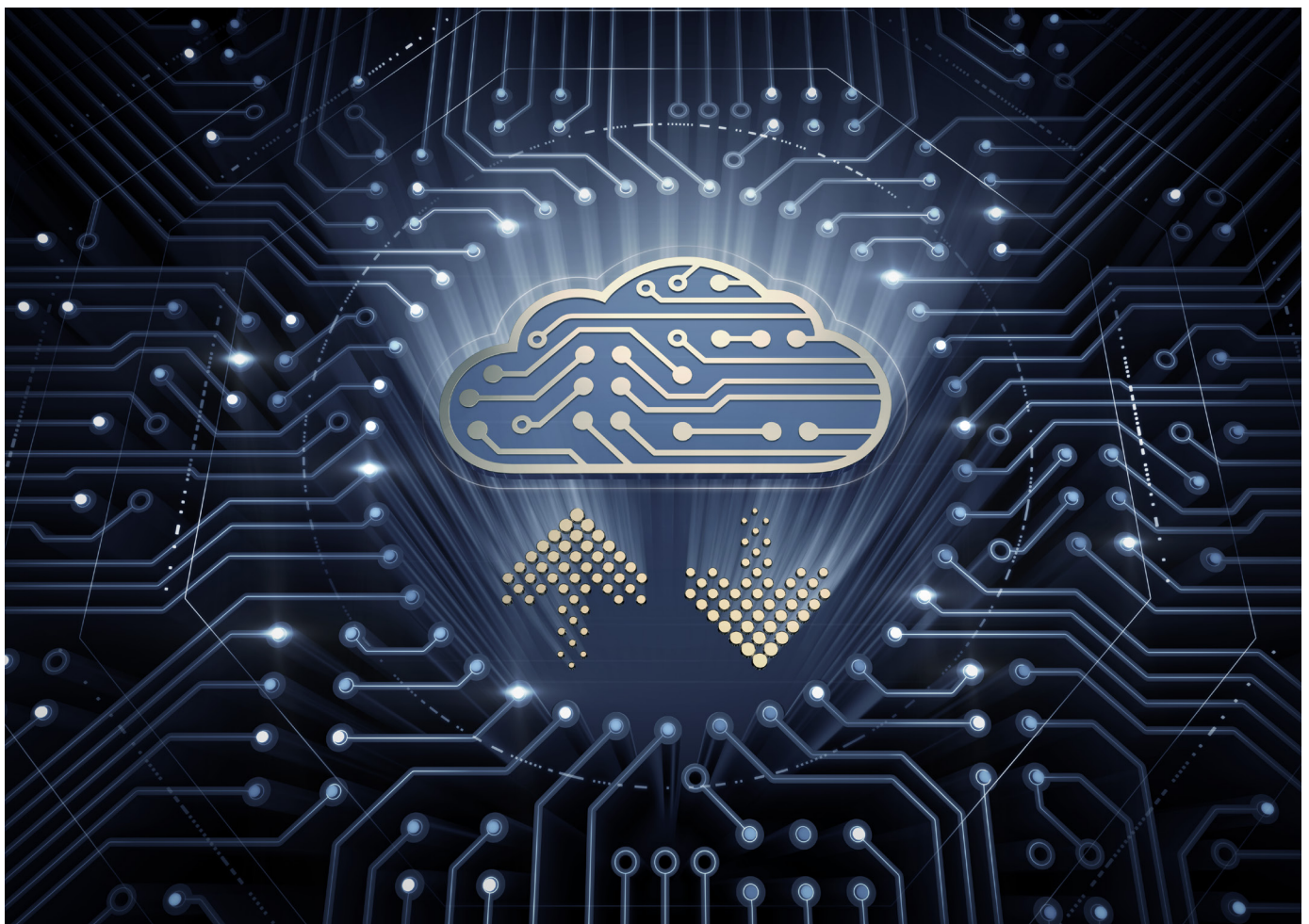


2019 Frost & Sullivan Asia-Pacific
Managed Cloud Services
Competitive Strategy, Innovation &
Leadership Award



CITIC TELECOM CPC

**ASIA PACIFIC
BEST PRACTICES
AWARDS**

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I am proud to present you with this year's award for Competitive Strategy Innovation and Leadership in the managed cloud services industry.

Frost & Sullivan's global teams of analysts and consultants research a wide range of markets in multiple industries and regions, and identify companies excelling in product strategies; whether in product quality, price/performance value, product differentiation, or breadth of product line. Our teams are interested particularly in companies that leverage product strategies to differentiate themselves from competitors based on innovation and creativity. Against the backdrop of extensive primary and secondary research across the entire value chain of specific products, Frost & Sullivan is pleased to recognize CITIC Telecom CPC for Competitive Strategy Innovation and Leadership in the managed cloud services industry.

Achieving excellence in competitive strategy is never an easy task, and it is made even more difficult considering today's competitive intensity, customer volatility, and economic uncertainty; not to mention the difficulty of innovating in an environment of escalating challenges to intellectual property. In this context, your receipt of this award signifies an even greater accomplishment.

Frost & Sullivan recognizes that this accomplishment is the result of many employees, customers, and investors making daily choices to support the organization and contribute in a meaningful way to its future.

I enthusiastically acknowledge and celebrate these achievements, and wish you great success in the future. Frost & Sullivan is here to support you on any future endeavor.

Sincerely yours,



David Frigstad
Chairman
Frost & Sullivan

Background and Company Performance

CITIC Telecom CPC is a wholly owned subsidiary of CITIC Telecom International Holdings Limited (SEHK: 1883).

Some important highlights:

Parameters	CITIC Telecom CPC
Founded	2001
Headquarters	Hong Kong
Global Points of Presence	140+
Global Cloud Service Centers	18+
Global Data Centers	30+
Major Areas of Expertise	Cloud computing solutions, managed services solutions, information security solutions, network solutions, and ICT services

Industry Challenges

Increased complexity in managing a hybrid and multi-cloud environment:

The adoption of a multi-cloud and hybrid cloud setup is expected to increase the complexity of managing a cloud environment. Enterprises will need support in terms of professional services and management platforms to mitigate complexity related to governing a hybrid and multi-cloud environment.

Pricing competition:

Pricing is one of the biggest challenges to cloud business growth in the Asia-Pacific market, with many vendors more flexible and agile than others in their pricing model. The race is no longer about price cuts but more about pricing models that give customers different ways to arrange their workloads while enhancing computing power at economical prices.

Cloud security and privacy:

Similar to the global trend, enterprises across Asia-Pacific are increasingly adopting the multi-cloud model to use cloud services and keep mission-critical data on-premises, which requires high cloud security and privacy. The lack of security in cloud services can have major consequences, such as loss of intellectual property and the need to adhere to government regulations, as it is difficult when a third-party vendor controls the data.

Strategy Innovation and Customer Impact

Strategy Effectiveness

CITIC Telecom CPC started its cloud business in 2011, and over the years, it has identified its customers' need for multi-cloud services. CITIC Telecom CPC's strategy was to position itself as the industry expert in managing a multi-cloud environment.

Frost & Sullivan recognizes that CITIC Telecom CPC has created a strong competitive strategy for distributed IT architectures that address the organization's core market need to manage multi-cloud applications.

Strategy Execution

One of the company's key initiatives to offer optimized managed services is the SmartCLOUD™ Professional Service solution, which is a high-performance and high-availability infrastructure-as-a-service solution. The solution also offers enterprise customers consultative services to design, deploy, and support highly challenging distributed IT architectures.

The solution eliminates the complexity of staffing in-house cloud professionals. Other than its SmartCLOUD™ Professional Service, CITIC Telecom CPC provides a system integration service, which is a way to help enterprises migrate their environment from on-premises to SmartCLOUD™ or from another cloud to SmartCLOUD™.

Price Value

Frost & Sullivan is impressed that CITIC Telecom CPC provides a wide range of innovative managed service solutions along with a focus on cost-effectiveness, as pricing is considered a major growth challenge in the cloud market.

Indeed, cloud service providers are cutting down their prices and making their pricing models more flexible to attract enterprises. In response, CITIC Telecom CPC is providing more flexibility and agility in its pricing models.

Competitive Differentiation

The key differentiator of CITIC Telecom CPC compared to other cloud service providers is its 'same region classification' strategy. Unlike other cloud service providers who may separate their business into China region and international region, CITIC Telecom CPC considers different regions as 'one classification'. This ensures that enterprises who have offices in different locations can enjoy same standard of services and seamless operations, optimizing the cloud benefits to enterprises and fulfilling their business needs.

Another key differentiator of CITIC Telecom CPC is its total solution capabilities. Its cloud solutions are complementary to its network, information security, and data center services. Cloud-network convergence can be achieved to bring enterprises competitive strengths and unlimited possibilities. This 'total solution' strategy assures a suite of powerful enterprise-class tools to empower any organization of any scale, with world-class functionality and agility at breakthrough cost-effectiveness and capability.

Customer Ownership Experience

Enterprise clients can leverage CITIC Telecom CPC's unique product positioning strategy that focuses on managed services. The company has strengthened its focus on professional services by developing a high-performance and high-availability virtual cloud solution, SmartCLOUD™. A comprehensive cloud computing solution for enterprises.

SmartCLOUD™ offers cloud computing resources pool (Compute), dedicated private cloud (vONE), and virtualized back-up, replication, and recovery. CITIC Telecom CPC has also optimized its managed security services for customers by developing TrustCSI™, an information security solution. With its unique competitive strategy, the company has become a one-stop shop for enterprises.

Brand Equity

CITIC Telecom CPC has established a strong global presence in Asia-Pacific as its target companies are mainly MNCs with operations in Asia Pacific and Mainland China. With an especially strong foothold in China, CITIC Telecom CPC was the first Asian managed services provider to have a point of presence along the Belt and Road Initiative's (21st-Century Maritime Silk Road) infrastructure framework.

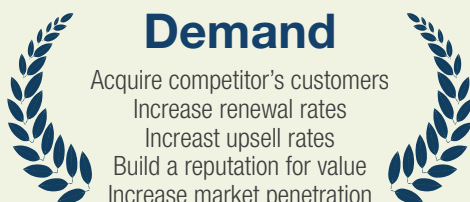
Also CITIC Telecom CPC has participated in government initiatives and program in cities like Hong Kong, Macau and other ASEAN cities to support its digitization initiatives. The company has expanded its brand visibility in Asia-Pacific by initiating key investments such as launching multi-cloud and managed services.

Conclusion

CITIC Telecom CPC achieved significant financial growth in 2018 compared to 2017. Frost & Sullivan is impressed with the company's many strategic initiatives and focus on becoming the one-stop shop solution provider for managed cloud services, differentiating it from its top competitors. For its strong overall performance and strategic differentiation, CITIC Telecom CPC has earned Frost & Sullivan's 2019 Asia-Pacific Managed Cloud Services Competitive Strategy, Innovation, & Leadership Award.



Any successful approach to achieving top-line growth must take into account what competitors are and are not doing; meet customer demand with a comprehensive, value-driven product or service portfolio; and establish a brand that resonates deeply with customers and stands apart from other providers. Companies must succeed in these 3 areas—brand, demand, and positioning—to achieve best-practice levels in competitive strategy.



Understanding Competitive Strategy Innovation and Leadership



Driving demand, brand strength, and competitive differentiation play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Strategy Innovation and Customer Impact.

Key Benchmarking Criteria

For the Competitive Strategy Innovation and Leadership Award, Frost & Sullivan analysts independently evaluated Strategy Innovation and Customer Impact according to the criteria identified below.

Strategy Innovation

- Criterion 1: Strategy Effectiveness
- Criterion 2: Strategy Execution
- Criterion 3: Competitive Differentiation
- Criterion 4: Executive Team Alignment
- Criterion 5: Stakeholder Integration

Customer Impact

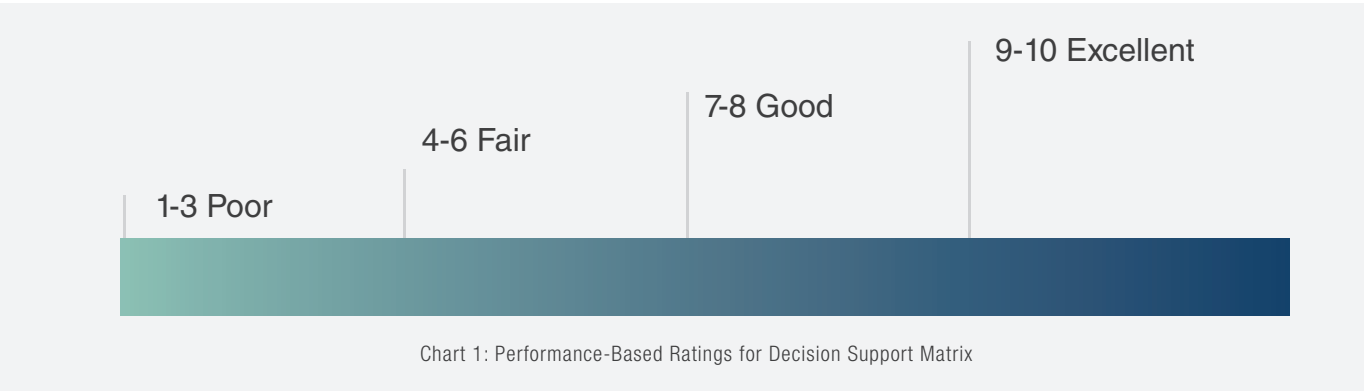
- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according

to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard is organized by Visionary Innovation & Performance and Customer Impact (i.e., these are the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis,

which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of companies. The results of this analysis are shown below. To remain unbiased and protect the interests of all organizations reviewed, we have chosen to refer to the other key participants as Competitor 1 and Competitor 2.

DECISION SUPPORT SCORECARD FOR COMPETITIVE STRATEGY INNOVATION AND LEADERSHIP

Measurement of 1–10 (1 = lowest; 10 = highest)	Competitive Strategy Innovation and Leadership		
	Visionary Innovation & Performance	Customer Impact	Average Rating
CITIC Telecom CPC	9.0	9.0	9.0
Competitor 1	8.0	8.0	8.0
Competitor 2	7.0	7.0	7.0

Strategy Innovation

Criterion 1: Strategy Effectiveness

Requirement: Strategy effectively balances short-term performance needs with long-term aspirations and vision for the company.

Criterion 2: Strategy Execution

Requirement: Adoption of best-in-class processes supports the efficient and consistent implementation of business strategy.

Criterion 3: Competitive Differentiation

Requirement: Unique competitive advantages with regard to solution or product are clearly articulated and well accepted in the industry.

Criterion 4: Executive Team Alignment

Requirement: The executive team is aligned with the organization's mission, vision, strategy, and execution.

Criterion 5: Stakeholder Integration

Requirement: Strategy reflects the needs or circumstances of all industry stakeholders, including competitors, customers, investors, and employees.

Customer Impact

Criterion 1: Price/Performance Value

Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience

Requirement: Customers feel they are buying the most optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience

Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

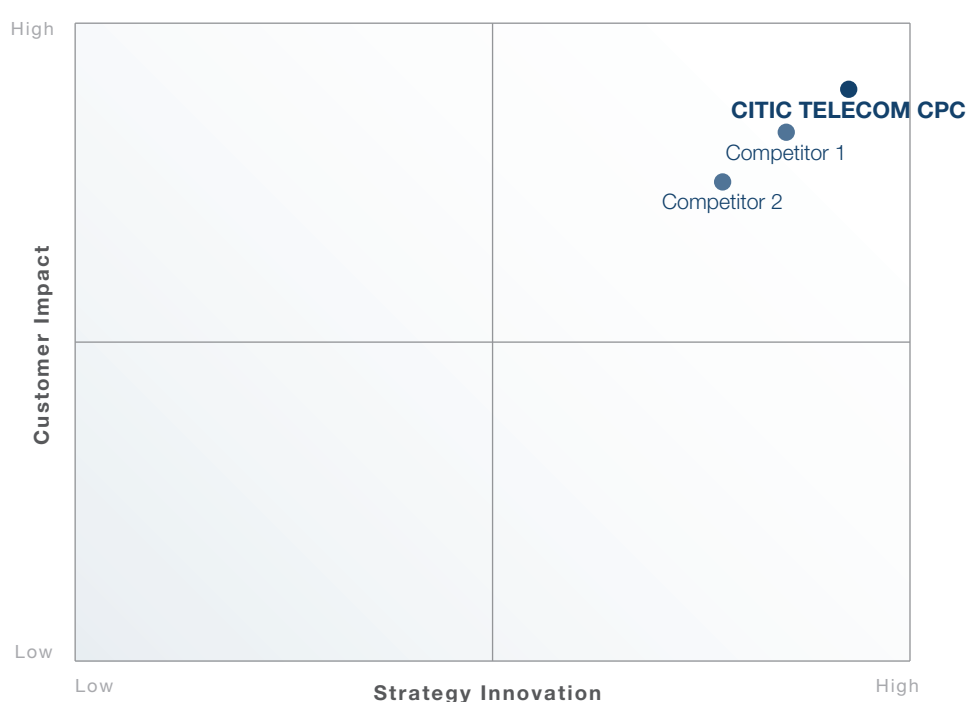
Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.

DECISION SUPPORT MATRIX
FOR COMPETITIVE STRATEGY
INNOVATION AND LEADERSHIP
(ILLUSTRATIVE)



Best Practices Recognition: 10 Steps To Researching, Identifying, And Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
 Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning all candidates' performance relative to one another
 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • Confirm best-practice criteria • Examine eligibility of all candidates • Identify any information gaps 	Detailed profiles of all ranked candidates
 Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • Share findings • Strengthen cases for candidate eligibility • Prioritize candidates 	Refined list of prioritized award candidates
 Conduct global industry review	Build consensus on award candidates' eligibility	<ul style="list-style-type: none"> • Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates 	Final list of eligible award candidates, representing success stories worldwide
 Perform quality check	Develop official award consideration materials	<ul style="list-style-type: none"> • Perform final performance benchmarking activities • Write nominations • Perform quality review 	High-quality, accurate, and creative presentation of nominees' successes
 Assemble board of advisors	Finalize the selection of the best-practice award recipient	<ul style="list-style-type: none"> • Present candidates to a Board of Advisors • Build consensus • Select winner 	Decision on which company performs best against all best-practice criteria
 Communicate recognition	Inform award recipient of award recognition	<ul style="list-style-type: none"> • Present award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance 	Announcement of award and plan for how recipient can use the award to enhance the brand
 Take strategic action	Share award news with stakeholders and customers	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess award's role in future strategic planning 	Widespread awareness of recipient's award status among investors, media personnel, and employees

The Intersection Between 360-degree Research And Best Practices Awards



360-degree research: seeing order in the chaos

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of our research process. It offers a 360-degree-view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often, companies make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission.

Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

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Bahru
Istanbul
Jakarta
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About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, works in collaboration with clients to leverage visionary innovation that addresses the global challenges and related growth opportunities that will make or break today's market participants. For more than 50 years, we have been developing growth strategies for the Global 1000, emerging businesses, the public sector and the investment community.

Is your organization prepared for the next profound wave of industry convergence, disruptive technologies, increasing competitive intensity, Mega Trends, breakthrough best practices, changing customer dynamics and emerging economies?

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