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Robotic Process Automation (RPA) - Technology Vendor Landscape with FIT Matrix Assessment – Technologies for Building a "Virtual Workforce"

Service Optimization Technologies (SOT)
Market Report – December 2016 – Preview Deck

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Background and scope of the research

Background of the research

Robotic Process Automation (RPA) has the potential to offer high value in terms of inorganic reduction in costs and improvement in productivity. Moreover, the value is realized in a fairly short time period as the deployments are quick and at low risk, due to the fact that the integration is non-invasive and easily remediable. As a consequence, many enterprises and global services providers are investing in this arena. However, RPA is a burgeoning market with technologies that are still relatively unknown to many potential buyers in terms of solution features, deployment models, supporting frameworks, and commercial aspects. The technologies are also evolving, with an expanding feature set and increasing richness of functionality.

In this context, this report examines the RPA technologies for creating a virtual workforce. It assesses 10 of the leading technology vendors and compares & contrasts their technologies within Everest Group's Feature, Implementation, and impacT (FIT) Matrix framework.

In this study, we analyze the RPA technology landscape across various dimensions:

- Everest Group's FIT Matrix™ evaluation of RPA technology vendors
- Remarks on key strengths and areas of improvement for each of the RPA technology vendors
- Key insights on RPA technology vendor market landscape

Scope of the study and methodology include:

- Only robotic tools that are sold on license, and irrespective of any ongoing business or IT process outsourcing services, were considered for this report. These include software that can be deployed and run by the clients in-house or those that require professional services for deployment, as well as ongoing services that are part of a hosted offering
- Tools from these 10 technology vendors have been assessed: Automation Anywhere, Blue Prism, Kofax Kapow, Kryon Systems' Leo, NICE (Robotic Automation), Redwood RoboFinance, Softomotive (WinAutomation & ProcessRobot), Thoughtonomy, UiPath, and WorkFusion

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This report is based on three key sources of proprietary information

1

Proprietary database of 10 RPA technology vendors

- The database tracks the following capability elements for each vendor:
  - Automation creation features
  - Automation management features
  - Input/output options available
  - Implementation options
  - Support in terms of consulting, implementation, and training
  - Offered commercial model(s)
  - Buyer coverage in terms of industry, geography, and buyer size
  - Company performance in terms of revenue and clients

2

Demonstrations and interactions with technology vendors and other industry stakeholders

- Detailed demos and interviews with RPA technology vendors for a comprehensive view of the solutions
- Interviews with technology vendors' reference clients
- Executive-level discussions with technology vendors as well as BPS providers that cover:
  - Current state of the market
  - Opportunities and challenges
  - Expected direction of movement in the industry
  - Vendor / service provider vision and roadmap
- Executive-level discussions with industry enablers / specialist technology integrators to get the buyer perspective and also to reaffirm the findings from other sources
- On-site as well as conference meetings with SDA technology buyers to understand:
  - Business case
  - Apprehensions & challenges
  - Approach
  - Outcomes
  - Future direction

3

The proprietary database of RPA capabilities of eight major BPS providers complements the research

- The database tracks the following capability elements for each service provider:
  - Robotic Process Automation (RPA) historical and projected adoption trends
  - Support in terms of consulting, implementation, and training
  - Offered commercial model(s)
  - Buyer coverage in terms of industry, geography, and buyer size
  - Key processes covered in terms of RPA deployment

Service providers covered in the analysis

Automation Anywhere
blueprism
KOFAX from Lexmark
Leo KRYON SYSTEMS
NICE
REDWOOD
softomotive
thoughtonomy
UiPath
WorkFusion

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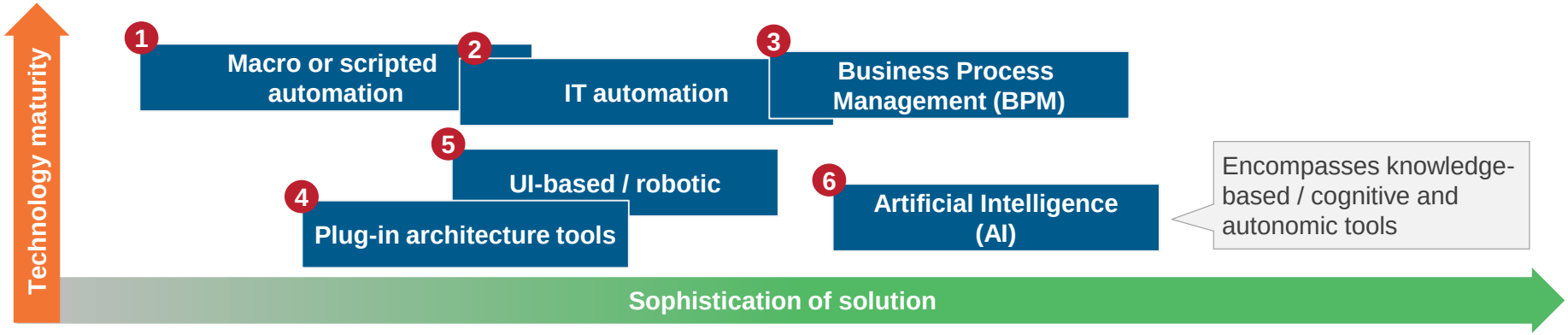
The most common automation technologies can be segmented into six basic areas



	Maturity	Scope of effectiveness	Limitations
Macro or scripted automation	Very high	Specific tasks	Typically used for tactical deployments. Can be difficult to maintain over long periods of time
IT automation	High	Number of areas including software application life cycle and service provisioning	Less effective in application production and run book environments
BPM	Very high	Large scale deployments involving enterprise- level transformation	Can be tactical or strategic with the ability to deal with scale. Can become too complex or costly
Plug-in architecture tools	High	Situations requiring deployment centrally and at scale to many desktops	Not suitable for situations where non-invasive integration of automation tools are needed
UI-based / robotic	Medium & evolving	Repetitive transactional administrative and rules-based tasks	Often deployed tactically or in combination with BPM tools
Artificial intelligence	Low & evolving	Number of areas, particularly document or content-heavy processes or IT Service Management (ITSM)	Robustness and resilience to change needs to be demonstrated in large scale operations; AI technologies have to learn from experience to find ways of handling unexpected scenarios

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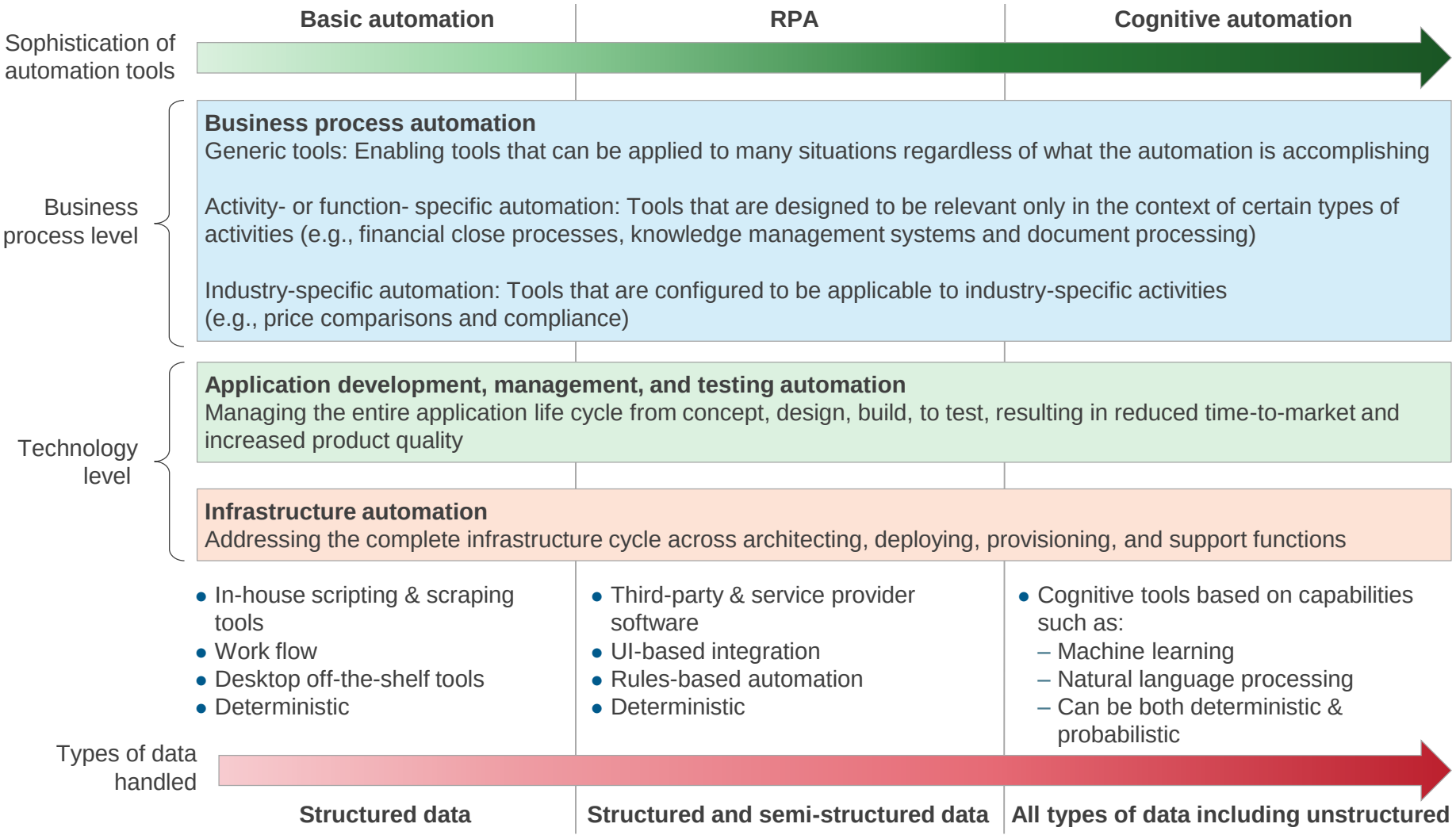
Everest Group's Service Delivery Automation (SDA) architecture | Automation technology can be applied to the whole process stack



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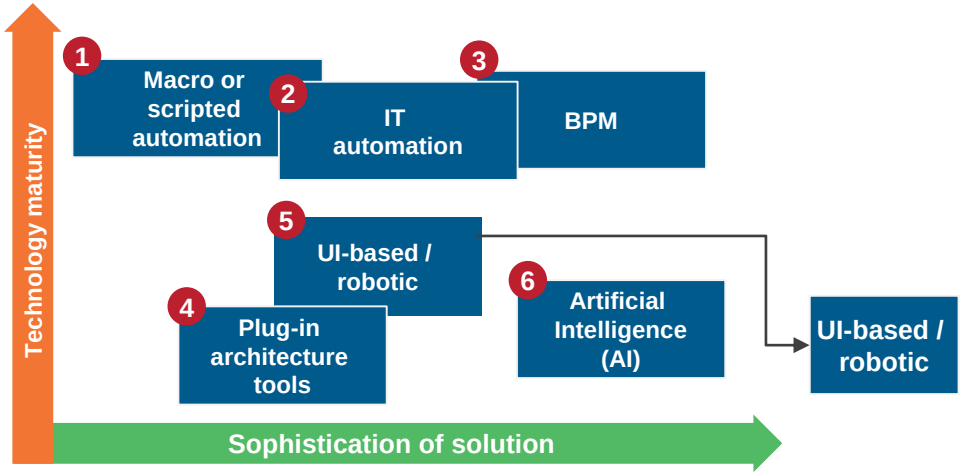
In this report, we focus on the RPA segment of the technologies



Business process automation

Generic tools: Enabling tools that can be applied to many situations regardless of what the automation is accomplishing

Activity-specific automation: Tools that are designed to be relevant only in the context of certain types of activities (e.g., knowledge management systems and document processing)

Industry-specific automation: Tools that are configured to be applicable to industry-specific activities (e.g., price comparisons and compliance)

Application development, management, and testing automation

Managing the entire application life cycle from concept, design, build, to test, resulting in reduced time-to-market and increased product quality

Infrastructure automation

Addressing the complete infrastructure cycle across architecting, deploying, provisioning, and support functions

Scope of the report

- Focuses primarily on robotic technologies specified above, and with a few that also offer artificial intelligence-enabled automation with generic use cases for any rules-based process, be it for business or IT
- The software applications assessed in this report are provided by independent software vendors under license with or without professional services

Areas out of scope of the report

- Automation, not covered in detail in this report, includes bespoke coding of macros/scripts, plug-in architecture tools, and BPM (one, three, and four in the above diagram)
- Excludes vertical tools such as price web scraping software for the travel industry
- Software that is available only within business processes or IT outsourcing contracts and not on a stand-alone basis

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Overview and abbreviated summary of key messages

The report provides a detailed view of the RPA technology vendor landscape by providing a thorough assessment of the various RPA technology solutions and positioning them along Everest Group's Feature, Implementation, and impacT (FIT) Matrix. The report also analyzes key strengths and areas of improvement for each of the technology vendors from the perspective of their RPA solution. Additional insights on advances in RPA technologies, operating models, capabilities of different platforms, and commercial models have also been provided

Some key elements and findings of the report are:

Everest Group FIT Matrix™ evaluation

- Everest Group has classified 10 RPA technology vendors on its FIT Matrix into the four categories of Leaders, Challengers, Optimizers, and Aspirants
- Automation Anywhere, Blue Prism, UiPath, and Thoughtonomy are the Leaders. Redwood and WorkFusion emerged as the Challengers. Kofax Kapow & NICE are the Optimizers and Kryon Systems & Softomotive are the Aspirants on Everest Group RPA FIT Matrix for 2016
- Automation Anywhere, Softomotive, and UiPath are the "'Star Performers" based on their strong relative YOY movement on the FIT Matrix

RPA technology vendor assessment

- Assessment and remarks on each of the RPA technology vendors' solution along 10 different dimension including market success, portfolio mix, value delivered, vision & strategy, features, deployment options, ease of use, support, security & compliance, and commercials

RPA technology vendor market landscape

- Key insights on RPA technology vendor market landscape along:
  - Data and process coverage of solutions
  - Go-to-market approach
  - Commercial models
  - Productivity enhancing RPA technologies

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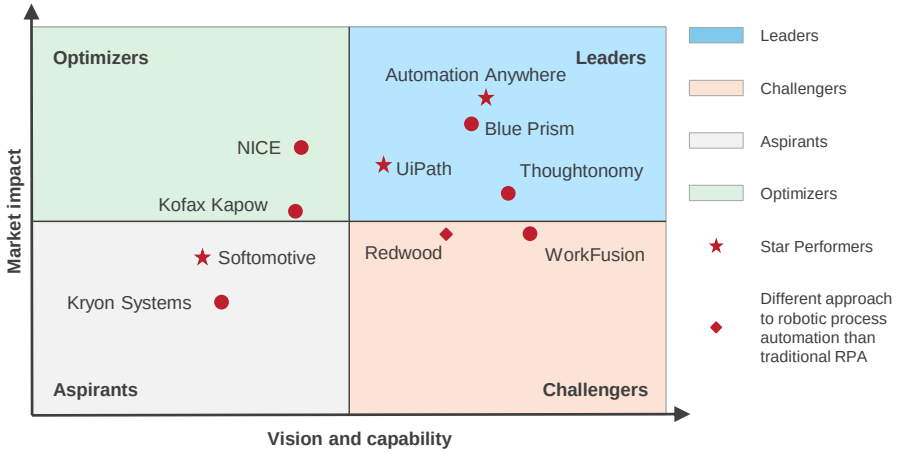
The study offers RPA technology vendor positions on the Everest Group's FIT Matrix, their key strengths & areas of improvement, evolution of RPA technologies, and insights on the market landscape

Everest Group RPA FIT Matrix



Capability assessment

Measure of capability: Best-in-class | Very high | High | Medium high | Medium | Medium low | Low | Not mature

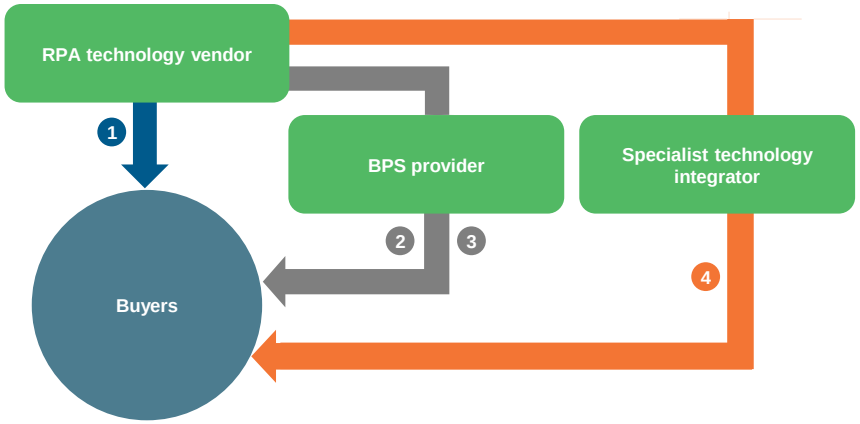
RPA technology vendor	Vision and capability								Impact			
	Vision & strategy	Features	Deployment options	Ease of use	Support	Security & compliance	Commercials	Overall	Market success	Portfolio mix	Value delivered	Overall
Automation Anywhere												
Blue Prism												
Thoughtonomy												
UiPath												
NICE												
Kofax Kapow												
Redwood												
WorkFusion												
Kryon Systems												
Softomotive												

Assessment and remarks on RPA vendors

Measure of capability: Best-in-class | Very high | High | Medium high | Medium | Medium low | Low | Not mature

Capability assessment		
Assessment dimension	**Rating**	**Remarks**
Market success		One of the biggest RPA providers with an impressive client base and growth rate
Portfolio mix		Although it has clients in many industries, most of them are in the XXX sector. Largely focused on large enterprises. It also has a presence across many geographies with major focus on North America
Value delivered		Buyers are pleased with the vendor's flexible approach, ease of doing business with, and availability of good libraries & technology features. There is opportunity to enhance some of its key features such as XXX and YYY
Vision & strategy		The company shows vision for pushing the capabilities of its platform, e.g., XXX
Features		Has enhanced and introduced several advanced features and functionalities, such as XXX in version X, to address scale and a few issues faced by its enterprise clients
Deployment options		It can be deployed on desktop, server, or on public clouds such as Microsoft Azure and Amazon by the client itself or a BPO partner
Ease of use		At par with the market in providing conventional means of automation creation (e.g., action recording and visual drag-and-drop), it has introduced the options of machine learning or natural language processing as extras
Support		Offers in-house, on-premise, and computer-based training services
Security & compliance		Supports XXX security controls and features role-based access model and stealth mode operations. It has several deployments in regulated and secure environments such as SOX and HIPAA. Opportunity to improve compliance with YYY
Commercials		Licenses are available only on a XXX basis. Also offers a pricing option that allows the customer to pay on YYY basis

Go-to-market approaches of RPA technology vendors



Source: Everest Group (2016)

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SOT research calendar

Published Current

Topic	Release date
Clever Machines at Your Service	February 2016
Heralding a New Era of Transformative Business Process Services through Technology	April 2016
Service Delivery Automation (SDA) – Best Practice Guide to Establishing an SDA Center of Excellence	April 2016
Robotic Process Automation in HR Outsourcing: Not the Same as Other Business Process Service Lines	April 2016
Unlocking Next-Generation Value through Technology-Embedded Business Process Services | Part 1	July 2016
Unlocking Next-Generation Value through Technology-Embedded Business Process Services | Part 2	July 2016
The Impact of SDA on Services TCO	August 2016
IT Infrastructure Services Automation: "Codified Consciousness is the Future"	September 2016
Business Case for Robotic Process Automation (RPA) in Global In-house Centers (GICs)	September 2016
The Service Delivery Automation (SDA) Journey	September 2016
IT Application Services Automation: Think Benefits, Not Costs	November 2016
Robotic Process Automation (RPA) - Technology Vendor Landscape with FIT Matrix Assessment – Technologies for Building a "Virtual Workforce"	December 2016

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Additional technology research references

The following documents are recommended for additional insight into the topic covered in this report. The recommended documents either provide additional details on the topic or complementary content that may be of interest

1. **Business Case for Robotic Process Automation (RPA) in Global In-house Centers (GICs)** (EGR-2016-2-R-1926); 2016. The report assesses the business case for adoption of RPA in offshore GICs and the associated payback period. It also provides insights into various factors impacting the business case and the threshold limits for each of them in order to have a justifiable business case

2. **Service Delivery Automation (SDA) – Best Practice Guide to Establishing an SDA Center of Excellence** (EGR-2016-13-R-1750); 2016. This report provides a guide to setting up and expanding an SDA CoE. It is intended for organizations that are setting out to build a CoE, service providers looking to build CoEs for their clients and SDA technology vendors seeking insights into the bigger CoE picture

3. **Service Delivery Automation (SDA) – The Story Beyond Marketing Messages and an Assessment of SDA Tools** (EGR-2015-10-R-1646); 2015. This report provides a detailed view of the SDA technology market by providing a thorough assessment of the various SDA technology solutions and ranking them along Everest Group's Feature, Implementation, and impacT (FIT) Matrix. The report also analyzes key strengths and areas of improvement for each of the technology vendors from the perspective of their SDA solution. Additional insights on the market, operating models, capabilities of different tools, and commercial models have also been provided

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