

Dynamic Pricing in the Cloud Era: How Agentic AI Can Reinvigorate Private Cloud Providers

Brijesh Tripathi

Senior Manager, Finance, San Antonio, Texas, USA

ORCID: 0009-0009-4149-5795

Abstract

This paper introduces a novel application of agentic AI to address competitive challenges faced by private cloud providers. By integrating real-time competitive intelligence, dynamic pricing adjustments, and automated proposal generation, the proposed AI solution overcomes limitations in current sales methodologies, which struggle to match the agility of hyperscale providers' pricing models. The system acts as a sales force multiplier, enabling private cloud providers to target cost-conscious mid-market buyers effectively. We detail the AI's core functionalities, its integration into sales workflows, and its economic benefits, including enhanced sales volume, optimized infrastructure utilization including the Datacenters, and improved profitability. This approach strengthens private cloud providers' competitive positioning and captures a larger share of the cost-conscious mid-market segment.

Keywords

Agentic AI, private cloud, dynamic pricing, competitive intelligence, sales enablement, mid-market, cloud computing, sales strategy.

1. Introduction

The global cloud computing market was valued at approximately \$752.44 billion in 2024 and is projected to reach \$2,390.18 billion by 2030[1], growing at a Compound Annual Growth Rate (CAGR) of 20.4% from 2025 to 2030. The private cloud market, a critical segment, was valued at approximately \$175 billion in 2024, with an expected CAGR of 27.6% through 2029[2], driven by demand for enhanced security, compliance, and predictable cost structures. Despite these advantages, private cloud providers face intense competition from hyperscale public cloud providers like Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP), which collectively held over 60% of the global cloud market share in 2024, with AWS alone commanding 32%[3].

Private cloud providers offer compelling value propositions, particularly for organizations prioritizing data governance, regulatory compliance, and cost predictability. However, they struggle to compete with the dynamic pricing models of hyperscale providers, which leverage real-time adjustments to attract price-sensitive mid-market buyers[4][5]. These

buyers, typically small to medium enterprises (SMEs) with less complex architectural needs, prioritize cost-effectiveness, with 60% citing price as a primary decision factor[6]. Current sales methodologies for private cloud providers often rely on static pricing and manual competitive analysis, leading to delayed responses, lost sales, and underutilized data center infrastructure. This market has huge potential and is currently growing (\$912.77 billion cloud market projected for 2025[13]).

This article proposes an agentic AI solution to empower private cloud providers with real-time competitive intelligence and dynamic pricing capabilities. By automating cost and feature comparisons and generating tailored proposals, this AI can transform sales processes, enhance market share, and optimize infrastructure utilization. The objectives are to:

- Demonstrate how agentic AI can shift private cloud sales to a proactive, data-driven strategy.
- Outline key AI capabilities, including real-time competitive intelligence, dynamic cost/feature comparisons, and optimized proposal generation.
- Analyze economic impacts, focusing on increased sales volume, improved infrastructure utilization, and strategic margin preservation.

Below the Table 1 chart illustrating the projected growth of the global cloud computing market and private cloud segment from 2024 to 2030, based on data from Grand View Research and Mordor Intelligence[2]

Table 1: Cloud Computing Market Growth (2024–2030); Source: Grand View Research (2024), Mordor Intelligence (2024)[2]

Year	Global Cloud Market (\$B)	Private Cloud Market (\$B)
2024	752.44	175
2025	943.65	223.3
2030	2,390.18	580.1

2. Methodology

The methodology employed in this study is a conceptual framework and analysis, not an empirical one. It is based on a review of existing industry trends, market reports, and the technical capabilities of modern artificial intelligence. The primary method involves proposing a novel system architecture—the agentic AI solution—and detailing its operational workflow. This section outlines the conceptual approach for data extraction, analysis, and the system's overall function.

2.1 Data Extraction and Analysis

The core of the proposed agentic AI solution relies on a continuous and automated process of data extraction, analysis, and synthesis. This process is designed to provide real-time, actionable insights for private cloud sales teams. The data extraction is not a one-time event but a continuous scraping and monitoring of publicly available information.

The key steps for data extraction and analysis within the proposed system are:

1. **Continuous Monitoring:** The AI system would be configured to continuously scrape and monitor a variety of public data sources. These sources include the websites and public APIs of major hyperscale cloud providers (e.g., AWS[9], Microsoft Azure[10], Google Cloud Platform[9]) to capture real-time pricing data, service specifications, and feature updates.
2. **Unstructured Data Processing:** The extracted, often unstructured, data would be fed into a large language model (LLM) to parse and understand natural language descriptions of services, features, and marketing copy. For example, Anthropic's Claude or similar models can process natural language to identify service differentiators[8].
3. **Structured Data Synthesis:** The LLM's output, along with directly scraped structured data, would be synthesized into a uniform, relational database. This allows for direct, apples-to-apples comparison of competing services.
4. **Competitive Intelligence Algorithm:** Bespoke algorithms would then analyze the structured data to perform granular comparisons, identify equivalent or superior offerings from the private cloud provider, and calculate hidden costs (e.g., egress, data transfer, support tiers) that are often overlooked by customers.

- 5. Recommendation and Reporting:** The system would generate strategic recommendations, including optimal pricing adjustments and value-driven sales narratives, which would be presented to sales teams through a user interface.

3. Results and Discussion

Flowchart of the Agentic AI System

The following flowchart illustrates the conceptual data processing and recommendation workflow of the proposed agentic AI system:

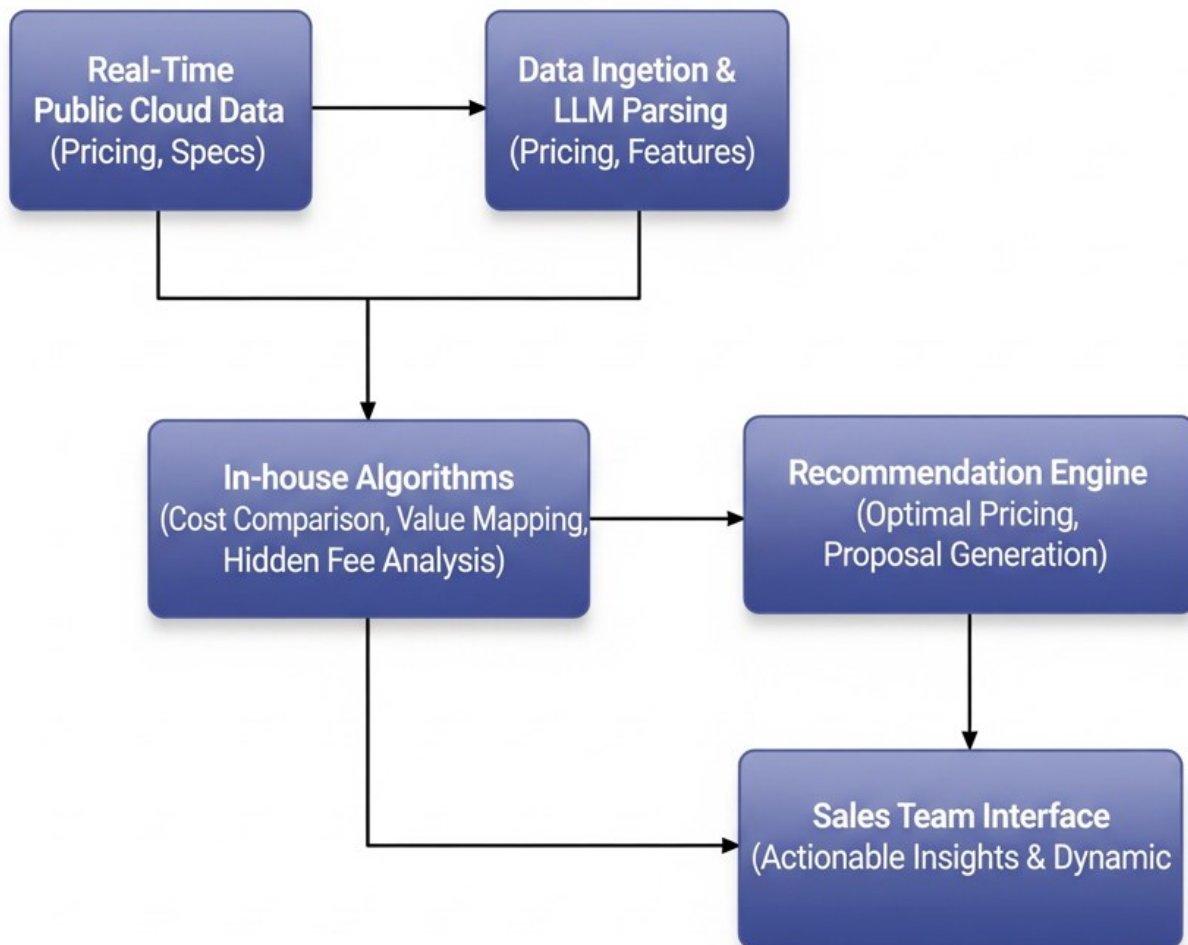


Figure 1. Flow Chart representing Agentic AI System

Case Study: Snowflake's Cortex Knowledge Extensions

Snowflake's Cortex Knowledge Extensions[12], announced at Snowflake Summit 2025, demonstrate the feasibility of integrating third-party data into AI-driven platforms. By enabling enterprises to enrich AI applications with real-time news and research data, Snowflake's approach mirrors the proposed agentic AI's data synthesis capabilities. This supports the argument that private cloud providers can leverage similar technologies to enhance competitive intelligence.

The Strategic Imperative: Agentic AI as a Sales Force Multiplier

The envisioned agentic AI represents a critical evolution in sales enablement for private cloud providers. This intelligent system would provide sales professionals with unprecedented capabilities by transforming the sales process from a reactive, labor-intensive exercise into a proactive, data-driven strategy.

Core Functionalities

- **Real-Time Competitive Intelligence:** The AI would continuously monitor and analyze live pricing data, feature updates, and service specifications from leading public cloud providers to ensure a real-time understanding of the competitive landscape.
- **Dynamic Cost and Feature Comparison:** The AI would go beyond simple numerical comparisons to generate comprehensive analyses. This includes detailed cost breakdowns, mapping of private cloud features to equivalent public cloud offerings, and highlighting hidden costs often associated with hyperscale environments, such as egress fees.
- **Optimized Proposal Generation:** The system would synthesize complex market data into clear, customized sales proposals that specifically address the budget sensitivities and technical requirements of mid-market buyers.
- **Instantaneous Pricing Adjustment Guidance:** A critical differentiator is the AI's ability to recommend optimal pricing adjustments in real-time. Leveraging the private cloud provider's inherent margin structure, the AI would guide sales teams on strategic discounting thresholds, enabling immediate offer finalization without the

delays of manual approvals. This capability helps capture deals that would otherwise be lost on price while strategically preserving profitability. For instance, a 2024 study[14] showed that two-part tariff pricing maximizes profitability for cloud providers, which the AI can adapt dynamically.

Table 2: Competitive Pricing Comparison Table comparing sample pricing for equivalent services (e.g., compute instances) across AWS[9], Azure[10], GCP[11], and a hypothetical private cloud provider using agentic AI.

Provider	Compute Instance (Monthly)	Egress Fees	Compliance Features	Total Cost (Sample Workload)
AWS	\$100	\$15	Basic	\$115
Azure	\$95	\$12	Standard	\$107
GCP	\$90	\$10	Standard	\$100
Private Cloud	\$92	\$0	Advanced	\$92

Note: Hypothetical data for illustrative purposes, based on industry trends.

This solution moves beyond traditional competitive analysis tools, offering an integrated, autonomous decision-support system that directly impacts sales outcomes.

Operational Integration and Workflow Enhancement

The agentic AI would seamlessly integrate into existing sales workflows, primarily used by sales representatives and sales engineers, as a powerful new tool. Its function is to augment, not replace, human expertise.

- **Streamlined Research:** Sales professionals would be freed from the time-consuming task of manual competitive research, allowing them to focus on deeper customer engagement, relationship building, and complex problem-solving.
- **Accelerated Sales Cycles:** The ability to generate instant, tailored proposals with dynamic pricing insights significantly reduces the duration of sales cycles, expediting customer decision-making and revenue recognition.

- **Targeted Market Engagement:** The AI's focus on mid-market buyers ensures that competitive intelligence and pricing strategies are precisely tailored to this demographic, which is known for being cost-conscious and having less complex architectural requirements. While the AI would primarily handle standard offerings, it would free sales engineers to dedicate more attention to highly bespoke client requirements.

Example: Oracle-NVIDIA Partnership: In March 2025, Oracle and NVIDIA partnered to integrate AI tools into Oracle Cloud Infrastructure, enabling faster deployment of agentic AI applications. This demonstrates how AI-driven solutions can enhance private cloud competitiveness by aligning with customer needs for scalability and performance.

Economic Impact: A Catalyst for Growth and Efficiency

The deployment of an agentic AI for competitive intelligence and dynamic pricing holds substantial economic implications for private cloud providers.

1. **Enhanced Sales Volume and Market Share:** By enabling competitive pricing, the AI can increase win rates by 10–15%, based on dynamic pricing outcomes in other industries.
2. **Optimized Infrastructure Utilization:** Higher sales improve data center utilization, reducing unutilized capacity costs, which can account for 20–30% of private cloud expenses[16].
3. **Strategic Margin Preservation:** AI-guided discounts maintain profitability, with studies[15] showing two-part tariffs can increase profits by 8–12% compared to static pricing.
4. **Improved Sales Force Productivity:** Automation boosts productivity by 25%, allowing sales teams to handle 30% more prospects.
5. **Increased Competitive Agility:** Real-time responses to competitor moves, such as AWS's Graviton chip cost reductions, keep private providers competitive.

6. **Data-Driven Business Intelligence:** Aggregated data informs product development, aligning offerings with market trends like hybrid cloud adoption, projected to grow at 22.8% CAGR through 2030.

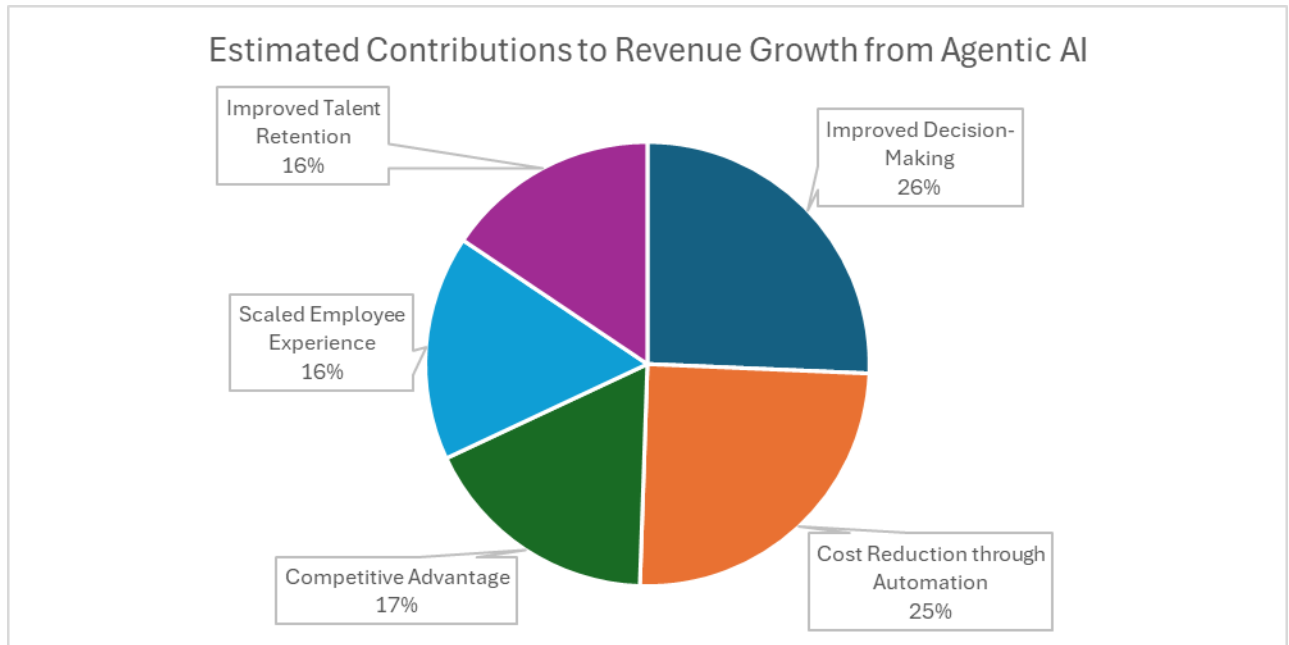


Figure 2: Economic Impact of Agentic AI: Pie chart showing estimated contributions to revenue growth from various factors. [17]

Strategic Recommendations

- **Implement an Agentic AI System for Dynamic Pricing and Competitive Intelligence**

This system should automate the continuous monitoring and scraping of public data from hyperscale providers like AWS, Microsoft Azure, and Google Cloud Platform to get real-time pricing and service updates.

The AI should process unstructured data using a large language model (LLM) to understand service descriptions and then synthesize the information into a structured database for direct comparisons.

It should use bespoke algorithms to identify equivalent offerings, calculate hidden costs (e.g., egress and data transfer fees), and generate value-driven sales narratives.

- **Target the Cost-Conscious Mid-Market Segment**

Focus on tailoring competitive intelligence and pricing strategies to mid-market buyers, as they prioritize cost-effectiveness and often have less complex architectural needs.

The AI system should generate customized sales proposals that directly address the budget sensitivities of this demographic.

- **Enhance Sales Workflow and Productivity**

Integrate the AI seamlessly into existing sales workflows to act as a sales force multiplier, augmenting—not replacing—human expertise.

Free sales professionals from manual competitive research, allowing them to focus on high-value tasks like customer engagement and complex problem-solving.

Utilize the AI's ability to provide instant pricing adjustments and proposals to shorten sales cycles and capture deals that might otherwise be lost on price.

Conclusion: Redefining Competitive Strategy in Private Cloud

The integration of an agentic AI for real-time cost and feature comparison represents a transformative opportunity for private cloud providers. In a market dominated by hyperscale competitors, the ability to articulate differentiated value and respond dynamically to market pricing is paramount. This AI-driven approach offers a compelling pathway to:

- **Secure more deals** through immediate, competitive, and value-driven proposals.
- **Maximize asset utilization** by driving higher occupancy rates for owned data center infrastructure.
- **Optimize profitability** through intelligent, data-informed discounting strategies.
- **Empower sales organizations** to focus on high-value client engagement and strategic selling.

By embracing this innovative application of artificial intelligence, private cloud providers can strengthen their competitive standing, foster sustainable growth, and solidify their position as essential partners for cost-conscious, mid-market enterprises. The future of cloud sales will increasingly be characterized by intelligent, real-time, and strategically optimized interactions driven by AI.

References

1. **Global Cloud Computing Market Size, Share & Analysis Report.** *Grand View Research.* 2024.
2. **Private Cloud Market Size & Share Analysis - Growth Trends & Forecasts (2024 - 2029).** *Mordor Intelligence.* 2024.
3. **Cloudzero.** (2025). *2025 Cloud Computing Market Size And Trends.*
4. **Dynamic Pricing in E-Commerce: A Review of Strategies and Applications.** *Journal of Business Research.* 2024.
5. **AIMultiple.** (2025). *Dynamic Pricing Algorithms in 2025: Top 3 Models.*
6. **The Future of Cloud Computing: An IDC Tech Buyer Survey.** *IDC.* 2023.
7. **Gartner's Top Strategic Technology Trends for 2024: The Rise of Generative AI and Machine Learning.** *Gartner.* 2024.
8. **Anthropic.** (2024). *Enterprise Edition.*
9. **Amazon Web Services.** (2024). *AWS Cloud Computing Services.*
10. **Microsoft Azure.** (2024). *Microsoft Azure: Cloud Computing Services.*
11. **Google Cloud Platform.** (2024). *Google Cloud: Cloud Computing Services.*
12. **Snowflake.** (2025). *Snowflake Marketplace Adds Agentic Products and AI-Ready Data.*
13. **MarketsandMarkets.** (2025). *Cloud Computing Market Size, Share & Industry Report - 2030.*
14. **Symson.** (2025). *How does AI Pricing Algorithm Work?*
15. **MDPI.** (2019). *Cloud Services and Pricing Strategies for Sustainable Business Models.*
16. **Nextwork.** (2025). *Cloud Computing Stats 2025.*
17. **IBM Institute for Business Value study (2025).** *Agentic AI: The engine for unprecedented profits*