

***ISG** Provider Lens™

Digital Banking Services

Nordics 2021

Quadrant
Report



A research report
comparing provider
strengths, challenges
and competitive
differentiators

Customized report courtesy of:

Infosys®

December 2021

About this Report

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The research and analysis presented in this report includes research from the ISG Provider Lens™ program, ongoing ISG Research programs, interviews with ISG advisors, briefings with services providers and analysis of publicly available market information from multiple sources. The data collected for this report represents information that ISG believes to be current as of November, 2021 for providers who actively participated as well as for providers who did not. ISG recognizes that many mergers and acquisitions have taken place since that time, but those changes are not reflected in this report.

All revenue references are in U.S. dollars (\$US) unless noted.

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1	Executive Summary
4	Introduction
16	Core Modernization and Integration Services
22	Banking Governance, Risk and Compliance Services
28	Transformational and Digital Banking Services
35	Payment and Card Processing Services
39	Methodology

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EXECUTIVE SUMMARY

DIGITAL BANKING SERVICES 2021 – Nordics

Twenty-seven million people live in the five Nordic countries of Sweden, Denmark, Finland, Norway and Iceland, and share geographic proximity and cultural affinities. Nordic banking is oligopolistic in nature. Post-COVID, imperatives are driving digitalization trends in the Nordics. Many banks are announcing debt restructuring measures to ease the pain for their beleaguered borrowers. However, the Nordic banks have reported lower NPAs and are expected to absorb the credit losses, owing to their strong financials.

The Nordic banks were the most successful in the European banking system and have survived the 2008 crisis. Also, 90 percent of the Nordic society on an average is cashless. Average household internet access is 95 percent. Even in the Nordics, like the rest of Europe, newer fintech players are challenging the traditional banks. As both homegrown and global players disrupt the market across the value chain, traditional banks are attempting to defend their territory by reinventing their digital models. For instance, the P27 initiative provides a single common payments infrastructure across the Nordic countries.

Outsourcing of IT services is the dominating theme in Nordics. Many European IT firms are trailing behind their Indian counterparts on their own turf. The overseas providers' offshoring strategy reduced operational costs and brought to the Nordics the advantages of having a globally distributed model, including cultural learning, HR, processes, customers,

incentives, and recruitment. Driven by a relentless ambition to dominate the markets, Indian IT firms have taken over the region.

Core Modernization and Integration Services

The global core banking software market generated around US\$10 billion in 2020.

Core is shifting to the cloud: Many banks operate legacy mainframe core banking platforms that date back to the 1980s and 1990s. They tend to be complex and are either proprietary or heavily customized. There have been major changes in the industry, including regulatory, payments, data privacy, cross border, and digital services. Instead of propagating these changes throughout the system, the banks just added new layers of technology to accommodate the new products, regions, channels, and functions. It has become imperative for all FIs, regardless of size, to modernize their core platforms to meet the expectations of their customers and regulators, and operate cost effectively, while adding digital capabilities.

Therefore, banks are now shifting to such other platforms as service-oriented platforms and cloud-native platforms. While service-oriented platforms are offered as cloud-based software-as-a-service (SaaS) subscription model, cloud-native platforms leverage

microservices-based architecture with APIs. Furthermore, cloud-native platforms support real-time processing and are highly cost effective because they are offered as a pay-per-use subscription model. Cloud-based lighter versions of the core are being provided by Thought Machine and Mambu. For instance, U.K. fintech Thought Machine offers a cloud-native platform to various prestigious clientele, which include JP Morgan Chase, Lloyds Banking Group, Atom Bank, Standard Chartered, and Sweden's SEB. Large banks such as Royal Bank of Scotland and BNP Paribas are also the major clients of IBM. Further, banks are "hollowing out the core", that is they are decoupling insights, analytics, and business tools, from the core banking platform. This will allow the platform to focus on its core functionality – that of a system of records.

Demand for third-party integration is on the rise: Banks are seeking IT service providers that offer commercial off-the-shelf products through customized engagements. Two factors are driving the core modernization segment. First, demand for emerging technologies such as AI, machine learning, natural language processing (NLP), blockchain, and RPA; second, demand for relevant skillsets in Agile and DevOps methodologies.

New pricing models for core modernization:

- Operate and transfer models: In this model, the IT service providers are held accountable for migrating and/or upgrading systems. In some cases, as the client transitions to cloud-native platforms over the contract period, the operating expenses are held constant.
- New tools at no extra cost: Newer proprietary tools that support transition to the cloud are being offered at no extra cost, making them highly cost effective.

- Bundle pricing: IT service providers offer bundle pricing for modernizing an array of related systems or retiring them altogether.

New approaches to core modernization:

- Low-code platforms are gaining traction: Low-code platforms carry out complex tasks and integrations by pointing and clicking rather than writing the code. They are integrated with AI and machine learning capabilities.
- Easier business rule extraction: Improved mining technologies are making it easier to extract the business logic so that the legacy code can either be refactored, removed, or replaced with microservice architecture.
- Improved incremental modernization: Using a set of increasingly sophisticated mapping tools, logical subgroupings can be identified, and legacy interfaces can be severed, replacing them with API-based architecture. Over time, these services can be optimized for a more predictable and consistent performance.

Banking Governance, Risk and Compliance Services

Global GRC market size is expected to be around \$29 billion in 2020.

- **Rising regulatory scrutiny and compliance costs driving growth for regtech:** Banks are facing challenges due to rising regulatory scrutiny and costs. As a result, the demand for regtech is increasing. This has become even more imperative in the post-COVID world, where external risks are shutting down businesses and increasing

the credit risk and non-performing assets (NPAs) of banks. The high growth areas include data privacy, enterprise risk, cybersecurity, financial crime, and risk management.

- **Digital GRC is gaining market traction:** Moving to the cloud enables the banks to respond quickly to any changes in regulations, and dynamically adjust their risk weighted assets and NPAs and undertake stress tests. Also, emerging technologies can be easily implemented. Such offerings save time, money, and effort when compared to on-premises implementation of GRC.
- **Clients demand in-built compliance and risk features for cost effectiveness:** The demand for cost-effective digital transformation offerings is increasing. Also, software, services and processes that are being digitized must have risk and compliance capabilities in-built in them.
- **Banks are regulated but fintech is not:** Third-party risk is emanating for the banks from the exponentially rising fintech, which may not have adequate internal compliance systems. These include, for instance, lack of KYC at the associate fintech.

Transformational and Digital Banking Services

The global digital transformation market in banking generated US\$55 billion in 2020.

- **Ongoing fierce turf war increases DX adoption:** Nordic banks are facing intense competition from global and local banks across the banking value chain on all main product areas. Banks are embracing digital technologies like never before to prepare themselves for this change. As fintechs unleash the cashless revolution, many Nordic

retail banks could witness a substantial fall in their revenue over the next two years. A major factor contributing to the vulnerability of the Nordic banks has been their lack of preparedness and foresight to embrace digital technologies.

- **Demand for hyper-personalized services to deliver Uber-like UX:** Banks want IT service providers to enable them to leverage emerging technologies such as AI, machine learning, RPA, and blockchain to deliver hyper-personalized services focusing on UX to their customers. This will improve revenue opportunities and optimize costs. Nordic countries also have governments that are highly digitized. For instance, their eID schemes can be used to log into bank accounts.

Payment and Card Processing Services

The global payment and card processing market size was estimated at US\$138 billion in 2020.

- **P27 payment initiative is driving the payments segment in the Nordics:** P27 is a real-time, cross-border payment system that supports multiple currencies for domestic and cross-border payments. The initiative will also support transactions in the rest of the eurozone, in harmony with Single Euro Payments Area (SEPA) standards. It is aimed at reducing the associated transaction costs and hassles related to these transactions and will boost intra-regional trade and travel.
- **Fintechs are challenging hegemony of banks:** Fintech firms' tech expertise and user-friendly services are driving the market. P27 is a joint initiative by Danske Bank

(Denmark), Handelsbanken (Sweden), Nordea (Denmark), OP Financial Group (Finland), SEB (Sweden), and Swedbank (Sweden) to fight back against the looming threat from fintechs. Banks recognize that the payments segment is the vital gamechanger that can help them reconnect to their customers.

- **Big tech is a game changer:** In addition to fintechs, there are many big techs such as Amazon, Apple, and Meta (formerly named Facebook) that are progressing with superior UX offerings. They have a formidable advantage in routing the traffic of millions of dollars via mobile payment apps and other in-built payment apps. Their abundant financial resources help them have a higher staying power in the low margin, high volume world of payments.
- **Interbank collaboration and shared IT service providers paving the way for open banking adoption:** In Denmark, 27 banks made an agreement with Nordic API Gateway through BEC, the IT supplier they collectively own, to provide open banking services to the group's more than two million customers. Similarly, nine Danish banks made an agreement with their IT service provider Bankdata, to access open APIs from Nordic API Gateway for their 1.7 million customers. So far, 42 banks have signed up with Nordic API Gateway. Many banks are cutting jobs to become lean. Also, 96 percent of Nordic households have internet access, paving the way for open banking.



Introduction

Simplified illustration

Digital Banking Services 2021	
Core Modernization and Integration Services	Banking Governance, Risk and Compliance Services
Transformational and Digital Banking Services	Payment and Card Processing Services

Source: ISG 2021

Definition

The Digital Banking Services 2021 study analyzes companies in four distinct areas of consulting, professional, and managed services. In light of the COVID-19 pandemic, the banking industry is undergoing massive digital disruption, with online deposits, mobile apps, and e-bill payments fundamentally becoming the norm. Banks are seeking professional service providers to help them embrace innovation and tackle the ever-changing challenges of the present digital world, while staying competitive and attracting or retaining customers. To cope with these challenges, banks are primarily seeking advisory and operational support to evolve digitally by transforming established client services and building a robust foundation for digital services. In addition, banks use professional services for specific businesses to free resources and focus on the above-mentioned

Definition (cont.)

establishment of the digital strategy. ISG has identified that business leaders in banking and financial institutions are shifting their focus toward digital solutions and services, which can help improve customer engagement as well as enable faster onboarding and deeper analytics on spend and investment, along with cross-sell opportunities.

Service providers offering transformational and modernization services that help to faster transition to a digital, omnichannel platform are in demand. Bank executives expect these providers to offer robust services with deep functional and domain expertise that help improve customer experience as well as revenue opportunities.

Core banking modernization and integration continues to lead the list of priorities among banks investing in digital transformation initiatives. As banks increasingly prefer to modernize specific functional modules of the core banking system, service providers have been offering modularized application development to quickly integrate necessary

functionalities and kick start relevant services within a short duration. Service providers are strengthening their experience across several core banking platforms and investing in vendor/platform agnostic integration approaches. In addition to core modernization, banks are focusing on digitalizing their front- and back-office processes, utilizing emerging technologies and solutions such as automation, AI, advanced analytics, IoT, cloud, and security.

With banks facing challenges to successfully meet regulatory requirements, governance, risk and compliance services also remain a top priority. In addition to managing regulatory risk, service providers are also expected to offer financial, operational, IT, and fraud risk management services. Payments and cards processing is another key area of investment among banks, and recent advancements in digital payment technologies allow banks to offer high levels of personalization and faster transaction capabilities to customers.

Definition (cont.)

Scope of the Study

The ISG Provider Lens™ study offers the following to the IT decision-makers:

- Transparency of the strengths and weaknesses of relevant providers
- Differentiated positioning of providers by segments
- A perspective on the Nordics market

Our study serves as an important decision-making basis for positioning, key relationships, and go-to-market considerations. ISG advisors and enterprise clients also leverage information from these reports for evaluating their current vendor relationships and potential new engagements.



Provider Classifications

The provider position reflects the suitability of IT providers for a defined market segment (quadrant). Without further additions, the position always applies to all company sizes classes and industries. In case the IT service requirements from enterprise customers differ and the spectrum of IT providers operating in the local market is sufficiently wide, a further differentiation of the IT providers by performance is made according to the target group for products and services. In doing so, ISG either considers the industry requirements or the number of employees, as well as the corporate structures of customers and positions IT providers according to their focus area. As a result, ISG differentiates them, if necessary, into two client target groups that are defined as follows:

- **Midmarket:** Companies with 100 to 4,999 employees or revenues between US\$20 million and US\$999 million with central headquarters in the respective country, usually privately owned.
- **Large Accounts:** Multinational companies with 5,000 or more employees or revenue above US\$1 billion, with activities worldwide and globally distributed decision-making structures.

Provider Classifications

The ISG Provider Lens™ quadrants are created using an evaluation matrix containing four segments (Leader, Product & Market Challenger and Contender), and the providers are positioned accordingly.

Leader

Leaders have a comprehensive product and service offering, a strong market presence and established competitive position. The product portfolios and competitive strategies of Leaders are strongly positioned to win business in the markets covered by the study. The Leaders also represent innovative strength and competitive stability.

Product Challenger

Product Challengers offer a product and service portfolio that reflect excellent service and technology stacks. These providers and vendors deliver an unmatched broad and deep range of capabilities. They show evidence of investing to enhance their market presence and competitive strengths.

Market Challenger

Market Challengers have a strong presence in the market and offer a significant edge over other vendors and providers based on competitive strength. Often, Market Challengers are the established and well-known vendors in the regions or vertical markets covered in the study.

Contender

Contenders offer services and products meeting the evaluation criteria that qualifies them to be included in the IPL quadrant. These promising service providers or vendors show evidence of rapidly investing in products/ services and follow sensible market approach with a goal of becoming a Product or Market Challenger within 12 to 18 months.

Provider Classifications (cont.)

Each ISG Provider Lens™ quadrant may include a service provider(s) which ISG believes has strong potential to move into the Leader quadrant. This type of provider can be classified as a Rising Star. Number of providers in each quadrant: ISG rates and positions the most relevant providers according to the scope of the report for each quadrant and limits the maximum of providers per quadrant to 25 (exceptions are possible).

Rising Star

Rising Stars have promising portfolios or the market experience to become a Leader, including the required roadmap and adequate focus on key market trends and customer requirements. Rising Stars also have excellent management and understanding of the local market in the studied region. These vendors and service providers give evidence of significant progress toward their goals in the last 12 months. ISG expects Rising Stars to reach the Leader quadrant within the next 12 to 24 months if they continue their delivery of above-average market impact and strength of innovation.

Not In

The service provider or vendor was not included in this quadrant. Among the possible reasons for this designation: ISG could not obtain enough information to position the company; the company does not provide the relevant service or solution as defined for each quadrant of a study; or the company did not meet the eligibility criteria for the study quadrant. Omission from the quadrant does not imply that the service provider or vendor does not offer or plan to offer this service or solution.

Digital Banking Services - Quadrant Provider Listing 1 of 2

	Core Modernization and Integration Services	Banking Governance, Risk and Compliance Services	Transformational and Digital Banking Services	Payment and Card Processing Services
Accenture	● Leader	● Leader	● Leader	● Leader
Atos	● Not in	● Product Challenger	● Product Challenger	● Market Challenger
Capgemini	● Not in	● Leader	● Leader	● Leader
CGI	● Not in	● Not in	● Product Challenger	● Product Challenger
Cognizant	● Leader	● Leader	● Leader	● Leader
Deloitte	● Market Challenger	● Market Challenger	● Market Challenger	● Not in
DXC Technology	● Market Challenger	● Contender	● Product Challenger	● Product Challenger
EXL	● Not in	● Contender	● Not in	● Not in
HCL	● Leader	● Leader	● Leader	● Leader
Infosys	● Leader	● Leader	● Leader	● Leader
KPMG	● Not in	● Market Challenger	● Not in	● Not in

Digital Banking Services - Quadrant Provider Listing 2 of 2

	Core Modernization and Integration Services	Banking Governance, Risk and Compliance Services	Transformational and Digital Banking Services	Payment and Card Processing Services
LTI	● Rising Star	● Rising Star	● Rising Star	● Rising Star
Mindtree	● Contender	● Contender	● Contender	● Contender
Mphasis	● Contender	● Contender	● Contender	● Contender
NTT DATA	● Not in	● Not in	● Not in	● Product Challenger
Persistent Systems	● Contender	● Contender	● Contender	● Contender
PwC	● Not in	● Market Challenger	● Not in	● Not in
SLK Software	● Contender	● Not in	● Contender	● Contender
Sopra Steria	● Product Challenger	● Not in	● Market Challenger	● Not in
TCS	● Leader	● Leader	● Leader	● Leader
Tech Mahindra	● Product Challenger	● Product Challenger	● Contender	● Contender
TietoEVRY	● Leader	● Leader	● Leader	● Leader



Digital Banking Services Quadrants

ENTERPRISE CONTEXT

Core Modernization and Integration Services

This report is relevant to enterprises across industries in the Nordics for evaluating core modernization and integration services.

In this quadrant report, ISG highlights the current market positioning of core modernization and integration service providers in the Nordics, based on the depth of their service offering and market presence.

In the Nordic banking industry, modernization of core banking systems is transitioning from legacy on-prem systems to open-banking and cloud-based models. This transformation ranges from small incremental changes to a complete “rip-and-replace” approach. However, the approach taken will depend on the bank’s current requirements. Also, there is an emerging trend of acquiring the IT service provider of a core platform, jointly owned by a group of banks, then securing the outsourcing contract for the building and operation of the platform. Such acquisitions will help the IT service providers to directly contract with the bank.

Who should read the report:

Chief Information Officer (CIO): For CIOs, this report provides better understanding of how current processes and protocols impact an enterprise’s existing use of legacy systems and technologies as well as potential limitations that may exist for the adoption and integration of new capabilities. The report also examines the relative strengths and cautionary statements of different service providers and helps CIOs better evaluate various service providers.

Chief Digital Officer (CDO): CDOs should read this report to gain better perspectives on the digital service suite of different providers, which, in turn, will enable better decision-making. This report also helps gain insights on provider capabilities, which will help them embark on a smooth and seamless journey to address their growing needs and gain a competitive advantage.

Chief Technology Officer (CTO): CTOs and technology leaders should read this report to understand the paradigm shift and emerging trends witnessed in the banking industry. This will help increase revenues, provide better customer experience, optimize cost structure, and manage enterprise risk.

Chief Strategy and Operations Officer: Strategy and operations executives should read this report to understand the need for designing and investing in services that are technology- and customer-centric, as well as the relevant provider’s capabilities in offering these solutions. The report also provides insights on better managing existing legacy systems and explores plausible strategies that can be adopted to minimize switching costs and implementation effort.

Chief Experience Officer: Experience officers should read this report to better assess their banking environment for opportunities to implement solutions and services and improve customer experience. The report also provides analysis of provider capabilities, and assessment of prevailing market dynamics, to better strategize customer experience initiatives.

Project Leaders: Project leaders responsible for transformation and modernization of financial services across banks and other financial institutions should read this report to understand the differentiators among the leading IT service providers in the Nordics.

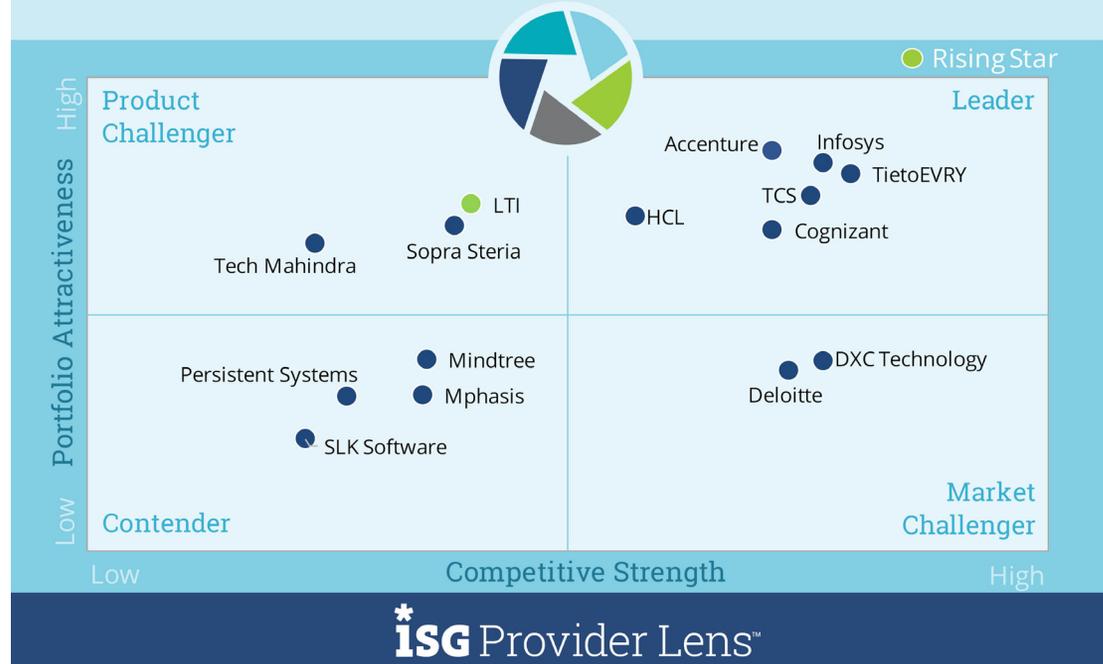


CORE MODERNIZATION AND INTEGRATION SERVICES

Definition

In this quadrant, ISG analyzes consulting and system integration service providers that help banking clients to maintain competitive relevance and attain operational excellence in a digital-first environment. With the goal of optimizing customer experience while reducing operating costs and enhancing service quality, such services also help banks manage risk and regulatory compliance more effectively. Core modernization and integration services are clustered around key building blocks such as developing a modernization strategy charting out a business as well as a technology architecture, along with an end-to-end roadmap. Executing a successful strategy involves offering implementation and integration planning and support to upgrade legacy systems, deploy new core platforms, implement customized solutions, and integrate legacy and new core banking platforms supported by data migration services.

Digital Banking Services
Core Modernization and Integration Services 2021 Nordics



Source: ISG Research 2021

CORE MODERNIZATION AND INTEGRATION SERVICES

Eligibility Criteria

- Service providers with proven industry experience of implementation and integration of core banking systems with at least one project executed or underway this year:
- Service providers should have expertise on any available core banking platforms in the market, with experience and partnership of working with at least one platform vendor
- Service providers should have necessary capabilities to offer advisory, technical redesign and application development, implementation, operations enablement, and cloud migration for successful modernization
- Providers should be capable of designing and developing applications and tools using DevOps and agile methodologies to implement necessary modules and requirements for data management, workflows and business processes
- Providers should have translated their experience and expertise to reusable components including playbooks, assessments, templates, and blueprints
- Service providers should be able to showcase their industry experience through references and use cases
- Providers should invest in partnerships with technology providers, hardware, software and system integration providers, banking industry alliances and associations.

CORE MODERNIZATION AND INTEGRATION SERVICES

Observations (cont.)

Key observations about the providers, M&A and key pointers about the leaders

- **Accenture's** deep domain expertise, coupled with a platform-agnostic approach and a broad portfolio of core banking services, positions it as a leader in the core modernization segment.
- **Cognizant** is rapidly expanding its footprint in the growth markets of Europe and Asia by offering integration services for diverse platforms, investing in new technologies and building a strong partner ecosystem.
- **Infosys** is a leader in this segment because of its continuous customer engagement, improved brand strategy for the company owned platform - Finacle, and substantial investments in innovative technologies.
- **HCL** is investing in high growth areas of emerging technologies and emerging markets and leveraging its partner ecosystem to explore potential cross-selling opportunities for sustained market leadership.
- **TCS** offers bundled services around its BaNCS platform. Clients find the platform an attractive proposition as it lowers their costs, saves time and reduces the pain points associated with approaching multiple vendors for each solution.
- **TietoEVERY** offers core and niche core banking solutions and banking-as-a-service, while leveraging strategic alliances to emerge as a market leader in the Nordics.
- **LTI** (rising star) is expanding its global footprint by strategic acquisitions and partnerships in key markets and is taking an institutional approach to secure large deals.

INFOSYS

Overview

Infosys is a digital services and consulting provider, headquartered in Bangalore, India. For the fiscal year 2021, the company generated a revenue of US\$3.6 billion, of which about US\$0.8 billion was derived from Europe. The financial services segment contributed around US\$1.2 billion. It added 130 new clients for the fiscal year 2021. It has 158,000 employees.

Strengths

Customer diversification stems from own as well as other providers platform integration: Infosys is uniquely positioned to capitalize on the core banking opportunity as it provides integration services for not only its own native platform Finacle, but also to other providers' platforms. Finacle serves over 500 banks and a billion accounts in over 100 countries.

Creating brand awareness around Finacle with proprietary product offerings, resulting in increased global adoption: Finacle's brand strategy was revamped to project it as a cloud-based platform with proprietary product offerings. This increased its worldwide adoption. Some of its major clients include Santander, DBS and ING.

Building market presence through acquisitions: Infosys has a substantial presence in the Nordics. In 2018, it acquired Fluido, a Salesforce leading partner in the Nordics, for US\$76 million.

Investing in innovations to achieve cost leadership: The company has innovation hubs and delivery centers in the Nordics — Stockholm, Linköping and Östersund, and Helsinki. It has set up a US\$500 million worth innovation fund to work with fintechs. It has 18 delivery centers in Europe. Since 2008, Indian IT service firms have doubled their European revenues, compared to their more prominent European peers, owing to their cost competitiveness.

Caution

Legacy migration issues need to be carefully assessed by potential customers, while migrating to Finacle.



2021 ISG Provider Lens™ Leader

Continuous customer engagement, improved brand strategy for the company-owned platform Finacle, and increased investments in innovative technologies are paving the way for market leadership for Infosys.

ENTERPRISE CONTEXT

Banking Governance, Risk and Compliance Services

This report is relevant to enterprises across industries in the Nordics, for evaluating banking governance, risk, and compliance services.

In this quadrant report, ISG highlights the current market positioning of banking governance, risk and compliance services providers in the Nordics, based on the depth of their service offering and market presence.

In the Nordics, banks are deploying counterstrategies to ward off cyberattacks and third-party associated risks. Also, banks need to keep pace with changing regulatory requirements that are becoming more stringent in the region. Against the backdrop of large money-laundering scandals, banks in the Nordics are implementing a standardized utility model, namely Invidem. The platform will help them and their corporate clients to manage KYC information and requests. The pandemic resulted in a major debt restructuring exercise and increased market volatility. This acted as the stress test for the banks and proved their operational resilience. However, there could be some headwinds in the future, which the GRC software must predict and contain. Also, Nordic banks are considering the regulatory requirement adherence as a key priority, and most banks have digitized their operations and embraced reg-tech solutions.

Who should read the report:

Chief Information Officer (CIO): For CIOs, this report provides better understanding of how current processes and protocols impact an enterprise's existing use of legacy

systems and technologies, as well as potential limitations that may exist for the adoption and integration of new capabilities. The report also examines the relative strengths and cautionary statements of different service providers and helps CIOs better evaluate various service providers.

Chief Digital Officer (CDO): CDOs should read this report to gain better perspectives on the digital service suite of different providers, which, in turn, will enable better decision-making. The report also helps gain insights on provider capabilities, which will help them embark on a smooth and seamless journey to address their growing needs and gain a competitive advantage.

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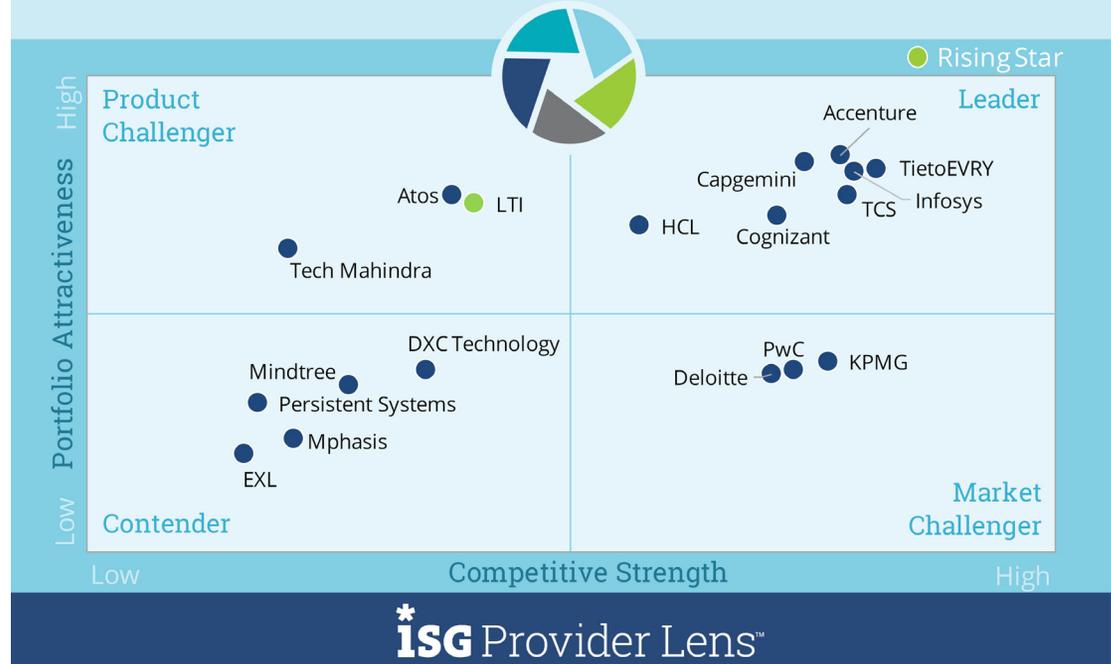
BANKING GOVERNANCE, RISK AND COMPLIANCE (GRC) SERVICES

Definition

Service providers in this quadrant support banks in enabling effective corporate governance, mitigating enterprise level risk and meeting regulatory compliance requirements. Although some of the GRC components are available as modules in the core banking platform, the quadrant explicitly analyzes portfolio offered by service providers on GRC system integration and managed services to account for risk mitigation arising from IT systems, data, legacy applications, new product/platform integration, and overall business risk validation. Services offered by providers include, but not limited to, KYC/AML, fraud management, credit, liquid and market risk management, assets, and liabilities management, adhering to regulatory compliance, and vendor risk management. These services help banks build, establish, and operate a logically integrated, analytics-driven, automated solution, along with the corresponding enhancements in the existing GRC framework.

Digital Banking Services
Banking Governance, Risk and Compliance Services

2021
Nordics



Source: ISG Research 2021

BANKING GOVERNANCE, RISK AND COMPLIANCE (GRC) SERVICES

Eligibility Criteria

- Service providers should have proven banking industry experience with their GRC portfolio of services covering advisory, application development, implementation, testing, and operations support
- Service providers should be capable of implementing and integrating readily available platforms in the market for KYC, AML, fraud risk management, credit risk, market risk, assets and liabilities management, and regulatory compliance with advanced reporting capabilities
- Service providers should also be capable of developing their own models, analysis, and solution to suit the custom requirements of banks within the GRC portfolio
- Service providers should be able to leverage next generation technologies including automation, analytics, AI/ML, to automate and build intelligence to reduce time as well as improve risk management capabilities
- Providers should have translated their experience and expertise into reusable components including playbooks, assessments, templates, and blueprints
- Service providers should be able to showcase their industry experience through references and use cases
- Providers should invest in partnerships with technology providers, hardware, software and system integration providers, banking industry alliances, and associations.

BANKING GOVERNANCE, RISK AND COMPLIANCE (GRC) SERVICES

Observations

Key observations about the providers, M&A, and key pointers about the leaders.

- **Accenture** provides a highly specialized compliance as a service to help clients effectively navigate the regulatory landscape, while supporting them with a formidable array of services to deliver high ROI and achieve efficiency.
- **Capgemini's** integrated offerings and partner expertise make it a leader in the risk and compliance space.
- **Cognizant** innovates with its risk and compliance as a service to offer cost-effective solutions to its clients. It is partnering with domain experts to expand its footprint.
- **HCL** offers third-party risk management as a service and vendor assessment as a service in a pay-per-assessment model, which could help the banks meet a majority of their regulatory requirements by providing them with the required expertise at optimal costs.
- **Infosys** is leveraging on its deep domain expertise, partner ecosystem, and augmented native platform capabilities to offer a broad and diversified product suite to its clients.
- **TCS** offers augmented risk and compliance capabilities, which are integrated into its BaNCS platform to offer cost-effective and efficient solutions to its clients.
- **TietoEVERY's** bundled GRC capabilities built into its core banking platform, along with its expertise in financial crime prevention, help the company gain market leadership in the Nordics.
- **LTI** is leveraging on its partnerships, innovative solutions, and broad service suite to gain traction and position itself as a strong challenger in the risk and compliance space.

INFOSYS

Overview

Infosys is a digital services and consulting provider. It generated a revenue of US\$3.6 billion. Its risk solutions are designed to address credit risk, credit decision-making, BASEL II&III, market risk, limit monitoring system, CVA, stress testing, CCAR, operational risk, liquidity risks, risk data warehouse, fundamental review of trading book (FRTB), BCBS239, and regulatory reporting. Furthermore, its compliance solutions support clients in the areas such as know your customer (KYC)/customer due diligence (CDD)/enhanced due diligence (EDD), watch list filtering, sanctions screening, Foreign Account Tax Compliance Act (FATCA), Common Reporting Standard (CRS), anti-money laundering (AML), fraud management, and trade surveillance.

Strengths

Broad and diversified product suite to offer comprehensive risk solutions: Infosys offers risk solutions in the areas of BASEL II&III — credit, market and operational risks, FRTB, BCBS239, and regulatory reporting. It offers compliance solutions in the areas of KYC/CDD/EDD, FATCA, CRS, AML, fraud management, and trade surveillance.

Partner ecosystem supports risk and compliance capabilities: The company's third-party vendors -- SAS, MetricStream, and RSA help Infosys augment its compliance capabilities and enable it to serve a wider client base.

Innovative framework on the impact of climate-related risk factors on banks KPIs: The company is building frameworks on emerging themes such as climate change to assess its impact on KPIs of banks.

Risk and compliance capabilities are built around its native platform: Infosys offers bundled products in the risk and compliance space, along with its native platform, Finacle. This, in turn, drives traction for the company's regulatory solutions.

Caution

Infosys' risk and compliance capabilities offer a broad spectrum of services to clients; however, some of these solutions are native to its platform.



2021 ISG Provider Lens™ Leader

Infosys is leveraging its deep domain expertise, partner ecosystem, and augmented native platform capabilities to offer a broad and diversified product suite to its clients.

ENTERPRISE CONTEXT

Transformational and Digital Banking Services

This report is relevant to enterprises across industries in the Nordics for evaluating transformational and digital banking services.

In this quadrant report, ISG highlights the current market positioning of transformational and digital banking service providers in the Nordics, based on the depth of their service offering and market presence.

Many Nordic banks are embarking on ambitious projects to deploy emerging technologies such as automated customer services, AI and machine learning, and blockchain. This trend is being driven not only by customer expectations and regulatory requirements, but also by the need to improve their competitiveness against the emerging threat of fintechs. Banks want their digital banking solutions to provide a rich, seamless, omnichannel UX to their customers. Another trend is the emergence of non-financial players from other industries, such as IKEA, thereby creating additional business opportunity for service providers.

Who should read the report:

Chief Information Officer (CIO): For CIOs, this report provides better understanding of how current processes and protocols impact an enterprise's existing use of legacy systems and technologies, as well as potential limitations that may exist for the adoption

and integration of new capabilities. The report also examines the relative strengths and cautionary statements of different service providers and helps CIOs better evaluate various service providers.

Chief Digital Officer (CDO): CDOs should read this report to gain better perspectives on the digital service suite of different providers, which, in turn, will enable better decision-making. This report also helps gain insights on provider capabilities, which will help them embark on a smooth and seamless journey to address their growing needs, and gain a competitive advantage.

Chief Technology Officer (CTO): CTOs and technology leaders should read this report to understand the paradigm shift and emerging trends witnessed in the banking industry. This will help increase revenues, provide better customer experience, optimize cost structure, and manage enterprise risk.

Chief Strategy and Operations Officer: Strategy and operations executives should read this report to understand the need for designing and investing in services that are technology- and customer-centric, as well as the relevant provider capabilities in offering these solutions. The report also provides insights on better managing existing legacy systems and explores plausible strategies that can be adopted to minimize switching costs and implementation effort.

Chief Experience Officer: Experience officers should read this report to better assess their banking environment for opportunities to implement solutions and services and improve customer experience. The report also provides analysis of provider capabilities and assessment of prevailing market dynamics to better strategize customer experience initiatives.



TRANSFORMATIONAL AND DIGITAL BANKING SERVICES

Definition

In this quadrant, ISG analyzes service providers that can offer relevant technology to allow business process solutions to enable and enhance the digitalization roadmap of financial institutions. While a large proportion of banking operations are carried out via an electronic/online platform, digital banking should eliminate all processes requiring paperwork as well as reduce manual effort significantly.

Aimed at delivering nextgen customer experience, transformational and digital banking services should offer high levels of process automation, web-based services, as well as enhanced security on an application programming interface (API)- driven architecture.

Solutions offered by these providers are expected to be modular in nature and are predominantly termed as accelerators, capable of driving superior levels of scalability and agility for financial institutions to accommodate dynamic changes in customer and market demands.



TRANSFORMATIONAL AND DIGITAL BANKING SERVICES

Definition (cont.)

Service providers are expected to showcase significant technological, functional, process and domain expertise in integrating the right elements to help achieve complete digitalization. Customers expect omni-channel, remote onboarding and transaction services, intelligent financial management, feature-rich card and payment services, as well as the highest levels of security.

Banks and other financial institutions would rely on service providers with a strong portfolio and expertise in delivering, but not limited to, cloud services, microservices and APIs, security, analytics, as well as a combination of technologies, including AI/ML, IoT, and biometrics.

Eligibility Criteria

- Providers should have proven banking industry experience with their digital transformation portfolio of services covering advisory, application development, implementation, testing and support
- Service providers should be capable of integrating, implementing, and managing off-the-shelf applications and modules or develop custom applications and implement to suit the unique requirements of digital transformation journey of their banking clients
- Service providers should also be capable of developing their own architecture, redesign legacy, integrate modular accelerators, test, and operationalize the necessary requisites of the transformation elements (omni channel, digital onboarding, customer centricity)
- Service providers should be able to leverage next generation technologies including automation, analytics, AI/ML, cloud, microservices, and APIs to automate and build IT environments enabling digital services for banking customers

TRANSFORMATIONAL AND DIGITAL BANKING SERVICES

Eligibility Criteria (cont)

- Providers should have translated their experience and expertise into reusable components including: playbooks, assessments, templates, and blueprints
- Service providers should be able to showcase their industry experience through references and use cases
- Providers should invest in partnerships with technology providers, hardware, software and system integration providers, banking industry alliances, and associations
- Providers should establish thought leadership through centers of excellence, R&D labs, and verticalized platform/solution approaches.

Observations

Key observations about the providers, M&A, and key pointers about the leaders.

- **Accenture's** deep domain expertise, coupled with its consulting approach and strategic collaborations, is driving its growth in the digital transformation domain.
- **Capgemini's** systematic framework, structured approach, and a methodically designed portfolio have resulted in gaining market leadership in the digital transformation segment.
- **Cognizant** offers an industry independent broad portfolio of services and acquires regional boutique players to better serve its clients.
- **HCL** offers its clients a broad suite of services, coupled with a strong support network of partners, and pursues a localization strategy to build market dominance.
- **Infosys** integrates its core banking platform with digital engagement solutions and packages its services around Cobalt, a proprietary cloud-based solution, to win customer credibility and large deals.

TRANSFORMATIONAL AND DIGITAL BANKING SERVICES

Observations (cont.)

- **TCS** builds a strong market presence in the fast-growing BFSI sector in Europe, and wins several large deals in the digital transformation space, largely owing to its broad portfolio service suite and long-standing client relationships.
- **TietoEVRY** has a diversified service suite, strong partner ecosystem, and shared cultural values. This helps the company to collaborate with several large banks in the Nordics.
- **LTI's** (rising star) strong talent team and strategic acquisitions have positioned it as the second largest player in the Temenos ecosystem.



INFOSYS

Overview

Infosys is a digital services and consulting provider. It generated US\$3.6 billion in revenues. Infosys GTM strategy for digital transformation includes consulting, UX and design thinking, digital solutions, legacy modernization, and managed services. About 47 percent of the company's revenues come from such digital services as hybrid cloud, cybersecurity, and remote work. The company wants to increase this share to more than 50 percent of its revenues.

Strengths

Broad product suite driving segment growth - The company offers the Finacle Digital Engagement Suite as an advanced omnichannel solution that helps banks to serve both small and corporate customers. The suite can serve all types of user groups including end customer, bank staff, external partner, and third-party providers. Infosys Cobalt is a proprietary cloud-based set of services, solutions and platforms that assist in its client's digital transformation journey. It also offers cloud agnostic application stack through its Polycloud platform. The company's service store seamlessly provides modular components of the Infosys Live Enterprise — platforms, applications, and services. This lowers the TCO for its clients.

Global wins owing to credibility and trust: Infosys partners across countries and industries owing to its increasing credibility and customer trust. Some of the major wins include Arcelor Mittal, Wells Fargo, Bank Dhofar, TSB Bank (U.K.), and Volvo.

Comprehensive strategy and vision for the critical corporate and retail banking verticals: The company individually offers a full-fledged solution suite for each vertical. This helps it to position itself with better focus for each of these segments.

Caution

Potential clients need to be aware that a majority of Infosys's digital services are offered as a packaged service, implying that they cannot be subscribed to individually.



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Infosys is packaging its Digital Banking Solution Suite and bundling its services around Cobalt, a proprietary cloud-based solution, to win customer credibility and large deals.

ENTERPRISE CONTEXT

Payment and Card Processing Services

This report is relevant to enterprises across industries in the Nordics for evaluating payment and card processing services.

In this quadrant report, ISG highlights the current market positioning of payment and card processing services providers in the Nordics, based on the depth of their service offering and market presence.

Banks in Denmark, Sweden and Finland launched P27, a cross-border payment system that will enable integrated domestic and cross-border payments and help fend off fintech threat. Nordic banks are not only exploring opportunities for collaborations with fintechs but are actively focusing on strategic buyouts.

Open banking services were made possible by the EU's Payment Services Directive 2 regulation. PSD2 enables third parties such as fintechs to access the customer data of banks via APIs. Nordic banks are also concerned about the lack of joint action, which could potentially weaken their market power and may be perceived as little more than subcontractors by large tech giants such as Google, Apple, Meta (formerly known as Facebook), and Amazon. Banks also need to provide a seamless and cost-effective payment experience to their customers.

Who should read the report:

Chief Information Officer (CIO): For CIOs, this report provides better understanding of how current processes and protocols impact an enterprise's existing use of legacy

systems and technologies as well as potential limitations that may exist for the adoption and integration of new capabilities. The report also examines the relative strengths and cautionary statements of different service providers and helps CIOs better evaluate various service providers.

Chief Digital Officers (CDO): CDOs should read this report to gain better perspectives on the digital service suite of different providers, which, in turn, will enable better decision-making. The report also helps gain insights on provider capabilities, which will help them embark on a smooth and seamless journey to address their growing needs and gain a competitive advantage.

Chief Technology Officer (CTO): CTOs and technology leaders should read this report to understand the paradigm shift and emerging trends witnessed in the banking industry. This will help increase revenues, provide better customer experience, optimize cost structure, and manage enterprise risk.

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Chief Experience Officer: Experience officers should read this report to better assess their banking environment for opportunities to implement solutions and services and improve customer experience. The report also provides analysis of provider capabilities and assessment of prevailing market dynamics to better strategize customer experience initiatives.

Project Leaders: Project leaders responsible for transformation and modernization of financial services across banks and other financial institutions should read this to understand the differentiators among the leading IT service providers in the Nordics.



PAYMENT AND CARD PROCESSING SERVICES

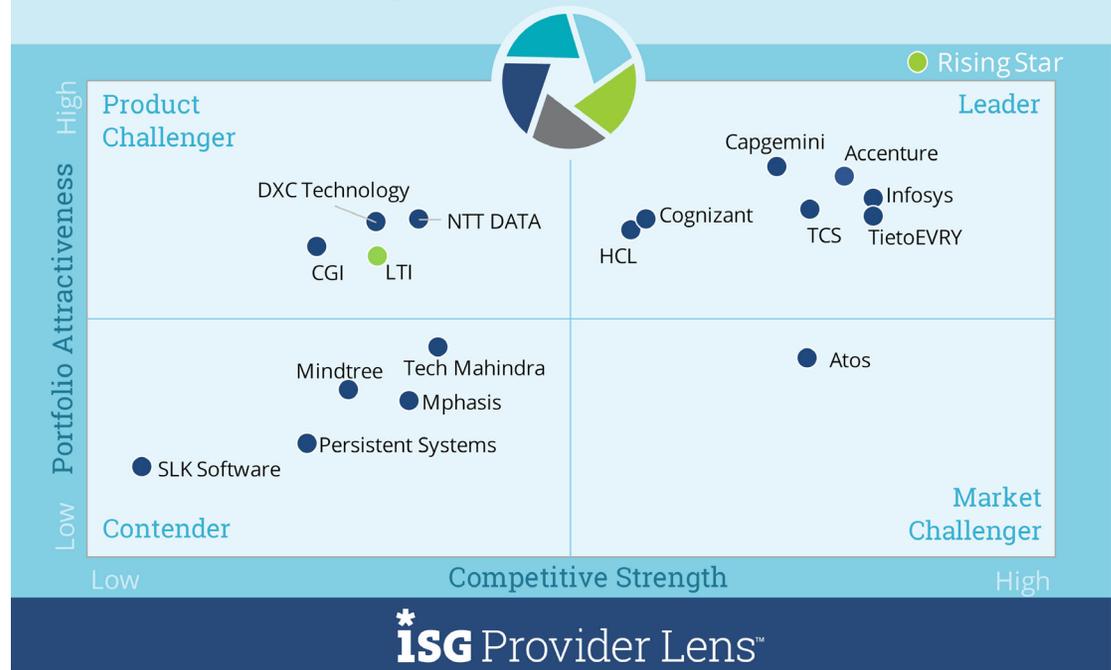
Definition

This quadrant measures the ability of managed service providers (MSPs) to help organizations create, implement and support payment-based business services in the global payment ecosystem. Through this ecosystem of payment processors (acquirer and issuer), payment networks, merchants, banks (acquiring and issuing) and other intermediaries, MSPs support their clients in deploying and operating proprietary platforms and technology services (application and infrastructure).

Companies need to offer their clients a safe, quick, and easy-to-use payment system. The chosen payment solution must satisfy the needs of the customers and a company's business. Hence, it must be protected from fraud, support a variety of payment methods, be convenient to use, and compatible with any existing back-end platform. Systems integrators help their clients to bridge the gap between customer needs and technical feasibility.

Digital Banking Services
Payment and Card Processing Services

2021
Nordics



Source: ISG Research 2021

PAYMENT AND CARD PROCESSING SERVICES

Eligibility Criteria

- Expertise in payment acquiring, issuing, and network domains
- Expertise across card transaction processing, clearing, settlement, customer management, and disputes
- Proven ability to modernize and customize existing card and payment platforms
- Partnerships and expertise in working with payment platforms and card packaged solutions across major issuer processors
- Proven knowledge of different regulatory and compliance requirements
- Proven use of emerging payment technologies.

Observations

Key observations about the providers, M&A, and key pointers about the leaders.

- **Accenture's** broad vision, strategy, and thought leadership, coupled with several strategic investments, enabled the company to win many significant deals.
- **Capgemini** offers a well-diversified payment product suite and leverages its long-standing associations with clients, while also establishing itself as a thought leader, to assert market dominance in the payments space.
- **Cognizant's** broad portfolio of payment solutions and services, robust payment ecosystem, and global delivery model help the company gain market leadership.
- **HCL's** GTM strategy for payments include offering proprietary package of solutions called PaCS, and its payment platform Novus, as also deploying extensive IP assets and region-focused strategies to drive growth.
- **Infosys** offers open banking as a packaged service and supports its clients with a robust partner ecosystem, making it a leader in the payment industry.

PAYMENT AND CARD PROCESSING SERVICES

Observations

- **TCS'** payment product solutions include highly niche solutions include real-time payments, central payments infrastructure, and customized P27 components. These solutions have found worldwide adoption in 25 countries and 40 clearing systems.
- **TietoEVERY** has a leadership position in the payment segment because of its vast array of payments solutions, long-standing relationships built on trust and transparency, and an upcoming reorg.
- **LTI's** GTM strategy of offering highly specialized payment services, driven by innovations, has resulted in several large cross-country deals, thereby driving its growth in the payments space.



INFOSYS

Overview

Infosys is a digital services and consulting provider. It has generated a revenue of US\$3.6 billion. Its GTM strategy for payments is based around its platform, Finacle. The solution is two-fold. It offers Finacle payments — an enterprise payments services hub, and Finacle Payments Connect — a blockchain-based enterprise solution.

Strengths

Open banking is offered as a packaged service to lower costs and improve efficiency: The open banking solutions are offered as a packaged service, and clients can pick and choose the desired components. The bundled solutions include APIs, customer consent, sandbox environment, developer portal, third-party onboarding, and integration layer. This is because the payments part of Finacle's offering is offered with both its own and other third-party core banking solutions. The solutions are ISO 2002-native. This lowers the costs and implementation time for the client.

Robust partner ecosystem and deeply integrated value chain, resulting in market dominance: When clients reach out to Infosys for payment solutions, they get access to a robust ecosystem comprising partners such as ACI Worldwide (BASE24), Finastra, First Data (VisionPLUS), Fiserv (Dovetail), and Wirecard. Clients can also benefit from its deeply integrated relationships across the value chain, ranging from issuers to processors, acquirers and regulators.

Caution

Clients that have not subscribed to Finacle but opt only for its payment service need to be aware that it does not have an exclusive team of specialists, which may dilute their attention span.



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Clients need to be aware that though Infosys offers a broad range of payment solutions, they need to check for its availability with the provider for their specific region.



Methodology

METHODOLOGY

The ISG Provider Lens™ "2021 — Digital Banking Services" research study analyzes the relevant software vendors/service providers in the Nordics market, based on a multi-phased research and analysis process, and positions these providers based on the ISG Research methodology.

The study was divided into the following steps:

1. Definition of Digital Banking Services market
2. Use of questionnaire-based surveys of service providers/vendor across all trend topics
3. Interactive discussions with service providers/vendors on capabilities and use cases.
4. Leverage ISG's internal databases and advisor knowledge and experience (wherever applicable).
5. Detailed analysis and evaluation of services and service documentation based on the facts and figures received from providers and other sources.
6. Use of the following key evaluation criteria: Strategy & vision
 - Innovation
 - Brand awareness and presence in the market
 - Sales and partner landscape
 - Breadth and depth of portfolio of services offered
 - Technology advancements



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ISG Provider Lens™ | Quadrant Report December 2021

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