

#### **Research Report**

## **Executive Summary:**

## **Guidehouse Insights Leaderboard: ADMS Vendors**

Assessment of Strategy and Execution for Eight Advanced Distribution Management Systems Providers

**NOTE:** This document is a free excerpt of a larger report. Click on the link above to purchase the full report.

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## Section 1

# **Executive Summary**

#### 1.1 Introduction

The competitive landscape for advanced distribution management systems (ADMS) is unique given the extensive requirements and growing list of modules captured under the ADMS umbrella. Over time, this has led to a smaller, more refined pool of vendors made up of traditional OEMs (General Electric [GE Digital], Schneider Electric SE, Siemens AG, Hitachi Energy), software conglomerates (Oracle Corporation, Minsait ACS [Indra]), and specialized OT providers (Open Systems International, Inc. [OSI], Survalent Technology Corporation).

These ADMS providers are building upon conventional innovations (e.g., modular, microservices-based design principles) with a wide mix of forward looking business and technology reorientations. While product and strategy roadmaps naturally vary by vendor, common macrotrends include architectural transformations (i.e., scalable, open, interoperable), revamped pricing and deployment models, streamlined upgrade frameworks, coordinated transmission and distribution (T&D) operations, mobile extensions, and cloud enablement, amongst many others. The criteria by which ADMS vendors are compared in this *Leaderboard* are:

- Vision
- Go-to-Market Strategy
- Partners
- Technology
- Geographic Reach
- · Sales, Marketing, and Distribution
- Product Performance
- Product Portfolio and Integrations
- Pricing
- Staying Power

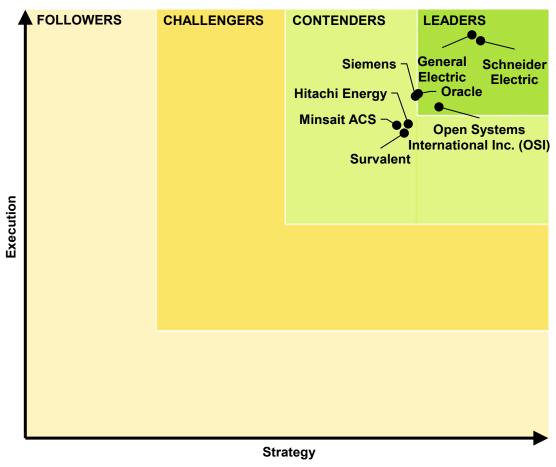
#### 1.2 Leaderboard Grid

Four companies achieved Leader status in this *Leaderboard*: Schneider Electric, General Electric, Oracle, and OSI. Each of these companies stands out from the competition because of its exceptional technological development and portfolios, strong partner relationships, sustainable business models, and significant market traction. While Schneider Electric and General Electric are capitalizing on their early-mover status with



highly sophisticated solutions and well-reasoned product roadmaps, relative newcomers Oracle and OSI continue to make significant inroads with their own set of unique differentiators. All of the vendors in the *Leaderboard* ranked as Leaders or Contenders, indicating a fiercely competitive landscape and an increasing need for them to differentiate.

#### Chart 1-1. The Guidehouse Insights Leaderboard Grid



(Source: Guidehouse Insights)



#### 4.1.2 General Electric

Overall Score: 85.0

Strategy: 84.9

Execution: 85.1

GE Digital is a division of General Electric (GE), a global engineering and technology provider founded in 1892 and based in Boston, Massachusetts. Headquartered in San Ramon, California, GE Digital was formed in 2015 to bring digital capabilities across GE into one organization. In November 2021, GE announced that it would be restructuring to form three separate, publicly traded companies focused on renewable energy, healthcare, and aviation. GE Vernova, the company's portfolio of energy businesses is expected to be formed in early 2024 through the combination of the existing GE Renewable Energy, GE Power, and GE Digital business groups.

#### 4.1.2.1 Vision

GE Digital was the first vendor to offer an integrated ADMS solution. Its differentiated success to date (see Section 4.1.2.6) has been a function of its early-mover status, strong brand recognition, deep industry expertise, technical functionality, and well-reasoned product roadmap. The company has shown a unique ability to anticipate market demand and quickly pivot its ADMS and DERMS strategies. From architectural investments in containerized microservices and open-source software (OSS) to cloud-native offerings and extended DERMS capabilities, GE Digital has capitalized on its early-mover status with future-proofed solutions and a clear vision.

GE Digital has completely revamped its product development strategy over the past two to three years. Underlying this transformation has been a shift to containerized microservices, modular composable applications, and increased OSS that enable the company to develop and deploy scalable, agile, and flexible applications more rapidly. This also contributes to the company's evergreen framework, with major releases issued twice a year—now moving from forklift upgrade cycles to continuous updates. In shifting from a largely proprietary to a commodity-based software stack, GE Digital employs its zero trust product design principle to placate many perceived cybersecurity concerns. GE Digital's Zero Trust software cybersecurity is modeled after, and maps to, NIST SP 800-207 Zero Trust Architecture and reenforced by Cybersecurity and Infrastructure Security Agency Zero Trust Maturity Model to secure the future grid.



Table 4-4. GE Digital's Vision

Category	Description
User interface and experience	In addition to modernizing its OMS user interface (UI) to be more workflow- and response-oriented, GE Digital is developing a web-faced (HTML 5) ADMS UI that unifies alarming, tagging, SSO, and audit trails in a single dashboard.
T&D optimization	GE Digital was an early mover in integrating its ADMS and EMS solutions and is actively developing use cases in support of T&D switching, outage planning, outage restoration, Volt/VAR optimization, DER operating envelopes, and simulation.
Mobile ADMS	GE Digital has deployed mobile switching applications for several ADMS customers worldwide (remote viewing, reporting switching management, outage management). This capability is complemented by its mobile GIS applications such as asset inspection and damage assessment to provide full IT/OT mobility enablement.
Cloud and software as a service	GE Digital has invested heavily in modularizing and standardizing its technology stack in recent years. All of the company's products are either cloud deployable, cloud-native, or are being rearchitected to become cloud-native through their multi-instance architecture.
DERMS and transactive energy	In December 2021, GE Digital acquired Opus One Solutions. The complementary ADMS, DERMS, and demand response management systems (DRMS) technologies from these integrated companies have facilitated the development of an extended DERMS platform addressing operations and analytics and simulation. While the company is not focusing on market-facing virtual power plant (VPP) software, it has successfully delivered transactive energy application pilots.

(Source: Guidehouse Insights)

This collection of high level strategic initiatives complements product-level improvements and planned enhancements that further contribute to the company's Vision score. Focus areas include visual intelligence (vegetation management, asset inventory, PaaS), weather data access, weather forecasting (i.e., Climavision partnership), storm readiness and response, and workforce optimization (i.e., Storm Manager+). GE Digital also benefits from a wide portfolio of advanced ADMS applications (their full scope and supported use cases are included in Section 4.1.2.4). The combined value proposition of these architectural reorientations, cross-cutting strategic initiatives, product enhancements, and growing portfolio of ADMS extensions illustrates the company's perceptive vision across the board.

#### 4.1.2.2 Go-To-Market

GE Digital predominantly employs a direct sales approach for its ADMS product with channels for countries where they do not have a direct presence. The company's disproportionately large customer base and spate of recent wins speak to the efficacy of these efforts. GE Digital also recognizes that it must remain agile, particularly given the dwindling number of greenfield opportunities in established markets, and growing appetite for ADMS in non-traditional markets. GE Digital is leveraging a broad network of regional partners and acquirees to open up new go-to-market channels.



The company leverages a mix of IT and non-IT partners to facilitate new sales channels and joint value propositions (see **Partners**); this tailored approach enhances the company's competitiveness in oft-underserved markets and provides valuable insights that can be used to refine go-to-market strategies. The company's recognition and understanding of local dynamics are positive contributors to it Go-To-Market Strategy scores, and complement several more indirect sales advantages.

Table 4-5. GE Digital's Go-to-Market Strategy

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Strategy	Description
Integrated EMS	GE Digital was an early mover in enabling a single platform for EMS and ADMS operations via its combined EDMS offering. While the concept is still relatively immature, growing interest in coordinated T&D operations and unified network visibility offer GE Digital with its multiple, global T&D deployments, an advantage over more recent product integrations and non-EMS providers (e.g., Oracle, Survalent).
Smallworld GIS	GE Digital is the only ADMS provider to offer its own GIS platform. The monopolistic nature of the GIS market facilitates greater sales advantages relative to other IT and OT portfolio offerings; excluding Esri, GE Digital Smallworld exceeds all other vendors combined and is built specifically for the complexity of network-based utilities and telecommunication companies.
Partners and acquirees	GE Digital's acquisition of Opus One Solutions provides additional sales capabilities, as well as product synergies that can be leveraged in the context of single-pane-of-glass sales approaches. In partnership with Climavision, the company is in the early steps of identifying joint customers that want to deploy advanced weather forecasting technologies alongside GE Digital ADMS. With GE Digital's Visual Intelligence solution, further partnerships with satellite and ground-based lidar capture will further complement its weather prediction capabilities.

(Source: Guidehouse Insights)

#### 4.1.2.3 Partners

GE Digital is building upon its established network of IT and integrator partners with more recent engagements aimed at elevating the value proposition of its ADMS and complementary solutions. In the US, Europe, and Asia Pacific, traditional partners include a mix of software and implementation partners that enhance the company's go-to-market strategies in specific geographies and customer segments. In the Middle East & Africa, as well as pockets of Asia Pacific, the company engages with local partners (e.g., EPCs and other implementation partners) under a joint deployment approach. GE Digital has supplemented these traditional partnerships with more targeted alliances and acquisitions aimed at enhancing its ADMS platform and broadening its product portfolio.



Table 4-6 highlights several key examples.

Table 4-6. GE Digital's Partners

7 C. G. Digital of artifold		
Company	Description	
Opus One Solutions	GE Digital's acquisition of Opus One Solutions is the result of a long-standing partnership between the two companies. In particular, Opus One brings much needed DR management, look-ahead power-flow-based optimization, and DER simulation capabilities to complement GE Digital's existing ADMS and Grid DERMS solutions.	
Cloud providers	The company has partnered with Microsoft and Amazon to drive cloud engagement and adoption of hybrid cloud architectures, and proactively worked with regulators to lessen cloud barriers. Most of GE Digital's cloud deployments use AWS or Microsoft Azure, though the company also has experience with Oracle Cloud.	
Climavision	Announced in June 2022, GE Digital has partnered with Climavision to integrate its global weather forecasting technology in its ADMS, Storm Assist, and Storm Readiness solutions. This partnership brings new functionality to the weather forecasting space, including differentiated analytics software (e.g., 4D modeling) and next-generation weather sensors.	

(Source: Guidehouse Insights)

The company's collection of recent partnerships and strategic acquisitions, in addition to its traditional partnership network, facilitates joint value propositions and new sales channels. To maintain competitiveness, GE Digital should continue to explore ADMS-oriented, partner-based product enhancements where logical; for example, market-facing virtual power plant software, local flexibility market platforms, and customer engagement capabilities. Although these are not required for grid operation use cases per se, they can increasingly be seen as relevant components of ADMS-DERMS end-to-end platforms.

#### 4.1.2.4 Technology

GE Digital has invested heavily in rearchitecting and standardizing its technology stack in recent years. The company is building modular composable applications across all functional areas using commodity software and OSS; the use of OSS helps drive greater efficiencies in software development timelines, ease of use, and data migration. While the industry still has some skepticism and hesitancy about the cybersecurity implications of using OSS, GE Digital is addressing risks and these perceptions through comprehensive documentation and developer support, alignment with industry-leading standards (O-TTPS, Linux Foundation's Core Infrastructure Initiative's Best Practices), continuous vulnerability scans, and OSS DevOps processes.

GE Digital has also revamped its upgrade framework as a function of its architectural innovations, issuing more frequent releases to ensure its customers always have access to the latest and greatest technology. While this concept is not unique in the ADMS space, the relative frequency of the company's software releases is. GE Digital currently issues major upgrades bi-annually and minor upgrades incrementally throughout the year. In



comparison, most other ADMS providers issue major software updates on an annual or multi-year basis, or less frequently. GE Digital has shown strong investment in ADMS model validation, enterprise switching management, and data management capabilities. Furthermore, GE Digital has invested in several advanced ADMS applications for utilities with more complex requirements. Table 4-7 lists and describes these optional platform extensions.

Table 4-7. GE Digital's Technology: Advanced ADMS Applications

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Application	Description
Distribution state estimation	It provides a real-time robust estimation of dynamic grid networks and identifies prioritized improvements for ADMS customers.
Adaptive protection setting	It automates manual settings maintenance for digital protection devices.
Device management	It remotely supervises and manages the lifecycle of grid intelligent electronic devices (IEDs), and is based on a multi-layered architecture and vendor neutral approach.
Dual-production	It runs multiple versions of ADMS advanced applications in a production environment.
Adaptive network management	It is real-time DER dispatch through adaptive curtailment and dispatch functionality for reduced CAPEX exposure.
Enterprise OMS	It enhances workflows and includes value-added capabilities, such as modernized UI, order ownership, custom field placement, automated dispatch, and guidance applications.
Meter load shed	It enables surgical load-shed capabilities to inform rotational load shed how to prioritize feeder shedding by customer type (DER, critical, etc.).
WAMS and distribution	It is syncrophasor-based distribution intelligence (i.e., distribution level) for improved outage restoration and resiliency functionality with distribution resources that can participate in blackstart services.
<u> </u>	

(Source: Guidehouse Insights)

GE Digital achieved a high score for its DERMS solutions in the *Guidehouse Insights Leaderboard: DERMS Vendors* report. The newly released Opus One DERMS allows energy companies to integrate small-scale renewables produced at the distribution level, connect new smart buildings to the grid, and manage energy storage systems to adjust offers with demand, addressing DER-originated issues at both distribution and transmission. It enables optimized EV charging, and can manage and shave end-user consumption via DR functionality; and also includes a certified IEEE 2030.5 server (DER Gateway) that securely connects to any DER over the internet. However, GE Digital does not focus as much on market-facing virtual power plant (VPP) and holistic customer engagement solutions as other competitors do.



GE Digital products are all either cloud deployable, cloud-native, or are being rearchitected to become cloud-native. For core operational systems, GE Digital customers that utilize on-premise or hybrid architectures can still leverage the benefits of cloud for applications such as rapid deployment, evergreen environments, active pre-production, and testing and hosting tertiary copies (enabling the on-premises copy to be the last break emergency copy).

#### 4.1.2.5 Geographic Reach

GE Digital is one of the most geographically diverse ADMS providers among its profiled competitors. It has one of the largest bases of ADMS customer meters in emerging markets and the lowest standard deviations across all geographies. This supports the company's remarkable success in North America and Europe and contributes to the industry-leading size of its ADMS customer base.

Uniquely, the company has more international ADMS customer meters than domestic; its largest footprint is in Europe, followed by North America. In emerging markets, Latin America is the only region where GE Digital trails multiple competitors, though with an extensive EMS and GIS installed base, GE Digital is focused on the interoperability of these systems in the region. Additionally, local partnership networks offer the company a relative advantage moving forward given the mix of restrictive price points and tax constraints often found in these markets.

GE Digital also demonstrates a high degree of geographic diversity in its recent ADMS wins. Over the past year, it was among the companies that attracted the most ADMS customer meters outside North America. The company's shift to cloud-native architectures further improves its overall positioning and competitiveness; for example, GE Digital is already running distributed management systems (DMS) in the cloud for multiple utility customers in Southeast Asia. The combination of GE Digital's massive and industry-leading ADMS customer base, its differentiated geographic reach, and its support across both of these dimensions in recent wins, highlights its unique ability to maintain competitiveness regardless of geography.

#### 4.1.2.6 Sales, Marketing, and Distribution

GE Digital has the largest number of ADMS customer meters globally. It was the first vendor to offer an integrated ADMS solution, and since that time, has garnered >190 distribution customers (290 million+ customer meters). Driven by a lack of complacency and ubiquitous competitiveness, GE Digital is capitalizing on its early-mover status with sustained success; its reach, scale, and depth provide differentiated domain experience. Partnering with progressive utilities and regulatory environments across the globe provides the company with a unique understanding of market needs.

The company's disproportionately large customer base contributes heavily to its Sales, Marketing, and Distribution scores. GE Digital has also shown differentiated success in its recent ADMS wins, attracting more than 16 million customer meters during the past year.



While the majority of these wins have been greenfield projects, GE Digital has also shown impressive success in converting ADMS customers from its competition, including Schneider Electric, Oracle, OSI, Survalent, and Hitachi Energy. The company has, however, failed to retain customers over the past decade, with some examples being ADMS conversion projects to competitors' solutions. This attrition is not atypical in the industry and overall GE Digital has gained more customers than it has lost, increasing market share in comparison to others.

GE Digital benefits from its ability to scale from small to large customers. This is not universal, as many vendors have historically played in one or two particular markets (i.e., Tier I, II, or III), but this paradigm is quickly changing. The company's ongoing business and technology reorientations (architectural innovations, cloud services, flexible licensing models) should help facilitate additional opportunities across all customer segments.

#### 4.1.2.7 Product Performance

The company's transformative evolution in software architecture and development approaches is driving greater efficiencies for both GE Digital and its customer base. In shifting to OSS-based applications, it has dramatically reduced the temporal requirements associated with closed-source software development, delivering additional benefits around ease of use and lift and shift in the process; what once took years can now be achieved in a matter of months. These shortened development timelines enable software upgrades to be released on a more frequent basis.

GE Digital ADMS is also one of the most storm proven products in the market, having supported Hurricanes Ida, Zeta, Delta, Michael, Irma, and Sandy. This has resonated with its base of impacted ADMS customers, with utilities such as Florida Power & Light, Eversource, PPL Electric, Southern Company, and Tampa Electric all voicing high customer satisfaction with the performance of GE Digital ADMS during these outage events.

The company has invested heavily in enhancing its storm and outage response capabilities, bringing new algorithms to the market in support of next-generation predictive and prescriptive analytics use cases (e.g., storm preparation, workforce planning). For example, the company is building upon its Storm Readiness forecasting application with Storm Manager+, which focuses on resource acquisition and crew management use cases.

This is just one of several examples of how Technology and Product Performance are helping drive higher levels of customer satisfaction.



Table 4-8. GE Digital's Product Performance: Notable Performance Indicators

Performance Indicator	Benefit		
Visibility of current network status	-	100%	
Switching communication delays	Reduction	Up to ~80%	
Field crew operator voice interactions	Reduction	Up to ~80%	
Time to value	Reduction	Up to ~50%	
LV outage reporting accuracy	Increase	Up to ~32%	
Communication times (control room and field)	Reduction	Up to ~30%	
Storm cost savings	Increase	Up to ~30%	
SAIDI / SAIFI	Reduction	Up to ~30%	
Renewable and DER grid imports	Increase	Up to ~20%	
Voltage reduction	Reduction	Up to ~3%	

(Source: Guidehouse Insights)

These performance metrics are supported by several exemplary case studies. For example, GE Digital deployed fault isolation and service restoration (FISR) as part of its ADMS deployment for Alabama Power. These capabilities have helped the utility avoid 237 Million customer minutes of interruption, equivalent to 450 years-worth of outages. Similarly, PPL Electric Utilities was the first to install FISR centrally across its entire service territory; it received the 2022 *POWER Magazine* Smart Grid Award for its automated self-healing grid. In 2021 alone, customers experienced 34% fewer outages compared to the average over the previous five years.<sup>3</sup>

#### 4.1.2.8 Product Portfolio and Integrations

GE Digital covers the full energy value chain, beginning with GIS asset modeling, distribution operator services, transmission operator services, and market operator and player solutions. Layered in are also Al/ML-based analytics to support the utilities journey from predictive to prescriptive operations to autonomous, closed-loop optimizations. At the foundation of GE Digital ADMS is the company's common data fabric; this architecture enables native interoperability across enterprise systems, including traditional ADMS modules, DERMS, EDMS, GIS, MWMS, and so forth. The company has one of the most comprehensive software portfolios in the energy space, including:

 DERMS. The complementary technologies from these integrated companies have facilitated the development of an extended DERMS platform. GE Digital now offers Opus One DERMS as an optional, integrated set of modules in each of its proposals; employing this joint solutions approach opens up new business development opportunities across both business lines.

<sup>&</sup>lt;sup>3</sup> Yahoo Finance, "PPL Electric Utilities Earns 2022 POWER Magazine Smart Grid Award," August 2022



- GIS. GE Digital Smallworld GIS software was designed specifically for utilities and telecom network modeling more than 30 years ago. Native interoperability between ADMS and GIS delivers a harmonized network model across a common data fabric; this provides a shared and consistent view to promote improved data governance.
- Mobility. Integration between mobile capabilities and existing utility back-office
  systems enables office and field personnel to visualize and share network data and
  operational tasks such as field switching in real time, while remaining agnostic of the
  mobile operating system.
- Data Analytics. Ingestion of GIS, OMS, AMI/MDM, CIS, WAMS, and other datasets
  (including weather) into its common data fabric provides error detection and grid model
  data correction; predictive data analytics engines are trained using historical data and
  ongoing ML to deliver focused analytics that also reduce risk (e.g., monitoring system
  inertia), improve customer experience (storm readiness), and drive optimization.
- EMS. GE Digital has integrated its advanced energy management system (AEMS) and ADMS to deliver an EDMS (AEMS+ADMS) solution. Operating as a single real-time platform, EDMS enables coordinated operations across transmission and distribution networks for higher levels of situational awareness and synergistic decision-making.

The company also benefits from a broad portfolio of complementary hardware offerings that enable the company to deliver value through an end-to-end product development and sales approach.

#### 4.1.2.9 **Pricing**

GE Digital's massive and growing base of ADMS customers indicates a high degree of overall pricing competitiveness. This is further supported by the company's term-based licensing options, cloud-native solutions, and flexible packaging models that deliver a unique advantage when pricing and marketing GE Digital ADMS.

GE Digital's product packaging approach allows utilities to pick-and-choose the level of functionality to suits their needs, facilitating multi-faceted *Pricing* and *Sales, Marketing, and Distribution* strategies that can be targeted at both larger (e.g., brownfield opportunities, value-adds) and smaller (e.g., greenfield opportunities) utility customers.

While most of its competitors continue predominantly employing traditional per-meter pricing models based on technical capabilities, GE Digital now offers term-based options in addition to perpetual licenses. The company's growing portfolio of cloud-native solutions, meanwhile, are offered through software as a service (SaaS) and consumption-based licensing models. GE Digital has demonstrated relative pricing competitiveness regardless of geography or customer type. The wide spatial and demographic distribution of its ADMS base indicates an aggressive yet tailored pricing approach based on specific needs. The combination of GE Digital's product and architectural enhancements, as well as flexible pricing and deployment models, will help deliver relative pricing advantages now and into the future.

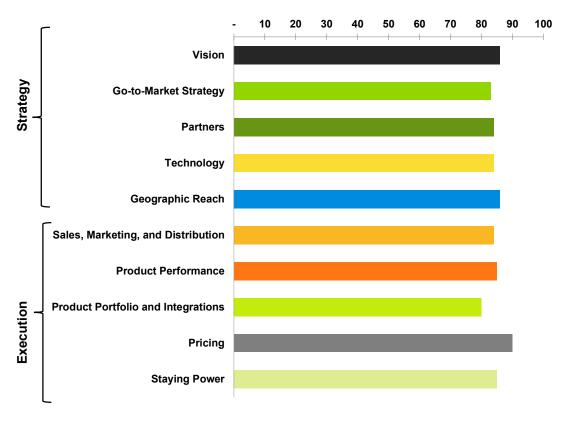


#### 4.1.2.10 Staying Power

GE Digital was the first vendor to offer an integrated ADMS solution. The company benefits from its well-established brand name and recognition, deep industry expertise, and the industry-leading size of its customer base. While encroaching competition has led to some ADMS conversions, the company has matched this with high-volume, high value wins year-over-year. Some early movers have lost ADMS market share over the past few years, but GE Digital has managed to maintain its competitive positioning. The company currently serves around 30% of distribution utilities and approximately 40% of transmission utilities worldwide, and continues to show impressive resiliency and competitiveness as a function of sophisticated technologies, prudent strategy, and compelling product roadmaps.

#### www.ge.com

#### Chart 4-2. General Electric Strategy and Execution Scores



(Source: Guidehouse Insights)



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### Section 8

## Scope of Study and Methodology

#### 8.1 Scope of Study

The major objective of this *Leaderboard* is to provide a timely overview of the companies involved in the ADMS market, as well as their Strategy and Execution in developing, marketing, and delivering these solutions. Company ratings capture a vendor's standing at the time of the report and are not a retrospective of past accomplishment or an indication of future success. In this market, ratings are likely to shift as companies consolidate and switch focus and ADMS applications continue evolving.

#### 8.2 Sources and Methodology

Guidehouse Insights' industry analysts use a variety of research sources in preparing Research Reports. The key component of Guidehouse Insights' analysis is primary research gained from phone and in-person interviews with industry leaders including executives, engineers, and marketing professionals. Analysts are diligent in ensuring that they speak with representatives from every part of the value chain, including but not limited to technology companies, utilities and other service providers, industry associations, government agencies, and the investment community.

Additional analysis includes secondary research conducted by Guidehouse Insights' analysts and its staff of research assistants. Where applicable, all secondary research sources are appropriately cited in this report.

These primary and secondary research sources, combined with the analyst's industry expertise, are synthesized into the qualitative and quantitative analysis presented in Guidehouse Insights' reports. Great care is taken in making sure that all analysis is well-supported by facts, but where the facts are unknown and assumptions must be made, analysts document their assumptions and are prepared to explain their methodology, both in the body of a report and in direct conversations with clients.

Guidehouse Insights is a market research group whose goal is to present an objective, unbiased view of market opportunities in its coverage areas. Guidehouse Insights is not beholden to any special interests and is thus able to offer clear, actionable advice to help clients succeed in the industry, unfettered by technology hype, political agendas, or emotional factors that are inherent in cleantech markets.

#### 8.2.1 Vendor Selection

Vendors were selected based on market presence, commercial activity, and expertise related to ADMS systems. This includes vendors that maintain a core solution set of DMS, SCADA, and OMS modules. While DERMS and EMS (to a lesser extent) are becoming



common modules within ADMS as well, this is not a required functionality/module among listed vendors at this time.

#### 8.2.2 Ratings Scale

Companies are rated relative to each other using the following point system. The ratings are a snapshot in time, showing the current state of the company. These scores are likely to be fluid as new competitors enter the market and customer requirements evolve.

•	Very Strong	91 – 100
•	Strong	76 – 90
•	Strong Moderate	56 – 75
•	Moderate	36 – 55
•	Weak Moderate	21 – 35
•	Weak	11 – 20
•	Very Weak	1 – 10

#### 8.2.2.1 Score Calculations

The scores for Strategy and Execution are weighted averages based on the subcategories. The overall score is calculated based on the root mean square of the Strategy and Execution scores.

#### 8.2.3 Criteria Definitions

#### 8.2.3.1 Strategy

The criteria described here must match those covered in this *Guidehouse Insights Leaderboard*. More specifically, they should match the criteria listed in the Executive Summary and the Excel file.

- Vision: Measures the company's stated goals in designing market solutions against
  the actual needs of customers based on the entire environment in which it will operate.
  In this case, companies with a vision for transforming the home into a dynamic grid
  asset receive higher scores. Clear and compelling visions that are effectively
  communicated to the industry also result in higher scores.
- Go-to-Market Strategy: Evaluates the company's strategy for reaching the target
  market, including the sales and marketing channels used and the processes for
  informing the target market about brand differentiation and product value. Higher
  scores are the result of companies going to market through multiple channels to reach
  a variety of industries and forming partnerships with key organizations.
- Partners: Measures the company's established partnerships with key organizations that will likely provide an advantage in financial backing, sales, business, and product development. Higher scores are given to companies that have established partnership



- networks or are operating within an ecosystem that furthers the traction of their offerings.
- Technology: Evaluates whether the company has developed or patented (or both)
  technology that provides a significant business advantage over competitors that is
  likely to have an enduring effect on its success. Higher scores are given if the
  company's technology is already a proven market success or delivers unique product
  attributes.
- Geographic Reach: An evaluation of companies' ability to reach national and international customers through networks of distributors, partnerships, and other resellers. Scores are lower if the company does not have a sales or dealer strategy for multiple regions.

#### 8.2.3.2 Execution

- Sales, Marketing, and Distribution: Evaluates the company's marketing and sales
  performance and current distribution channels. Higher scores are given to companies
  with brand recognition and significant sales.
- Product Performance: Evaluates the competitive performance of the company's smart meter analytics solutions. Higher scores are given to companies with higher customer satisfaction and energy savings results.
- Product Portfolio: Addresses the company's breadth of offerings related to smart
  meter analytics. Companies that score highly in this category have products that
  address a variety of smart meter analytics applications and have integrated with
  third-party solutions to offer more comprehensive solutions.
- Pricing: Determines the suitability of product pricing based on its cost-effectiveness, whether products are available at multiple price points, and how pricing compares to that of competitor products.
- Staying Power: Evaluates whether the company has the financial resources to
  withstand the strains of an emerging market and increasing competition. This criterion
  also measures the maturity of a company's solution, including how long it has been
  present in the market. Higher scores are given to companies that show signs of being
  able to persist in the future.



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