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BEST PRACTICES

AWARDS

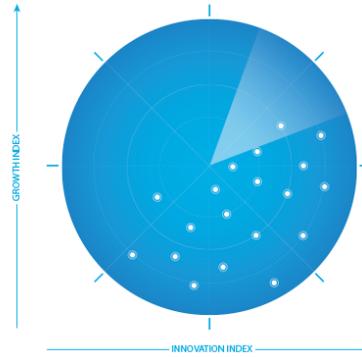
FROST & SULLIVAN

2020 BEST PRACTICES AWARD

 **Entrust Datacard®**

**2020 GLOBAL
TRANSPORT LAYER SECURITY CERTIFICATE
INNOVATION EXCELLENCE FROST RADAR AWARD**

FROST RADAR™



CONGRATULATIONS!

Frost & Sullivan is proud to present Entrust Datacard with this year's Frost Radar™ Best Practices Award for Innovation Excellence in the Global Transport Layer Security Certificates Market.

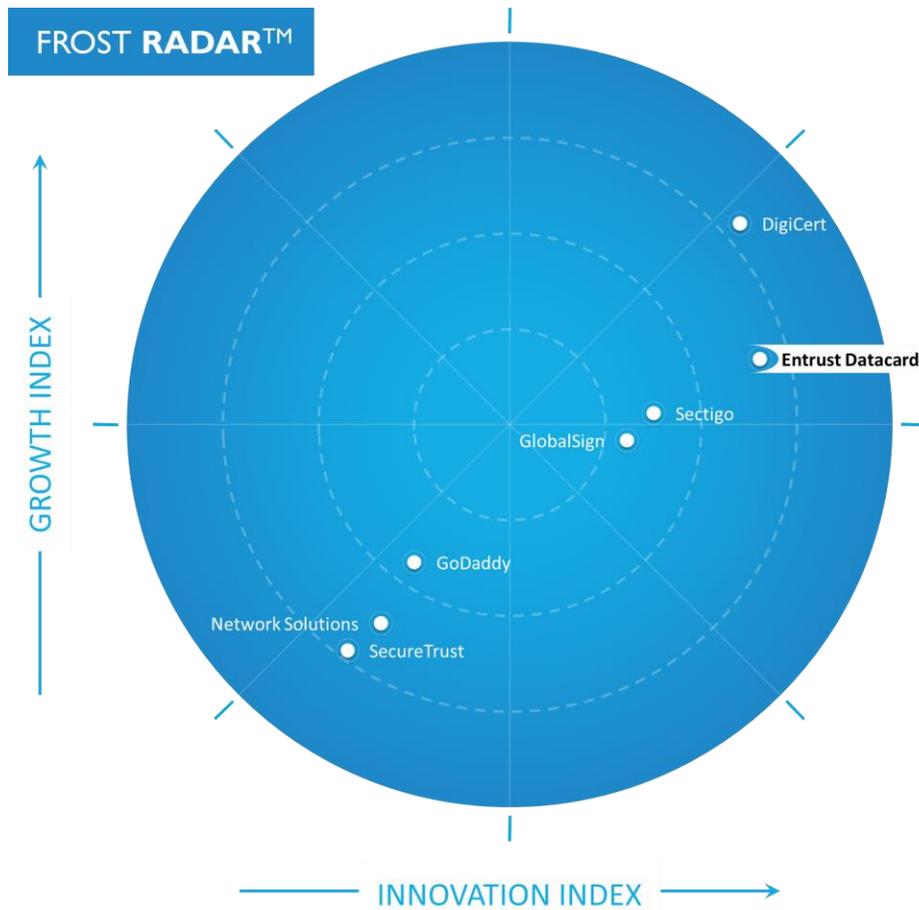
Frost & Sullivan's global team of analysts and consultants continuously research a wide range of markets across multiple industries and locations. As part of this ongoing research, we identify companies that consistently develop new growth strategies based on a visionary understanding of the future, and thus more effectively address new challenges and opportunities. This involves extensive primary and secondary research across the entire value chain of specific products and services. Against the backdrop of this research, Frost & Sullivan recognizes Entrust Datacard for these valuable achievements.

This recognition is strictly reserved for companies that are market leaders and are at the forefront of innovation. These companies consolidate or grow their leadership position by continuously innovating and creating new products and solutions that serve ever-evolving customer needs. These companies are also best positioned to expand the market by strategically broadening their product portfolio. Achieving Innovation Excellence is never an easy task, but it is one made even more difficult considering today's intensely competitive environment, customer volatility, economic uncertainty, and rapid technology evolution. In this context, Entrust Datacard's receipt of this Award signifies an even greater accomplishment.

Moreover, this recognition is the result of many individuals (employees, customers, and investors) making daily choices to support the organization and meaningfully contribute to its future. Frost & Sullivan enthusiastically acknowledges and celebrates these achievements. Once again, congratulations on your accomplishments and we wish you great success in the future.

Sincerely yours,

Darrell Huntsman
Chief Executive Officer
darrell@frost.com



Global Transport Layer Security Certificate Market

Source: Frost & Sullivan

In a field of 20+ global industry participants, Frost & Sullivan has independently ranked the top 7 companies in the above Frost Radar™ analysis.

The key parameters independently analyzed by Frost & Sullivan include:

- Innovation Scalability
- R&D
- Product Portfolio
- Mega Trends Leverage
- Customer Alignment
- Growth Pipeline
- Vision and Strategy
- Sales and Marketing
- Revenue Growth
- Market Share Growth

Frost & Sullivan studies related to this independent analysis:

- Global Transport Layer Security Certificate Market, Forecast to 2024

The Growth Environment

Based on Frost & Sullivan's forecast, the global transport layer security (TLS) certificate market is poised to generate revenue of \$1.1 billion by 2024. Regulatory requirements and the growth of privacy-conscious consumers will be major driving forces contributing to the growth of this market.

Recovering from a turbulent phase, the TLS certificate market witnessed a series of mergers, acquisitions, and exits of certificate authorities (CAs). The present competitive landscape includes fewer market participants that are competing for a larger share of the market.

Further, the main product of the TLS certificate market—the certificates themselves—has been standardized by the CA/Browser forum. With little scope to distinguish between them based on product features, innovation has become the key differentiating factor for CAs.

Public key infrastructure (PKI) use cases have moved beyond websites, emails, and documents and moved to Internet of Things (IoT) devices. Customers are looking for scalable solutions that address concerns regarding the easy management and future-ready security of their infrastructure.

The automation of certificate management has been explored sufficiently by leading CAs. However, scaling automation without pinching the security budget of enterprises remains a crucial requirement of chief information security officers (CISOs). At the same time, the rapidly evolving threat landscape requires automation to ensure rapid response.

Frost Radar™ Innovation Excellence Award

Entrust Datacard

Frost Radar™ Location

- Entrust Datacard is positioned on the right side of Frost Radar, holding clear leadership in the Innovation Index. Entrust Datacard strives to keep its customers engaged and loyal, not just with an extensive product portfolio and features, but also by offering customized, scalable solutions with a flexible business model.
- Entrust Datacard was founded in the United States in 1969 and is headquartered in Minnesota. The CA has a global customer base with a strong focus in the Americas, Europe, and APAC. Entrust Datacard is uniquely positioned to provide an end-to-end public and private certificate solutions.
- It offers a robust portfolio of TLS/SSL and PKI solutions, including hosted/on-premises/hybrid solutions for PKI, certificate management, and hardware security modules (HSMs). With a strong focus on the high assurance (HA) certificate segment, Entrust Datacard has the experience and insight to understand the needs of its enterprise customers.
- Further, the company's PKI use cases extend beyond web security to IoT, email, and cloud. The company has positioned itself as a pioneer in the space with its initiatives around post-quantum cryptography (PQC), verified mark certificate (VMC), and cloud-based use cases.

Growth

- Entrust Datacard's vision for certificate solutions includes an integrated approach to the TLS and PKI business. The Entrust Certificate Services (ECS) portal brings together public and private use cases of PKI into a single interface. The portal includes a cloud-based customer management layer that enables customers to purchase certificates, receive communications, and download entitlements and software licenses. The certificate lifecycle management layer includes capabilities such as certificate policy enforcement, reporting, discovery, provisioning, and automation.
- The gateways and endpoints layer on the ECS portal supports a wide range of protocols and enables API-based integration with endpoints and applications. Customers can deploy software agents within endpoints to perform various backend tasks. Finally, Entrust Datacard is the first commercial CA to have DevOps integrations such as with ServiceNow and Ansible.
- Entrust Datacard is driven by a strong vision to provide holistic and integrated certificate solutions to enterprises. Entrust Datacard has exhibited the strongest and most consistent organic growth rate since 2016. In terms of unit shipments, since 2016, the CA has almost had a 15% average YoY growth in OV certificates and 36% in EV certificates. Entrust Datacard holds the second largest market share of 20.4% in the high assurance certificate segment in terms of revenue in 2019.
- In terms of revenue, Entrust Datacard has exhibited an average YoY growth rate of 28.7% since 2016. In a turbulent market characterized by intense consolidation, the company has exhibited consistent organic growth and stayed ahead of its competitors.
- With its focus on medium and large enterprises, Entrust Datacard relies on its sales force to acquire new customers. Entrust Datacard has the experience to understand the needs of its enterprise customers and fuel growth.

Innovation

- The company has a long-term innovation focus in line with the evolving market needs and threat landscape. Entrust Datacard has leveraged its experience in the high assurance market to launch future-focused products and features.
- Entrust Datacard is the first commercial CA to have DevOps integrations, such as with ServiceNow and Ansible.
- Further, Entrust Datacard was the first commercial CA to release verified mark certificates (VMCs) that allow a customer's official logo to appear in a secure position in an email.

Next Steps

- Entrust Datacard's strong market performance and investment in R&D will enable the company to expand its business through new solutions such as VMC, certificate management and automation, and more. Frost & Sullivan believes Entrust Datacard will continue to grow in terms of revenue and market share because of its strong and extensive sales network and established customer base.
- In addition, Entrust Datacard has introduced a CLM to centralize public and private trust management to one platform. It includes a CA Gateway, which discovers private certificates issued by third parties.
- Another area where Entrust Datacard has taken a pioneering role is in preparing for post-quantum cryptography to help companies sustain their IT ecosystems through the anticipated change. It is collaborating with other organizations like the National Institute of Standards and Technology on new quantum resistant IETF X.509 certificate formats.

What is the Frost Radar™?

Companies to Action – Benchmarking Future Growth Potential

What is it?

A robust analytical tool that benchmarks companies' innovation focus and growth performance in a given market.

How is it built?

Through in-depth analysis built on Frost & Sullivan's 360-degree research methodology (primary and secondary research) and objective rating of companies in a given market.

Why do you need it?

To understand how companies benchmark against each other in their ability to innovate and grow against a backdrop of industry transformation.

What will it accomplish?

Companies can gain an objective, independent perspective of their innovation and growth strategies, including their robustness, effectiveness, relative competitive strength, and implications for their long-term success.

How to use it?

The Frost Radar™ is a dynamic tracking tool that offers frequent rating and positioning of companies that are leading the industry in growth, innovation, or both. Because of changes in the operating environment and internal organizational changes, their positioning in the Frost Radar™ will change over time. It is important to leverage the Frost Radar™ to ensure that companies are aware of changes to their ecosystem and their relative positions to it.

What does it mean to be on the Frost Radar™?

Companies have been chosen to be in the Frost Radar™ because they have proven themselves to be worthy by demonstrating excellence in growth, innovation, or both, and are able to translate that into proven solutions that benefit their clients. At times, companies with high market share may not place on the Radar. Companies are chosen because they are already doing great things or are poised to do great things.

Frost Radar™ – Benchmarking Future Growth Potential

2 Major Indices, 10 Analytical Ingredients, 1 Platform

Vertical Axis – The Growth Index

Growth index is a measure of a company's growth performance and track record, along with its ability to develop and execute a fully aligned growth strategy and vision; a robust growth pipeline system; and effective market, competitor, and end-user focused sales and marketing strategies. The elements of this index include:

- **G11: Market Share (previous 3 years):** This is a comparison of a company's market share relative to its competitors in a given market space for the previous 3 years.
- **G12: Revenue Growth (previous 3 years):** This is a look at a company's revenue growth rate for the previous 3 years in the market/ industry/category that forms the context for the given Frost Radar.
- **G13: Growth Pipeline:** This is an evaluation of the strength and leverage of a company's growth pipeline system to continuously capture, analyze and prioritize its universe of growth opportunities.
- **G14: Vision and Strategy:** This is an assessment of how well a company's growth strategy is aligned with its vision. Are the investments the company is making in new products and markets consistent with the stated vision?
- **G15: Sales and Marketing:** This is a measure of the effectiveness of a company's sales and marketing efforts in helping it drive demand and achieve its growth objectives.

Horizontal Axis – The Innovation Index

Innovation index is a measure of a company's ability to innovate products/services/solutions (with a clear understanding of disruptive Mega Trends) that are globally applicable, are able to evolve and expand to serve multiple markets, and are aligned to customers' changing needs. The elements of this index include:

- **II1: Innovation Scalability:** This determines whether an organization's innovations are globally scalable and applicable in both developing and mature markets, and also in adjacent and non-adjacent industry verticals.
- **II2: Research and Development:** This is a measure of the efficacy of a company's R&D strategy, as determined by the size of its R&D investment and how it feeds the innovation pipeline.
- **II3: Product Portfolio:** This is a measure of a company's product portfolio, focusing on the relative contribution of new products to its annual revenue.
- **II4: Mega Trends Leverage:** This is an assessment of a company's proactive leverage of evolving, long-term opportunities and new business models, as the foundation of its innovation pipeline.
- **II5: Customer Alignment:** This evaluates the applicability of a company's products/ services/ solutions to current and potential customers, as well as how its innovation strategy is influenced by evolving customer needs.