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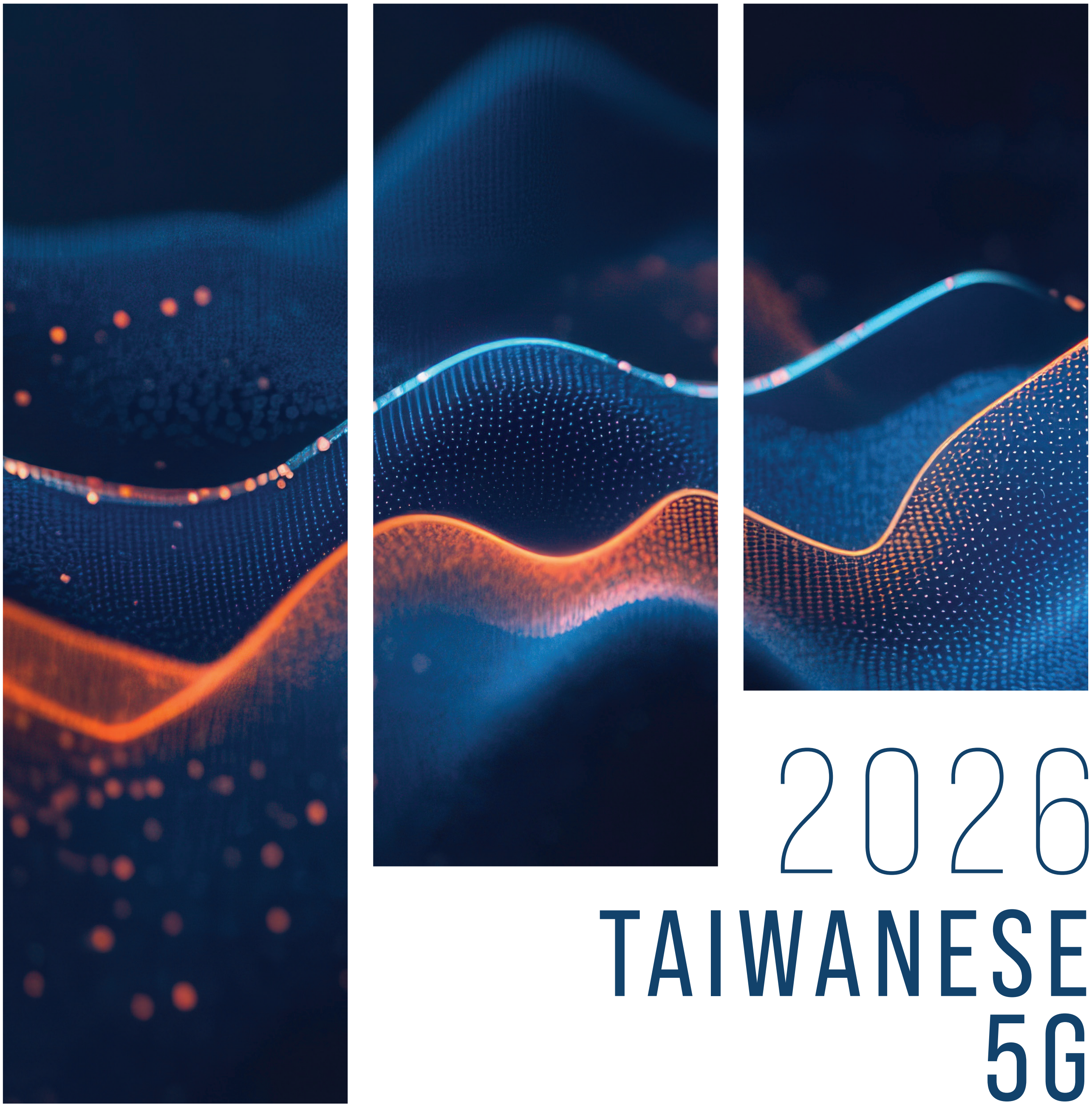
BEST PRACTICES



2026 TAIWANESE 5G TECHNOLOGY INNOVATION LEADERSHIP

中華電信
Chunghwa Telecom

FROST & SULLIVAN

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Best Practices Criteria for World-Class Performance

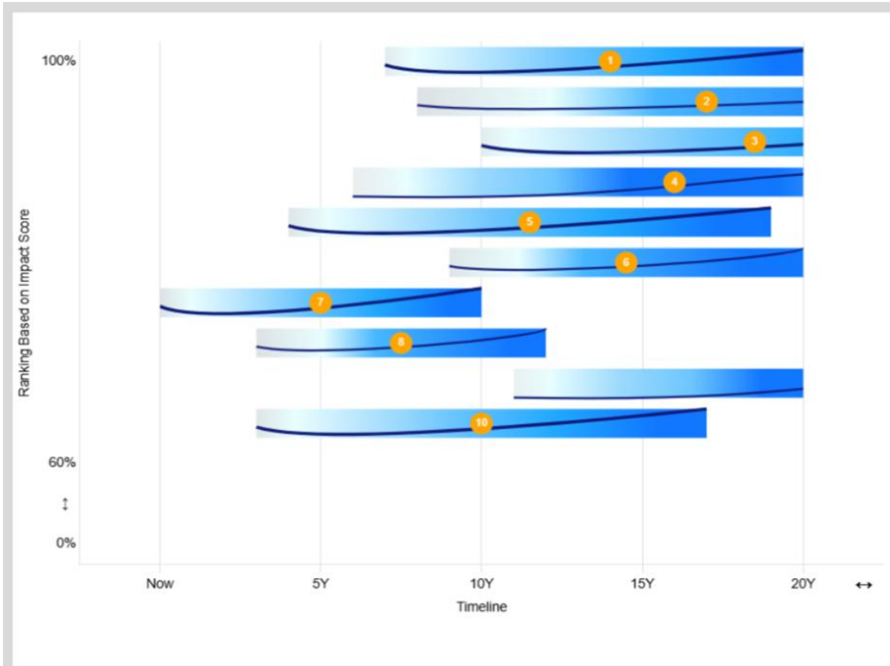
Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each recognition category before determining the final recognition recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Chunghwa Telecom excels in many of the criteria in the Taiwanese 5G space.

RECOGNITION CRITERIA

Business Impact	*Technology Leverage*
Financial Performance	Commitment to Innovation
Customer Acquisition	Commitment to Creativity
Operational Efficiency	Stage Gate Efficiency
Growth Potential	Commercialization
Human Capital	Application Diversity

Top Transformations Impacting Growth in the Taiwanese 5G Industry

Rank	Strategic Imperative	Timeline	Impact (%)	Impact Curve
1	**Geopolitical Chaos** Impact of trade tariffs on EV charging component costs	2031 - 45	87	Exponential
2	**Transformative Mega Trends** Rise of autonomous electric fleets in urban areas	2032 - 50	84	Polynomial
3	**Industry Convergence** Telecommunications and automotive sectors partnering for connected EV ecosystems	2034 - 51	77	Exponential
4	**Transformative Mega Trends** Government mandates for green public transportation systems	2030 - 50	76	Logistic
5	**Competitive Intensity** Entry of tech giants into the EV charging market	2028 - 43	72	Exponential
6	**Geopolitical Chaos** Political instability affecting infrastructure investments in certain regions	2033 - 44	68	Polynomial
7	**Disruptive Technologies** Development of ultra-fast charging technology reducing charge times to minutes	2024 - 34	67	Exponential
8	**Internal Challenges** Legacy IT systems hindering integration with modern e-mobility solutions	2027 - 36	64	Polynomial
9	**Industry Convergence** Integration of EV charging with renewable energy projects	2035 - 54	62	Logistic
10	**Compression of Value Chains** Direct manufacturer to consumer sales bypassing traditional dealerships	2027 - 41	61	Exponential



Commitment to Innovation and Creativity

As Taiwan's largest mobile operator, Chunghwa Telecom is the country's premier 5G service provider, delivering the fastest 5G download speeds, best network availability, and most extensive mobile network coverage across the country. Based on its 2025 guidance and strategic growth pillars, Chunghwa Telecom targeted several key 5G growth areas, including artificial intelligence (AI) integration, enterprise solutions, and network expansion. The company has also made it a priority to support mobile service revenue and future 5G application opportunities in both the consumer and enterprise markets. For consumers, the company continues to strengthen its mobile service offerings through 5G service upgrades, including increasing 5G speed for customers. 5G service upgrades remain an important support for driving revenue and subscriber market share growth in Taiwan.

The company’s enterprise strategy expands the scope for 5G within enterprise applications. It combines 5G, multi-access edge computing (MEC), and AI to process data locally with millisecond latency. This powers the 5G enterprise private network and smart applications and fortifies security resilience. Driven by its 2025 strategic initiatives, the company focuses on 5G-Advanced technologies, autonomous AI-radio access networks (RANs), and expanding global distributed AI infrastructure, which is backed by a massive infrastructure investment plan exceeding US$ 1 billion. The company is building international, cross-border AI data centers (AIDC) to overcome local power and data center constraints in Taiwan. At the Mobile World Congress (MWC) 2026, Chunghwa Telecom signed cooperation agreements with Ericsson and Nokia on 5G Advanced, pre-6G, and AI-driven intelligent networks. With Ericsson, the cooperation covers low latency, low loss, scalable throughput (L4S), and ultra-reliable low latency communications (URLLC) to support latency-sensitive applications such as cloud gaming, augmented reality (AR), and virtual reality (VR), as well as AI-enabled network automation, spectrum efficiency, and energy efficiency. These agreements pave the way for further 5G development and the implementation of innovative 5G applications.

The company's key technological advancements that will drive 5G adoption and the creation of new 5G products and services include the incorporation of 5G-Advanced, network slicing, edge computing, and autonomous networks capabilities. 5G-Advanced and network slicing capabilities will give the company the ability to segregate traffic and optimize performance to customize service experience for specific target segments. Edge computing capabilities allow processing of massive data volumes at the mobile network edge to eliminate the need to send all data to a centralized cloud. Autonomous network capabilities make adopting AI-RAN and multi-band massive multiple-input multiple-output (MIMO) make telecom infrastructure smarter and more self-optimizing. These new capabilities will strengthen Chunghwa Telecom's 5G value proposition and help with 5G monetization.

As a result, 2025 saw an increase in the commercialization of 5G AI and Internet of Things (IoT) use cases. This success was partly driven by the company's 2025 Digital Innovation Application Series competition, which focuses on driving digital transformation by leveraging robust 5G infrastructure, edge computing, and smart network technologies. As AI and connected services become more widely used, cybersecurity and digital trust have become important needs. To address the enterprise segment's need to strengthen security resilience, the company offers integrated AI-driven cybersecurity solutions. Enhancing network security and digital resilience is a critical area for 5G monetization. The company achieves this by providing robust, integrated AI-driven cybersecurity solutions.

Commercialization

For Chunghwa Telecom, a major commercialization focus is on providing tailored private 5G networks and campus networks for vertical industries, specifically targeting manufacturing, logistics, and university campuses. The company's strategic objective is to integrate 5G, AI, and advanced computing power to deliver actionable technological solutions for customers. For instance, it has launched the Taiwan 5G AIoT solution export project, which uses a 5G private network to support an overseas smart park and integrate smart transportation and smart environment AIoT applications into one management platform. The project has proven to be a major success and functions as a key driver for the company's international expansion. The company has successfully exported its smart solutions, including private networks, smart healthcare, and smart building systems, into the Association of Southeast Asian Nations (ASEAN) and international markets.

> *"As the country's premier 5G service provider, Chunghwa Telecom proactively leverages its technological innovation to raise the bar for 5G services and solutions in Taiwan."*
>
> ***Mei Lee Quah***
> ***Senior Director, ICT Research***

To achieve commercial viability, AI network and solution design must be tailored to meet the unique demands within the specific environment and customer use case, facilitating frictionless deployment and practical utility. For example, to address the need for AI training and inference environments that are fueling the AI infrastructure market, Chunghwa Telecom is commercializing infrastructure through state-of-the-art AI data centers and its Chunghwa Telecom AI Factory Platform. This delivers tailored AI application services. A key success factor is the ability to link computing power, AI models, agents, and customer workflows to practical, business-ready solutions.

In smart cities, effective city traffic governance relies on evidence-based decision-making driven by IoT sensors, real-time data analytics, and integrated public transit. To that end, Chunghwa Telecom has launched a commercial smart transportation application. The system leverages AIDC computing power, agentic AI, vision language models (VLMs), and digital twin technology to optimize traffic management and operational planning. Successful deployment requires data connection, validation, and cooperation with local governments or partners. By shifting away from reactive, fragmented policies, local governments can build resilient mobility networks that prioritize sustainability and efficiency.

> *"These recent outcomes indicate strategic efforts are well placed, and the corresponding early market developments are indicative of positive future growth prospects."*
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> ***Mei Lee Quah***
> ***Senior Director, ICT Research***

The company anticipates that future commercialization potential will be driven by 5G Standalone (SA), 6G AI infrastructure, enterprise AI applications, and smart transportation applications. Strategic efforts by the company are targeting markets and enterprises requiring ultra-low latency, highly reliable connectivity, and intelligent, data-driven infrastructures. The company's effort in this space has been acknowledged through industry recognition. For instance, in 2025, the company was awarded the Technology Innovation of the Year award by Asian Telecom for its 5G smart port system, which utilizes unmanned vehicles and AI-driven analysis. Additionally, the company's Q4 2025 financial report highlights a 16% year-over-year growth in ASEAN markets driven by AI supply chain and 5G enterprise solutions. These recent outcomes indicate strategic efforts are well placed, and the corresponding early market developments are indicative of positive future growth prospects.

Application Diversity

Chunghwa Telecom's technological capabilities, powered by a 5G private enterprise network with edge computing power and AI, deliver versatile digital infrastructure that supports diverse, multi-use product lines. The company's Q4 2025 financial report highlights that revenue from 5G private network service grew 88% YoY, and recurring ICT revenue grew 15% YoY. Complementing 5G, Chunghwa Telecom's AI Factory platform provides robust infrastructure for advanced AI-driven applications, including smart manufacturing and smart home ecosystems. Furthermore, the company leverages multi-orbit satellite technology via its comprehensive sea-land-sky-space strategy, delivering highly resilient communications tailored for government, enterprise, and emergency response operations. Operating as an integrated resilient network that combines submarine cables, fiber optics, and advanced satellites, the company ensures uninterrupted connectivity across diverse terrains and during critical emergencies.

By integrating AI with 5G-Advanced to support URLLC and edge intelligence for enterprise applications, Chunghwa Telecom achieves unprecedented, mission-critical connectivity. This convergence empowers enterprises with sub-10ms latency, autonomous network optimization, and on-demand network slicing for seamless, real-time industrial and digital applications. The company is actively expanding its 5G-enabled IoT platform ecosystem, prioritizing smart grid, traffic management, and environmental monitoring. By leveraging its 5G SA and 5G-Advanced network capabilities, the company aims to secure a 45% to 55% market share in urban IoT deployments across Taiwan. Its comprehensive low Earth orbit (LEO) satellite rollout in 2025 provides robust 5G-integrated connectivity for maritime, aviation, and emergency response sectors. Acting as a critical failover and coverage extension, this multi-orbit infrastructure ensures uninterrupted service continuity.

Growth Potential

By shifting its strategic focus toward advanced technologies like 5G, AI, and cloud computing, Chunghwa Telecom has transitioned from a traditional mobile operator into an end-to-end digital transformation partner in Taiwan. This transition has been successful in supporting customer acquisition, deepening brand trust, and fortifying long-term loyalty across both consumer and enterprise segments. The results also show up financially, with the company’s Q4 2025 financial report depicting that its mobile revenue and subscriber market share reached 40.8% and 39.7%, respectively.

For consumers, its integrated multiple-play service, which combines mobile, fixed broadband, and Wi-Fi, has surpassed 1 million subscriptions with a 15% YoY growth. This milestone highlights strong customer demand and a successful shift toward unified integrated services packages. Key service benefits that are driving adoption include unified convenience, cost efficiency, and premium infrastructure. Customers enjoy the simplicity of managing mobile data, high-speed fixed broadband, and seamless Wi-Fi connectivity through a single account and support system. Bundling multiple services provides better overall value for customers, reducing household or business telecoms overhead. Integrated plans often bundle high-speed tiers such as 300 Mbps or higher, and advanced home Wi-Fi, with premium networking equipment and software tools provided to ensure high-speed, comprehensive internet coverage throughout a customer's premises.

For enterprises, their technological innovations have also been driving growth. The company’s Q4 2025 financial report highlights that ICT revenue grew 25% YoY, supported by internet data center (IDC), cloud, and AIoT growth of 29%, 43%, and 26%, respectively. This shows strong demand for digital and AI-related services. The company is actively accelerating digital transformation across ASEAN and international markets such as Japan. It successfully exports its smart city solutions, private 5G integrations, and security services while leveraging regional subsidiaries, e.g., in Thailand and Vietnam, to deploy innovative infrastructure to target the demand for digital transformation in ASEAN markets. Its recent deployment of the AI-driven smart pole solution in Thailand uses platform capabilities for lightning control, digital signage, and traffic flow analytics.

Chunghwa Telecom has strong growth potential over the next 1 to 2 years based on its track record over the past few years in core services and new digital infrastructure and services. The fact that the company has mapped its investments in technology to long-term customer needs and is addressing rising customer demand for secure, resilient, and intelligent digital infrastructure improves the likelihood of future success. Positioning itself as a leader in digital transformation, the company showcased advanced technological solutions at the 2026 government seminar and MWC 2026. These solutions include sovereign AI, multi-orbit satellite services including One Web, SES, ST-2, and Astranis, as well as future-ready quantum cryptography. This initiative aims to further strengthen network-resilient communications and prepare for pre-6G and future 6G developments. Overall, these advancements represent important steps to ensuring longer-term business sustainability and market competitiveness.

Human Capital

Chunghwa Telecom encourages the use of technology to create real customer impact as part of the daily work culture. The company encourages employees to apply new technologies, especially AI and automation, to solve service challenges and make both customer service and frontline work easier. The company leverages proprietary generative AI solutions, featuring customer-facing agents and frontline AI co-pilots, to enhance service efficiency and augment employee capabilities. The system can provide real-time response suggestions, answer knowledge-based questions, and complete forms automatically. This helps its frontline employees reduce repetitive tasks, respond accurately, and serve customers more efficiently. This innovative approach recently garnered the Silver Award in the AI Innovation Award category at the World Communication Awards, marking the company as the only Taiwanese recipient in this category. Technology is fast becoming part of the company's service culture, improving customer experience in a practical way.

Chunghwa Telecom's technology-driven culture supports its human capital strategy by transitioning employees from routine telecom operations into future-oriented projects, such as AI, smart manufacturing, and future networks. This approach deepens engagement, drives continuous skill development, and fosters long-term talent retention. As an example, in October 2025, the company launched Invent AI, a new subsidiary spun off from its research division to help commercialize AI innovations. This development demonstrates to employees that R&D work can grow into real business opportunities and that internal innovation can become part of the company's future growth engine. For the company, investment in AI-related talent is an important area as it continues to grow in IDC and AI-related business. It has further expanded the scope of use of agentic AI to improve workflows and upgrade service offerings this year. These open declarations backed by positive reinforcement build morale and drive employee retention by helping employees see their future within the company. When employees can learn new skills, join high-growth projects, and see their work become real customer solutions, it naturally supports engagement and long-term talent retention.

Conclusion

As the country's premier 5G service provider, Chunghwa Telecom proactively leverages its technological innovation to raise the bar for 5G services and solutions in Taiwan. For its efforts, the company enjoys long-term customer loyalty, privileged status as an end-to-end digital transformation partner, and healthy financial growth. This will be solid fuel for long-term business sustainability and market competitiveness.

With its strong overall performance, Chunghwa Telecom earns Frost & Sullivan's 2026 Taiwanese Technology Innovation Leadership Recognition in the 5G industry.

What You Need to Know about the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Recognition identifies the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Recognition Analysis

For the Technology Innovation Leadership Recognition, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

Financial Performance: Strong overall business performance is achieved in terms of revenue, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Leveraging innovative technology characterizes the company culture, which enhances employee morale and retention

Best Practices Recognition Analytics Methodology

Inspire the World to Support True Leaders

This long-term process spans 12 months, beginning with the prioritization of the sector. It involves a rigorous approach that includes comprehensive scanning and analytics to identify key best practice trends. A dedicated team of analysts, advisors, coaches, and experts collaborates closely, ensuring thorough review and input. The goal is to maximize the company's long-term value by leveraging unique perspectives to support each Best Practice Recognition and identify meaningful transformation and impact.

		VALUE IMPACT	
STEP		WHAT	WHY
1	**Opportunity Universe**	Identify Sectors with the Greatest Impact on the Global Economy	Value to Economic Development
2	**Transformational Model**	Analyze Strategic Imperatives That Drive Transformation	Understand and Create a Winning Strategy
3	**Ecosystem**	Map Critical Value Chains	Comprehensive Community that Shapes the Sector
4	**Growth Generator**	Data Foundation That Provides Decision Support System	Spark Opportunities and Accelerate Decision-making
5	**Growth Opportunities**	Identify Opportunities Generated by Companies	Drive the Transformation of the Industry
6	**Frost Radar**	Benchmark Companies on Future Growth Potential	Identify Most Powerful Companies to Action
7	**Best Practices**	Identify Companies Achieving Best Practices in All Critical Perspectives	Inspire the World
8	**Companies to Action**	Tell Your Story to the World (BICEP*)	Ecosystem Community Supporting Future Success

*Board of Directors, Investors, Customers, Employees, Partners

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Generator™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fueled by the Innovation Generator™.

Learn more.

Key Impacts:

- **Growth Pipeline:** *Continuous Flow of Growth Opportunities*
- **Growth Strategies:** *Proven Best Practices*
- **Innovation Culture:** *Optimized Customer Experience*
- **ROI & Margin:** *Implementation Excellence*
- **Transformational Growth:** *Industry Leadership*

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Megatrend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)