

ACI Worldwide Recognized for

2021

Product Leadership

Global Real-time
Payments Industry
Excellence in Best Practices

//CI Worldwide Real-Time Payments

Strategic Imperatives

Frost & Sullivan identifies three key strategic imperatives that impact the digital payments mobile commerce industry: competitive intensity, disruptive technologies, and innovative business models. Every company that is competing in digital payments enablement is obligated to address these imperatives proactively; failing to do so will almost certainly lead to stagnation or decline. Successful companies overcome the challenges posed by these imperatives and leverage them to drive innovation and growth. Frost & Sullivan's recognition of ACI Worldwide is a reflection of how well it is performing against the backdrop of these imperatives.

COMPETITUE DISRUPTIVE INNOVATIVE INTENSITY BUSINESS MODELS TECHOLOGIES The demand for interactive The explosion of data from technologies such as artificial The trend is shifting from intelligence, augmented voice, audio, video and traditional models to a value evolving customer needs for reality (AR), and virtual net approach. At the same data-intensive workloads are reality (VR) will help track time, omnichannel strategies driving a significant expansion customer behavior and and social commerce are of the industry. Voice support ecommerce resulting in personalization of shopping and mobile image platforms to tap into in the M-commerce experience. recognition technology are incremental revenue Value net model and revenue rapidly growing. opportunities. sharing models have Adoption of 5G integration will 5G and 6G will be crucial emerged in the past few revolutionize data-handling to enablers by improving speed, years. However, although the offer critical communication, customer experience, and value net model has received caching, and computing long-term cost efficiency, and a wide acceptance, there is capabilities; ensuring topwill play a vital role in no standard business model enabling companies establish growth performance across in the industry. various industries. an omnichannel retail presence. Mobile operators globally will Companies should develop integrate 5G before 2025, technologies catering to In the next 5-10 years, a presenting a huge opportunity efficient deployment of Mcombination of both value for M-commerce players. commerce, as the market Likewise, earlier technologies net and revenue sharing such as 4G, took approximately 3 models will gain popularity. rapidly grows till 2022. years to synchronize with With no standard business The average monthly data network devices and model operating in the consumption of a smartphone applications, so companies must industry and models user to triple over the next 5 prepare for the rapid rise in fluctuating due to innovation, years and users will dedicate demand from new network consumer demand, and rise 90% of their smartphone capacities in the next 1-2 years. in competition; companies usage time to non-voice Predictive analytics will enable need to have flexible models activities. Companies must enterprises to customize sales conversion, and VR/AR will and strategies to gain cater to the need for a datatransform customer experience. competitive advantage in the adaptive network is increasing Investment in these emerging next 5-10 years. with an estimated data growth

technologies is crucial in the next

5-7 years.

rate of 46% by 2022.

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. ACI Worldwide excels in many of the criteria in the real-time payments space.

AWARD CRITERIA	
Product Portfolio Attributes	Business Impact
Match to Needs	Financial Performance
Reliability and Quality	Customer Acquisition
Product/Service Value	Operational Efficiency
Positioning	Growth Potential
Design	Human Capital

Necessary Qualities in a Burgeoning Industry

Technological advancements and evolving consumer demands disrupt the digital payments industry as they continue to drive change throughout the payments ecosystem. A shift to online and mobile payments, the rise in electronic commerce (e-commerce), and the consumer preference for quick and uninterrupted service are driving the need for real-time payments (RTP). The year 2020 sped up the trend tremendously, as businesses across the board shifted their operations online. As these changes occur, industry participants face significant challenges. At a minimum, they must abide by changing regulations, which vary from country to country, while also learning to embrace new and innovative technologies like artificial intelligence (AI) and machine learning (ML). To remain competitive, they must implement RTP strategically, offer multiple payment schemes, and support clients with seamless customer service. Successful companies will also have adaptability at their core. In the dynamic world of RTP, providers must be agile and flexible enough to adapt quickly. Traditionalists who resist change risk obsolescence and missed opportunity, while those who embrace change will prevail.

A Global Leader

Founded in 1975 in Omaha, Nebraska, Miami, Florida-based ACI Worldwide (ACI) is a software company in the global real-time payments industry. The recipient of Frost & Sullivan's 2019 Product Leadership Award, the company has spent the past four and a half decades refining an extensive portfolio of digital software solutions, which enable use cases in all facets of the payments ecosystem: digital payments management, omni-commerce, bill pay, and fraud and risk mitigation. The solutions are applicable in various industries to empower several different player types throughout the value chain (merchants, payment service providers, acquirers, processors, billers, and banks [both retail and corporate]). ACI

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- Vikrant Gandhi, Senior Industry Director

supports these businesses with more than 4,000 employees in offices in 34 countries worldwide.

The sheer breadth of ACI's implementations is enormous. The company's software powers electronic payments for more than 6,000 organizations in 95 countries worldwide, including 1,000 of the largest financial institutions (FIs) and intermediaries and thousands of global merchants. It serves 18 of the top

20 banks worldwide and executes more than \$14 trillion in payments and securities daily. In the United Kingdom (UK), about 50% of Faster Payments pass through ACI's software at some point in their journey; and in Hungary, that number increases to 75%. Frost & Sullivan continues to be impressed by ACI's efforts to build on this foundation and create an increasingly expansive network of clientele and use cases. In Malaysia, ACI has provided the real-time central infrastructure and connects about 40 banks to process real-time payments.

Setting the Stage for Continued Growth

The payments industry is evolving extremely rapidly, with regulatory requirements, customer expectations, technology advancements, and innovative business models driving change daily. To navigate the industry complexities and remain competitive, industry participants must embark on a quest of continuous product development, customer acquisition, and thought leadership.

Throughout its market tenure, ACI has been a very active participant in the real-time payments community and has made significant strides in innovation and client enablement. For instance, in June 2019, ACI made a strategic investment in a Mumbai, India-based financial technology (fintech) company called Mindgate Solutions Private Limited (Mindgate). Mindgate Solutions provides digital services (e.g., unified payment interfaces and bill pay services) for corporate banks and consumer banks. Currently, ACI and Mindgate Solutions now offer a joint solution that combines ACI's real-time software with Mindgate's digital overlay services that can be leveraged to drive new use cases around the world. The solution leverages AI, ML, and digital transformation in payments to connect the consumer experience with payments products, services, and infrastructure.

Later the same year, ACI joined the United States (US) Faster Payments Council (FPC) to help meet the consumer demand for seamless transacting. As part of the FPC, ACI supports real-time payments implementation, adoption, and monetization. More recently (January 2021), ACI was selected to participate in the Federal Reserve's pilot program for its FedNow service, a new real-time payments program in the US. Through the FedNow Pilot Program, thousands of US-based FIs will be able to provide secure real-time payments to businesses and consumers. ACI's role is to help develop features, refine the user experience, and test the service for readiness. As a result of this participation, the company will drive adoption for real-time payments in the US.

ACI also participates in thought leadership frequently. The company attends numerous conferences, highlighting its progress in real-time payments technology at events such as The Payments Canada Summit, Money20/20 and SIBOS. ACI also publishes research on topical subjects such as the COVID-19 pandemic's effects on the industry. These on-going upgrades and developments all contribute to ACI's future; not only do they secure the company's position as a product leader, but they also set the stage for continued growth opportunities.

Demonstrating Agility

The payments industry requires certain traits in market participants; successful companies must be agile and flexible. ACI exemplifies these qualities through its ability to adjust to clients' needs quickly and seamlessly. The company has built its business and solutions to pivot and respond rapidly to the industry's changes and challenges. For instance, ACI's strategic partnership with Microsoft Corporation (Microsoft) enables the company to help its customers enter new markets, expand globally, and implement their cloud-first strategies. One customer, the Brazilian next-gen payments processor and banking-as-a-service infrastructure provider, Conductor, leveraged ACI's retail payments solution and Microsoft Azure to introduce a new acquiring capability in just seven months. ACI's Fraud Management solution is also available in Microsoft Azure Marketplace; customers can download the latest version with a single click and then launch new features such as fraud prevention strategies and machine learning capabilities. They can complete this entire process complete in only a few hours. ACI is also public cloud-agnostic, so customers can also run solutions in Amazon Web Services, Google Cloud Platform, or any other cloud provider.

ACI has also done a lot of work around its banking solutions' application programming interface (API)

"In summary, 2020 was a year that challenged banks and FIs to adapt to market changes very quickly, and ACI's customers were able to make accurate and efficient decisions to meet the challenge. ACI stepped up to the test amidst the COVID-19 pandemic and impressed Frost & Sullivan with its product flexibility, reliability, and overall quality."

- Jeffrey Castilla, Best Practices Research Team Leader capabilities to ensure that its customers can expose APIs from their own systems as Account Information Service Providers and Payment Initiation Service Providers use cases under PSD2 mandate them to do in the market. Customers can leverage ACI's APIs to seamlessly consume information into their payment engines from across their businesses, core banking, digital channels, or even new fintech market entrants. They can also perform other tasks such as adding insurance or specialist providers, executing microinvestments, and white labeling solutions for mobile

banking applications. By building these capabilities into its systems, ACI enables its customers to be nimble and adaptable. ACI designed its APIs so that customers could easily leverage them and deploy new capabilities quickly.

Use Case: Erste Bank Hungary

When an aggressive domestic mandate struck in Hungary, Erste Bank was challenged to go live with real-time payments in a short time frame. ACI's solutions architect created a proposal of how the company's ACI Enterprise Payments Platform could execute against these strict requirements. Erste Bank was able to go live in a fraction of the expected time. Erste Bank also saved money on costs and minimized risk by simply activating existing capabilities within ACI's system, which it already owned. Since Erste Bank already had the system, it did not have to make any additional purchases.

Use Case: Everlink

Everlink, a national transactions processor for small banks and credit unions in Canada, became one of the first customers to go live with ACI's machine learning products. Using the ACI Model Generator™, Everlink was able to test a new fraud model and put it into production in about two hours. As a result, Everlink ensured that genuine transactions flowed through while capturing all the fraudulent transactions.

Put to the Test in the Age of COVID-19

All of the time and effort ACI put into its products paid off in 2020; the onset of the COVID-19 pandemic put the solutions' reliability and quality to the test. The pandemic struck worldwide, forcing global companies to accelerate their AI adoption plans and other digital initiatives. Many ACI customers saw an enormous increase in financial and non-financial transactions (e.g., bank account balance inquiries, investment inquiries, or credit card due dates). Digital payments adoption spiked, and global economic uncertainty led consumers to check their balances more frequently. Amidst the chaos, ACI's software enabled financial institutions to withstand the shock of the sudden influx of financial and non-financial transactions without seeing a significant uptick in fraud (which was another huge concern).

Use Case: Increasing the Limits on Contactless Card Payments in the UK

In the UK, many ACI banking customers needed to collaborate and determine how much to increase the limits on contactless card payments at the point of sale. They achieved this mutual goal overnight to ensure citizens could transact in a socially distant and contactless way, increasing the amount from around £30 to £45. Without ACI, many of these customers would have had to write hard code to lift the contactless limits. ACI's solutions' scripting functionalities enabled them to raise the contactless limits without creating the hard codes. They were then able to test it, put it into production, and roll it out live across the UK.

In summary, 2020 was a year that challenged banks and FIs to adapt quickly to market changes. ACI's customers were able to make accurate and efficient decisions to meet the challenge. ACI stepped up to the test amidst the COVID-19 pandemic and impressed Frost & Sullivan with its product flexibility, reliability, and overall quality.

Conclusion

The real-time payments (RTP) industry is evolving quickly, with challenges to match its opportunity. Frost & Sullivan identifies multiple strategic imperatives for successful solutions providers, including strategic implementation, adherence to various regulations worldwide, seamless customer service, the ability to support multiple payment schemes, and agility. ACI Worldwide (ACI) successfully navigates the complex industry landscape, leveraging more than four decades of market tenure to secure its future as a leading RTP provider. Through continuous product development, strategic market maneuvering, and adaptability, ACI has built its foundation while delivering unmatched value to its global client base.

For these impressive feats and the company's continuous dedication to the industry, ACI Worldwide earns Frost & Sullivan's 2021 Global Product Leadership Award in the real-time payments industry.

What You Need to Know about the Product Leadership Recognition

Frost & Sullivan's Product Leadership Award recognizes the company that offers a product or solution with attributes that deliver the best quality, reliability, and performance in the industry.

Best Practices Award Analysis

For the Product Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Product Portfolio Attributes

Match to Needs: Customer needs directly influence and inspire the product portfolio's design and positioning

Reliability and Quality: Products consistently meet or exceed customer expectations for performance and length of service

Product/Service Value: Products or services offer the best value for the price compared to similar market offerings

Positioning: Products serve a unique, unmet need that competitors cannot easily replicate

Design: Products feature innovative designs, enhancing both visual appeal and ease of use

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, 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: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

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 Engine™

Frost & Sullivan's proprietary model to systematically create on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$.

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

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis of prioritized opportunities PLANNING & IMPLEMENTATION Execute strategic plan with milestones, targets, owners and deadlines OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis of prioritized opportunities FUNDELINE ENGINE** GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

The Innovation Generator™

Our six 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:

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

