

Independent research by



FinTech Quadrant™ 2016

IFRS 9 technology solutions



About Chartis

Chartis is the leading provider of research and analysis on the global market for risk technology. It is part of Incisive Media which owns market-leading brands such as Risk and Waters Technology. Chartis's goal is to support enterprises as they drive business performance through better risk management, corporate governance and compliance and to help clients make informed technology and business decisions by providing in-depth analysis and actionable advice on virtually all aspects of risk technology. Areas of expertise include:

- Credit risk
- Operational risk and governance, risk and compliance (GRC)
- Market risk
- Asset and liability management (ALM) and liquidity risk
- Energy and commodity trading risk
- Financial crime including trader surveillance, anti-fraud and anti-money laundering
- Cyber risk management
- Insurance risk
- Regulatory requirements including Basel 2 / 3, Dodd-Frank, EMIR and Solvency II

Chartis is solely focused on risk and compliance technology giving it significant advantage over generic market analysts.

Chartis has brought together a leading team of analysts and advisors from the risk management and financial services industries. This team has hands-on experience of implementing and developing risk management systems and programs for Fortune 500 companies and leading consulting houses.

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Join our global online community at www.risktech-forum.com

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In this research paper

This Chartis research paper covers the following:

- FinTech Quadrant™ for IFRS 9 technology solutions 2016
- Wolters Kluwer IFRS 9 capabilities and market position
- FinTech Quadrant™ methodology

FinTech Quadrant™ for IFRS 9 technology solutions 2016

Figure 1: FinTech Quadrant™ for IFRS 9 technology solutions 2016



Source: Chartis IFRS 9 Technology Solutions 2016

Figure 1 above describes Chartis's view of the vendor landscape for IFRS 9 technology solutions.

The FinTech Quadrant™ is a proprietary methodology developed specifically for the risk technology marketplace. It takes into account product and technology capabilities of vendors as well as their organizational capabilities.

Appendix A sets out the generic methodology and criteria used for the FinTech Quadrant™. Specifically, we have considered the following criteria as particularly important:

Completeness of offering:

- Multi-GAAP Ledger
- IFRS 7 disclosures
- Accounting & reporting engine
- General ledger
- Reconciliation tool
- Classification of financial instruments
- Risk calculation
- Stress testing
- PD / LGD modeling
- Choice of models (3rd party and client)
- Impairment calculations and reporting
- Effective interest rate
- Fair value
- Hedge accounting
- Risk and finance integration
- Balance sheet optimization
- Management reporting
- Data management
- Embedded domain knowledge

Market Potential:

- Existing IFRS and Financial Accounting client base
- Track record of delivering successful risk and finance technology projects
- Growth strategy and brand
- Post-sales implementation and support capabilities
- Strategy for and investment in continued innovation in IFRS solution and related products
- Potential volume of IFRS related wins
- Potential value of IFRS related deals (i.e. tier 1 clients vs tier 2 or tier 3 Clients)
- Scalability of business model – i.e. repeatable sales and delivery capabilities
- Geographical reach
- Financial strength

Wolters Kluwer IFRS 9 capabilities and market position

Wolters Kluwer is a provider of risk, compliance, finance and audit technology solutions, information and consulting services. With more than 30 offices in 20 countries, the company serves more than 15,000 financial organizations and has approximately 2,300 employees, including more than 400 in-house finance, risk, compliance and audit experts. It is part of Wolters Kluwer, a \$4.9 billion company. As of July 2015 the business is part of the Wolters Kluwer Governance, Risk & Compliance Division (which combines Financial Services and Corporate Legal Services). Its financial risk and performance management solutions and reporting capabilities are utilized by 46 of the world's top 50 banks.

OneSumX includes capabilities for fair value and amortized cost, impairment, credit scoring and hedge accounting. The solution is modular with certified off-the-shelf functionality which can be tailored to the client's purposes.

By collating and standardizing the data, firms can calculate the values as per IFRS measurements and automate the classification through flexible business rules. Changes do not need to be made to systems that supply data. The solution works out IFRS impairment, hedging and other specific calculations, along with clients' often complex, and sometimes retro-active, impacts.

The IFRS and local GAAP compliant Chart of Accounts within the solution, together with the IFRS accounting schemes, allow reconciliation and clear justification of any differences between GAAPs for management and audit, and shorten implementation time without impacting reliability.

Stated differentiators include:

- Wide contract and event data management.
- IFRS (re-) classification.
- IFRS calculations.
- IFRS chart of accounts and accounting scheme.
- Contract level sub-ledger and general ledger.
- IFRS disclosures.
- Multi-GAAP, multi-entity and consolidation.
- Off-the-shelf, customizable and modular.
- Transparency.

OneSumX is part of an ecosystem of complementary and comprehensive solutions and services to manage the intersection of governance, finance, risk and compliance. The firm's Risk & Finance solution services more than 120 clients across retail, private and investment banks, with a focus on tier 1 and tier 2 clients. Focus markets include Singapore, Hong Kong, Australia, Thailand, Indonesia, Malaysia, Sri Lanka, Japan, the US, Canada, Germany, Austria, Switzerland and the UK.

Appendix A – FinTech Quadrant™ methodology

Independence

Chartis is a research and advisory firm that provides technology and business advice to the global financial services industry. Chartis provides independent market intelligence regarding market dynamics, regulatory trends, technology trends, best practices, competitive landscapes, market sizes, expenditure priorities, and mergers and acquisitions. Chartis's FinTech Quadrant™ reports are written by experienced analysts with hands-on experience of selecting, developing, and implementing financial technology solutions for a variety of international companies in a range of industries including banking, insurance and capital markets.

Chartis's research clients include leading financial services firms and Fortune 500 companies, leading consulting firms, and financial technology vendors. The FinTech vendors that are evaluated in the FinTech Quadrant™ reports can be Chartis clients or firms with whom Chartis has no relationship. Chartis evaluates all FinTech vendors using consistent and objective criteria, regardless of whether or not they are a Chartis client.

Where possible, FinTech vendors are given the opportunity to correct factual errors prior to publication, but cannot influence Chartis's opinion. FinTech vendors cannot purchase or influence positive exposure.

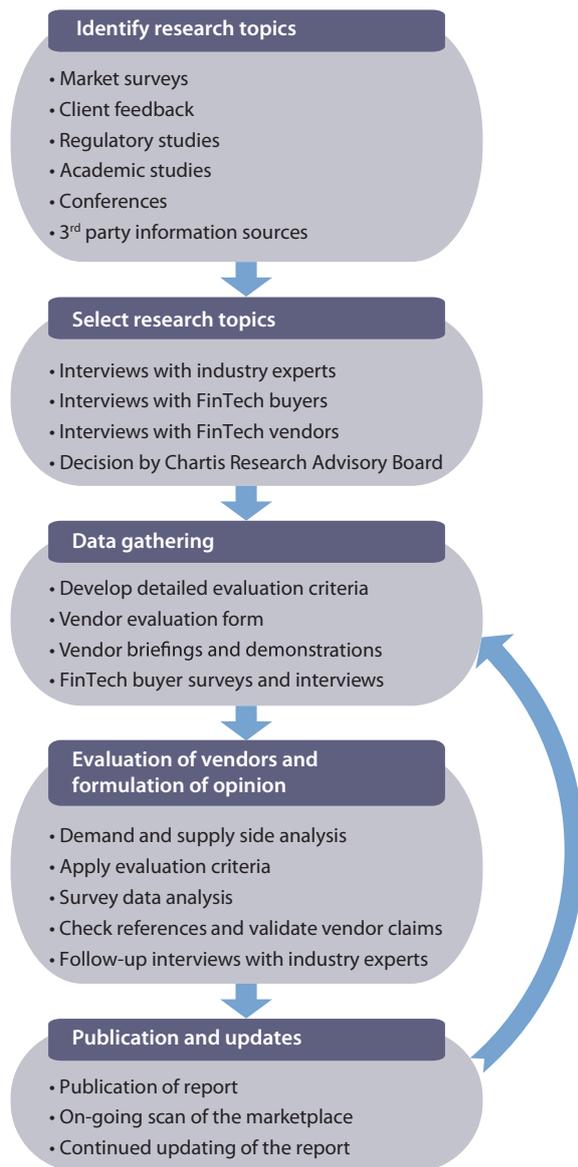
Inclusion in the FinTech Quadrant™

Chartis seeks to include FinTech vendors that have a significant presence in a given target market. The significance may be due to market penetration (e.g. large client-base) or innovative solutions. Chartis does not give preference to its own clients and does not request compensation for inclusion in a FinTech Quadrant™ report. Chartis utilizes detailed and domain-specific "vendor evaluation forms" and briefing sessions to collect information about each vendor. If a vendor chooses not to respond to a Chartis vendor evaluation form, Chartis may still include the vendor in the report. Should this happen, Chartis will base its opinion on direct data collated from FinTech buyers and users, and from publicly available sources.

Research Process

The findings and analyses in the FinTech Quadrant™ reports reflect our analysts' considered opinions, along with research into market trends, participants, expenditure patterns, and best practices. The research lifecycle usually takes several months, and the analysis is validated through several phases of independent verification. Figure 2, below, describes the research process.

Figure 2: FinTech Quadrant™ research process



Chartis typically uses a combination of sources to gather market intelligence. These include (but are not limited to):

- *Chartis Vendor Evaluation Forms* – A detailed set of questions covering functional and non-functional aspects of vendor solutions, as well as organizational and market factors. Chartis’s vendor evaluation forms are based on practitioner level expertise and input from real-life FinTech projects, implementations, and requirements analysis.
- *FinTech user surveys* – As part of its on-going research cycle, Chartis systematically surveys FinTech users and buyers, eliciting feedback on various vendors, satisfaction levels, and preferences.
- *Interviews with subject matter experts* – Once a research domain has been selected, Chartis undertakes comprehensive interviews and briefing sessions with leading industry experts, academics, and consultants on the specific domain to provide deep insight into market trends, vendor solutions, and evaluation criteria.

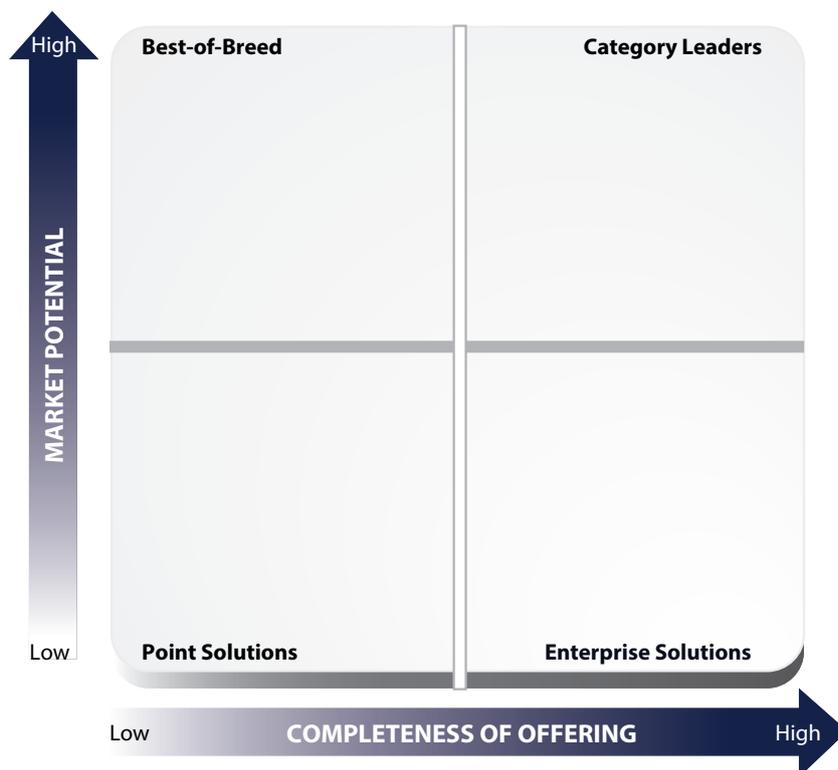
- *Customer reference checks* – These are telephone and / or email checks with named customers of selected vendors to validate strengths and weaknesses, and to assess post-sales satisfaction levels.
- *Vendor briefing sessions* – These are face-to-face and / or web-based briefings and product demonstrations by FinTech vendors. During these sessions, Chartis experts ask in-depth, challenging questions to establish the real strengths and weaknesses of each vendor.
- *Other third party sources* – In addition to the above, Chartis uses other third party sources of information such as conferences, academic and regulatory studies, and collaboration with leading consulting firms and industry associations.

Evaluation Criteria

The FinTech Quadrant™ evaluates vendors on two key dimensions:

1. Completeness of offering
2. Market potential

Figure 3: FinTech Quadrant™



The generic evaluation criteria for each dimension are set out below. In addition to the generic criteria below, Chartis utilizes domain-specific criteria relevant to each individual risk. These are detailed in the individual Vendor Evaluation Forms, which are published as an appendix to each report. This ensures total transparency in our methodology and allows readers to fully appreciate the rationale for our analysis.

Completeness of offering:

- *Depth of functionality* – The level of sophistication and amount of detailed features in the software product (e.g. advanced financial models, detailed and flexible workflow, domain-specific content). Aspects assessed include: innovative functionality, practical relevance of features, user-friendliness, flexibility, and embedded intellectual property. High scores are given to those firms that achieve an appropriate balance between sophistication and user-friendliness. In addition, functionality linking financial technologies, “big data” and business performance is given a positive score.
- *Breadth of functionality* – The spectrum of requirements covered as part of a financial technology solution. This will vary for each subject area, but special attention will be given to functionality covering analysis, data management, multiple business lines, multiple asset classes, front office to back office, and multiple user types (e.g. analysts, traders, business manager, CSO, CRO, CFO, COO). Functionality within risk management systems and integration between front-office (customer-facing) and middle/back office (compliance, supervisory, and governance) risk management systems are also considered.
- *Data management and technology infrastructure* – The ability of FinTech solutions to interact with other systems and handle large volumes of data is considered to be very important. Data quality is often cited as a critical success factor and ease of data access, data integration, data storage, and data movement capabilities are all important factors. Particular attention is given to the use of modern data management technologies, architectures, and delivery methods (e.g. in-memory databases, complex event processing, component-based architectures, cloud technology, software-as-a-service). Performance, scalability, security, and data governance are also important factors.
- *Analytics* – The computational power of the core system, the ability to analyze large amounts of complex data in a timely manner (where relevant in real-time), and the ability to improve analytical performance are all important factors. Particular attention is given to the difference between “advanced” analytics and standard “business” analytics. Advanced analysis requires such capabilities as non-linear calculations, predictive modeling, simulations, artificial intelligence, etc.
- *Reporting and presentation layer* – The ability to present information in a timely manner, the quality and flexibility of reporting tools, and ease of use are important for all FinTech solutions. Particular attention is given to the ability to do ad-hoc “on-the-fly” queries (e.g. what-if-analysis), as well as the range of “out-of-the-box” reports and dashboards.

Market potential:

- *Market penetration* – Both volume (i.e. number of customers) and value (i.e. average deal size) are considered important. Also, rates of growth relative to sector growth rates are evaluated.
- *Brand* – Brand awareness, reputation, and the ability to leverage current market position to expand horizontally (with new offerings) or vertically (into new sectors) are evaluated.
- *Momentum* – Performance over the previous 12 months is evaluated, including financial performance, new product releases, quantity and quality of contract wins, and market expansion moves.
- *Innovation* – New ideas, functionality, and technologies to solve specific risk management problems are evaluated. Developing new products is only the first step in generating success. Speed to market, positioning, and translation into incremental revenues are critical success factors for exploitation of the new product. Chartis also evaluates business model or organizational innovation (i.e. not just product innovation).
- *Customer satisfaction* – Feedback from customers regarding after-sales support and service (e.g. training and ease of implementation), value for money (e.g. price to functionality ratio) and product updates (e.g. speed and process for keeping up to date with regulatory changes) is evaluated.
- *Sales execution* – The size and quality of sales force, sales distribution channels, global presence, focus on risk management, messaging, and positioning are all important factors.
- *Implementation and support* – Important factors include size and quality of implementation team, approach to software implementation, and post-sales support and training. Particular attention is given to “rapid” implementation methodologies and “packaged” services offerings.
- *Thought-leadership* – Business insight and understanding, new thinking, formulation and execution of best practices, and intellectual rigor are considered important by end-users.
- *Financial strength and stability* – Revenue growth, profitability, sustainability, and financial backing (e.g. the ratio of license to consulting revenues) is considered as key to scalability of the business model for risk technology vendors.

Quadrant Descriptions:

Point Solutions – Providers of point solutions focus on a relatively small number (typically two or three) of component technology capabilities. These vendors meet a very important need in the financial technology market by solving specific business problems with domain-specific software applications and technologies. Point solution providers also provide a strong engine for innovation as their deep focus on relatively narrow subject areas generates thought leadership and intellectual capital. These vendors often have gaps relating to the broader enterprise solution and do not have the integrated data management, analytics, and business intelligence capabilities found in enterprise technology platforms. Furthermore, these vendors have not yet developed the organizational characteristics for capturing significant market share. Their growth is often constrained by lack of financial and human resources, or relatively weak sales and marketing execution.

Best-of-Breed – Providers of best-of-breed solutions have best-in-class point solution capabilities together with the organizational characteristics to capture significant market share in their chosen target markets. Providers of best-of-breed solutions usually have a growing client-base, superior sales and marketing execution, and a clear strategy for sustainable profitable growth. Best-of-breed solution providers can also demonstrate a healthy rate of investment in research and development, and have specific product or “go-to-market” capabilities that give them a competitive advantage. Best-of-breed solution vendors have depth of functionality, but lack the breadth of technology and functionality required to provide an integrated enterprise-wide solution. Best-of-breed solutions are often considered as a subset of more comprehensive financial technology architecture and are required to co-exist with other third party technologies or in-house systems to provide an integrated solution to a given business problem.

Enterprise Solutions – Enterprise solution providers have a clear strategy and vision for providing financial technology platforms. They are characterized by the depth and breadth of their technology capabilities, combining functionally rich FinTech applications with comprehensive data management, risk analytics, and business intelligence technologies. A key differentiator is the openness and flexibility of their technology architecture and their “tool-kit” approach to analytics workflow and reporting. Enterprise solution providers support their technology solutions with comprehensive infrastructure and service capabilities, ensuring best-in-class technology delivery. Moreover, enterprise solution providers have clear strategies for combining content and data with their software applications to provide an integrated “one-stop-shop” for FinTech buyers.

Category Leaders – Category leaders are FinTech vendors that have the necessary depth and breadth of functionality, technology, and content, combined with the organizational characteristics to capture significant market share by volume and value. Category leaders can demonstrate a clear strategy for sustainable, profitable growth, matched with best-in-class solutions. Category leaders also have the range and diversity of offerings, sector coverage, and financial strength to be able to absorb demand volatility in specific industry sectors or geographic regions. These vendors benefit from strong brand awareness, a global reach, and strong alliance strategies with leading consulting firms and systems integrators. Category leaders can also demonstrate an appetite for on-going investment in innovation, often matched by deep pockets and a strong financial performance. Ultimately, category leaders combine deep domain knowledge in various FinTech topics with deep technology assets and capabilities. They can demonstrate this by addressing the needs of very large clients with complex data and technology requirements, as well as addressing the needs of smaller clients with standardized requirements looking for integrated solutions from a single vendor.

Further reading

- RiskTech100® 2016
- Enterprise Stress Testing Systems 2015
- Global Risk IT Expenditure in Financial Services 2016
- Risk Data Aggregation and Reporting Solutions

For all of these reports see: www.chartis-research.com