step is advantageous.

Implementing a Cloud-first attitude

Many smaller BSPs find it hard to move to the public using their BSS. Nevertheless, most organisations worldwide have already implemented the public Cloud in their daily lives. Take, for example, the widespread use of Gmail or iCloud, which have revolutionised how over half of the world's 4.4 billion email users manage their emails. These Cloud-based platforms have distanced themselves from storing emails locally on computers.

The entertainment industry does not fall behind, with 78% of U.S. households subscribing to streaming services. Such a preference highlights a growing comfort with Cloud storage. Additionally, the trend extends to personal data storage as well, with 71% of individuals now storing photos and backing up files in the Cloud.

So, if the public Cloud is trusted in personal lives, why hesitate to implement it in business? If the team is hesitant about it, consider education and training, facilitating a smoother transition to the public Cloud in business operations.

The public Cloud's limitations and prospects for BSS/OSS

Core limitations

- **Lowered direct control.** Businesses that own and manage their servers internally will need to trust this process with third-party providers. This means relying on firms like Amazon Web Services, Google Cloud Platform, or Microsoft Azure and assigning them vital functions.
- **Serverless architecture costs.** Serverless architecture marks a significant shift, with Cloud providers charging based on user requests. This model can seem economical

per request, but it can later cost a lot for telecom companies due to high request volumes. In contrast to larger corporations that negotiate reduced rates, smaller businesses may struggle with these hidden expenses, lacking similar negotiating power.

- **Mixing compatible platforms.** Moving to a public Cloud BSS/OSS system might require working with a platform that differs from a company's existing software ecosystem.

  For instance, a business operating primarily on Microsoft-based solutions might be timid about adopting a system built on Amazon Web Services. Going to another competitive platform can be a concern, though many find that these Cloud-based solutions are adaptable and compatible with various systems.

Core prospects

- **Save time and money.** The shift allows large businesses to save on the costs and time associated with maintaining physical server infrastructure. This approach also mitigates risks related to equipment failure and obsolescence.
- **Human resource efficiency**. Managing in-house servers demands skilled professionals and significant time investment. Cloud BSS/OSS offloads this responsibility to the Cloud provider's expert team, effectively releasing a company's resource pool and focusing its staff on other business activities.
- **Dependable suppliers.** Amazon and Google have established their reputations by providing dependable and efficient services. These platforms feature uptime guarantees and expert assistance, meeting the demands of a wide range of organisations, from small firms to major multinationals.
- **High ROI.** The placement of data centres by leading providers plays a major role in Cloud migration decisions, especially for telecom companies. Selecting data centres in proximity to a company's OSS infrastructure is a must for all CSPs in terms of compliance and cost optimization.

  While the Cloud offers cost benefits in terms of maintenance, it's important to consider the potential latency and price when integrating such systems with on-premise data centres.

  For larger telecom firms that own direct data channels, handling this traffic can be almost cost-neutral. In contrast, small and medium-sized businesses, which typically rely on rented channels, may find the cost of returning service traffic to the Cloud less feasible. This financial consideration is often a deciding factor for smaller telecoms, leading them to choose to host solutions within their own data centres over Cloud migration.

BSS/OSS Migration to a Public Cloud: Pros & Cons

Pros	Cons
Save time and money	**Lowered direct control**
Human resource efficiency	**Serverless architecture costs**
Dependable suppliers	**Mixing compatible platforms**
High ROI	**Cybersecurity risks**

Key benefits of Cloud BSS and OSS

Scalability. Public Cloud providers enable businesses to spread their workloads across various data centres and regions, both domestically and globally. This flexibility allows the establishment of a geographically diverse server infrastructure, improving reliability and performance. The ability to scale resources contrasts sharply with the more complex and expensive process required for physical server expansion.

Efficiency. Consider the analogy of constructing a house. In one case, there is access to a comprehensive supply of tools and materials from a large retailer. In another, the company is tasked with creating tools and gathering materials from scratch. The former is clearly more efficient, showing the advantage offered by public Cloud providers. They hold plenty of resources, including artificial intelligence, machine learning, and business analytics, and don’t have to develop these tools in-house.

Summary

The transition to the public Cloud presents a significant opportunity for businesses. This shift aligns with the global trend toward digitalization and offers tangible benefits in terms of resource optimization and scalability. In the meantime, you should keep in mind that the migration creates several significant risks to consider, such as an increase in data traffic and expenses, as well as cybersecurity vulnerabilities.