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**RESEARCH ARTICLE**

## Saudi Arabia's Cloud Broadband Landscape: Opportunities and Challenges in the Era of Vision 2030

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### ABSTRACT

The cloud broadband market in Saudi Arabia is undergoing a rapid transformation, driven by the increasing enterprise adoption of cloud-based solutions. This necessitates high-performance, secure, and scalable connectivity, with a growing emphasis on cost-efficient broadband solutions. This research critically analyzes the current cloud broadband landscape, including enterprise usage patterns, preferred connectivity types, and investment trends. It also focuses on a leading telecommunications provider and the positioning of its strategy in this dynamic market. Based on primary research with 131 enterprises, the study identifies key opportunities, such as bundled cloud connectivity solutions, AI for cost optimization, and cybersecurity suite enhancements. However, challenges persist, including pricing sensitivity, intensified competition, and evolving enterprise demands. To maintain market leadership, the telecom provider must adopt an innovation-driven approach, balancing cost efficiency, AI integration, and flexible service models. Addressing these factors will enable the provider to improve its competitive advantage, accommodate the enterprise cloud on a greater scale, and solidify its leadership in Saudi Arabia's expanding digital economy. A proactive approach is crucial for long-term success in this evolving market.

### KEYWORDS

Cloud broadband, Cloud Computing, Broadband, IoT, Digital Transformation, Enterprise Connectivity, Cloud Adoption, Multi-Cloud, AI-Powered, Bundled Solutions, Cost Optimization, Cybersecurity, Market Competition, Service Innovation, Saudi Vision 2030

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### 1. Introduction

The rapid adoption of public cloud platforms, such as Microsoft Azure and Google Cloud Platform, is driving enterprise digital transformation in Saudi Arabia. This necessitates dynamic and scalable connectivity solutions. The increasing trend of using a multi-cloud strategy, where enterprises integrate IaaS, SaaS, and PaaS to improve efficiency and flexibility, further underscores the need for high-performance, secure, and cost-effective broadband solutions. A leading telecom provider is a strategic enabler of enterprise cloud connectivity, dominating the broadband and private network segments that underpin Saudi Arabia's overall transformation. With enterprise cloud spending forecasted to grow, businesses are seeking strategic connectivity solutions that efficiently reduce costs, provide security, and incorporate AI-driven management.

This study focuses on the opportunities and challenges that this telecom provider faces in this evolving market. To maintain its position, the company must innovate, expand cloud-integrated solutions, and address pricing sensitivities. A strategic approach is crucial to meet enterprise cloud demands and remain competitive in the long term.

### 2. Literature Review

The adoption of cloud computing in Saudi Arabia has been a subject of growing interest in recent years. Research indicates a strong trend towards digital transformation across various sectors, with cloud-based solutions playing a crucial role. Studies have highlighted the key benefits and challenges associated with cloud adoption in the Saudi context, including factors

such as cost optimization, security concerns, and the need for skilled personnel. Research has also explored the impact of cloud computing on specific sectors, such as higher education institutions and small and medium enterprises (SMEs).

The role of digital innovation dynamics in influencing organizational adoption of cloud services has also been investigated. In terms of the broader technological landscape, studies have examined the integration of on-premises and cloud-based software, highlighting the importance of product bundling strategies. The emergence of AI and its implications for next-generation computing, including cloud infrastructure, have also been discussed. Furthermore, research has analyzed the financial aspects of cloud adoption, including stock valuation of telecommunication providers involved in cloud services.

The importance of robust cybersecurity frameworks in protecting against threats in the cloud environment has also been emphasized. Overall, the existing literature provides a valuable foundation for understanding the dynamics of cloud broadband services in Saudi Arabia. This research aims to build upon this foundation by examining current enterprise usage patterns, identifying key opportunities and challenges, and offering strategic recommendations for A Leading Telecom Provider to maintain its market leadership in this evolving landscape.

### **3. Methodology**

This study employed a quantitative market research survey targeting enterprise decision-makers responsible for telecom services. Detailed insights into connectivity preferences, cloud adoption patterns, and investment trends were gathered through a structured questionnaire. To avoid misinterpretations and ensure applicability in the field, the survey was conducted through face-to-face interviews, guaranteeing high-quality responses. A broad market overview was obtained through a sample of 131 firms representing diverse industrial sectors, regions, and enterprise sizes. This granular approach allowed for the analysis of enterprise demands for preferred cloud providers, pricing, and AI-driven cloud connectivity solutions, enabling the provision of tailored content.

The study's findings are relevant across Saudi Arabia's corporate landscape, including the technology, finance, manufacturing, and retail sectors, providing insights into sector-specific connectivity needs and cloud adoption barriers. This research uses rigorous data collection to provide empirical evidence that can help A Major Telecom Operator make strategic decisions aligned with enterprise cloud transformation and the evolving Saudi digital economy.

### **4. Cloud Service Adoption in Saudi Enterprises**

Research findings reveal that Microsoft Azure and Google Cloud Platform dominate Saudi Arabia's enterprise cloud market, reflecting a strong preference for global hyperscalers. These providers offer established infrastructure, scalability, and a wide range of cloud services, making them attractive to enterprises. The widespread adoption of multi-cloud strategies, with enterprises using an average of 1.8 cloud vendors, indicates a demand for flexibility, redundancy, and cost-effectiveness. Enterprises diversify their cloud deployments to reduce downtime, avoid vendor lock-in, and optimize service for specific workloads, leveraging specialized capabilities across different cloud platforms. The increasing adoption of hybrid and multi-cloud architectures necessitates connectivity solutions that seamlessly connect multiple cloud environments, facilitating smoother data transfer, workload balancing, and application interoperability.

As enterprise IT ecosystems grow in complexity, the demand for advanced connectivity and management solutions increases to achieve scalability, security, and compliance. Despite high satisfaction levels with current cloud providers, enterprises remain open to switching if they find better pricing, improved service quality, or value-added features. This presents a strategic opportunity for the incumbent Telecom Operator to position itself as a critical connectivity facilitator by offering comprehensive cloud broadband solutions that meet the requirements of cloud security, cost efficiency, and cloud interoperability.

### **5. Internet and Cloud Connectivity Trends**

Fiber fixed broadband remains the primary enterprise connectivity solution in Saudi Arabia, with A Leading Telecom Provider holding a dominant market share due to its robust infrastructure and service reliability. Additionally, A Leading Telecom Provider is a major provider of MPLS Layer 3 (IPVPN) solutions for private enterprise connectivity, a key segment for high-security, high-performance networks. However, as enterprises transition to cloud-centric operations, connectivity preferences are shifting towards hybrid cloud models with diverse access options to maximize redundancy, flexibility, and cost-effectiveness. Organizations are increasingly adopting direct cloud connectivity through private cloud interconnects to establish low-latency and secure access to cloud providers, reducing reliance on traditional broadband for critical workloads.

Nevertheless, broadband internet access remains a viable option for less sensitive, cost-effective cloud applications. Enterprises requiring secure, high-performance connections for mission-critical workloads are turning to private links. This diversification of connectivity strategies suggests a broader transition towards adaptive, multi-modal cloud networking architectures designed for scalability, security, and efficiency. This transformation positions A Leading Telecom Provider to strengthen its market leadership in hybrid cloud broadband solutions, offering seamless integration of these diverse connectivity requirements.

## 6. Future Spending Trends in Cloud Services

The increasing enterprise investment in cloud services in Saudi Arabia reflects a strong commitment to digital transformation. Over one-third of businesses plan to increase cloud spending in the coming year, driven by several key factors. Cloud infrastructure capacity is expanding to support scalability, data storage, and workload processing. Enterprises are adopting SaaS, IaaS, and PaaS solutions to enhance efficiency, collaboration, and business agility. Security remains a critical driver, with cloud security frameworks becoming essential for addressing growing cyber threats and regulatory requirements.

These investments are expected to deliver ROI within one year. This presents a strategic opportunity for the incumbent Telecom Operator. By offering scalable, secure, and AI-powered cloud connectivity, the company can strengthen its position as a leading enterprise partner. Differentiating features, such as cost optimization tools, managed security, high speed, and low-latency cloud access, are crucial for competing effectively. Enterprises seek comprehensive, high-value cloud solutions that address performance, security, and cost optimization needs. The incumbent Telecom Operator's ability to deliver flexible, secure, and optimized cloud broadband will drive long-term growth.

## 7. Enterprise Interest in Bundled Cloud Connectivity Solutions

The research highlights a growing enterprise demand for bundled cloud connectivity solutions, emphasizing the need for integrated offerings that combine network infrastructure, cloud services, and AI-powered observability tools. Organizations are seeking converged solutions to simplify IT management, enhance cost efficiency, and strengthen security in increasingly complex IT environments.

AI-powered cost optimization is a key driver, with over 46% of enterprises already using it to manage cloud resources intelligently, eliminate unnecessary expenses, and ensure optimal performance of multi-cloud infrastructures. Enhanced security mechanisms are another priority, with businesses requiring robust cybersecurity frameworks to protect data, prevent cyberattacks, and meet regulatory compliance. Simplifying IT administration is also crucial, with enterprises seeking to reduce operational complexity through automated and integrated cloud connectivity solutions that improve scalability and performance.

This trend allows A Major Telecom Operator to leverage its market leadership to provide enterprise-grade, AI-driven cloud broadband solutions. Prioritizing cost optimization, security, and automation will help A Major Telecom Operator position itself as the preferred cloud connectivity provider compared to global hyperscalers.

## 8. Evaluating The Telecom Company's Cloud Broadband Proposition

The Telecom Company's Cloud Broadband proposition has garnered strong enterprise interest due to its ability to deliver integrated, high-performance solutions tailored to key business needs. The Telecom Company provides all of these in a package that will meet the ongoing demand for seamless, secure, and efficient Cloud Connectivity. Firms look for a unified approach in which cloud services as a bundle help simplify IT, strengthen security, and improve operational aspects. However, price sensitivity remains a very important factor, which means that The Telecom Company will have to use a flexible pricing strategy that is able to accommodate premium service quality with affordability. Businesses will get an option to choose a tiered pricing model that will suit their budgetary constraints and will allow them to create customized cloud broadband solutions based on their needs.

Furthermore, enterprise interest is based on the configuration of features, calling for modular service packages. The Telecom Company can play a significant role in maximizing competitiveness, preserving customer retention, and maintaining market leadership in Saudi Arabia's evolving cloud broadband market by providing scalable and customizable solutions.

## 9. Opportunities and Challenges for The Incumbent Telecom Operator

### Opportunities

The Telecom Company is at a strategic inflection point in Saudi Arabia's cloud broadband market, with significant opportunities to expand enterprise services. Bundled cloud connectivity solutions are a key avenue for growth, as enterprises demonstrate a strong demand for integrated offerings that combine network infrastructure, cloud services, and AI features. By introducing such solutions, The Telecom Company can add customer value, facilitate IT management, provide cost-effective cloud access, and reinforce its position as a one-stop provider for enterprise connectivity. Leveraging its market leadership is also crucial. As Saudi Arabia's dominant broadband and MPLS provider, The Telecom Company has strong enterprise relationships that can be used to promote the adoption of cloud broadband services. Additionally, cost optimization and AI-driven differentiation can provide a competitive advantage.

### Challenges

The Telecom Company faces significant challenges in Saudi Arabia's rapidly evolving cloud broadband market, requiring strategic navigation to maintain its competitive edge. Enterprise pricing sensitivity remains a hurdle, necessitating flexible pricing models, such as tiered subscription plans and usage-based billing, to accommodate varying budget constraints.

Market competition is intensifying, with The Telecom Company competing not only with other local telecom firms but also with global cloud giants that have extensive infrastructure and advanced cloud services. To counter these threats, The Telecom Company needs strong differentiation strategies, leveraging its expertise in localized matters like regulatory compliance and value-added services. Continuous service innovation is also essential to meet the ever-evolving enterprise cloud needs. As more businesses adopt multi-cloud and AI-driven solutions, The Telecom Company must upgrade its offerings to include cutting-edge security, automation, and performance enhancements.

## 10. Conclusion

Saudi Arabia's cloud broadband market presents a significant growth path for A Leading Telecom Provider, with opportunities to expand its enterprise presence through market leadership, AI-enabled cost savings, and bundled service offerings. The increasing adoption of cloud-first strategies among enterprises drives demand for high-performance, scalable, and cost-effective connectivity solutions, positioning A Leading Telecom Provider at the forefront of digital transformation. However, sustaining long-term market leadership requires a multi-faceted approach that addresses price sensitivities, service innovation, and competitive differentiation. Given the high price elasticity of enterprise cloud services, A Leading Telecom Provider must introduce flexible, modular pricing structures that cater to varying budget constraints and service-level expectations. Additionally, continuous innovation in cloud broadband offerings is crucial, prioritizing security, automation, and AI-powered network intelligence as core components of A Leading Telecom Provider's value proposition.

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