

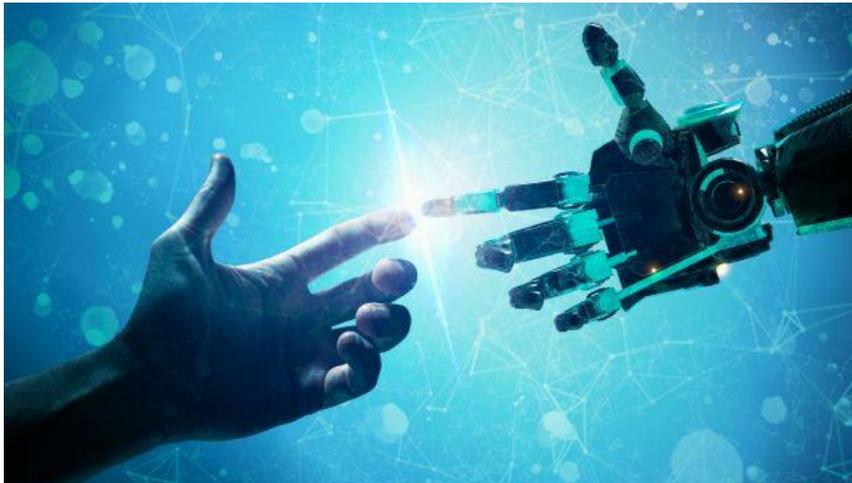


Winning with Digital Automation: Bots to Robotic Process Automation

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Fourth Industrial Revolution

An era that will be defined and driven by extreme automation and ubiquitous connectivity.



Expected to see heavy implementation of "emerging technology breakthroughs" in fields such as **artificial intelligence**, robotics, the Internet of Things, autonomous vehicles, 3D printing, quantum computing and nanotechnology with a high potential of disruptive effects.

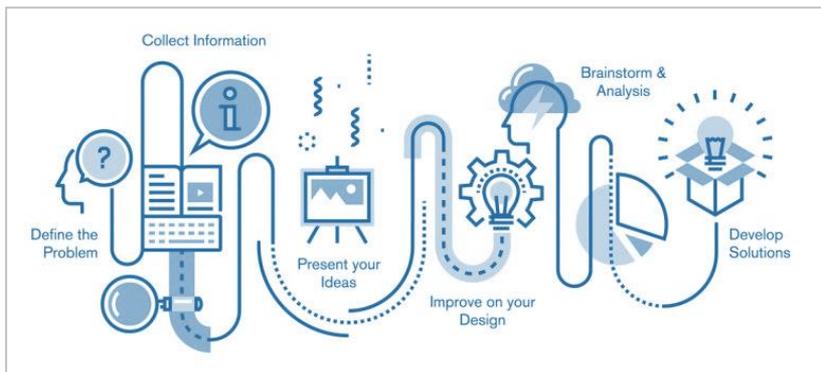
The Banking, Financial Service, and Insurance Industry Is The Largest User Group of RPA



■ Fast expansion to other industries:

- Loan application
- Credit card application
- Mortgage application
- Claim processing
- Customer data update
- Customer management
- Form filling
- Report generation
- Address update

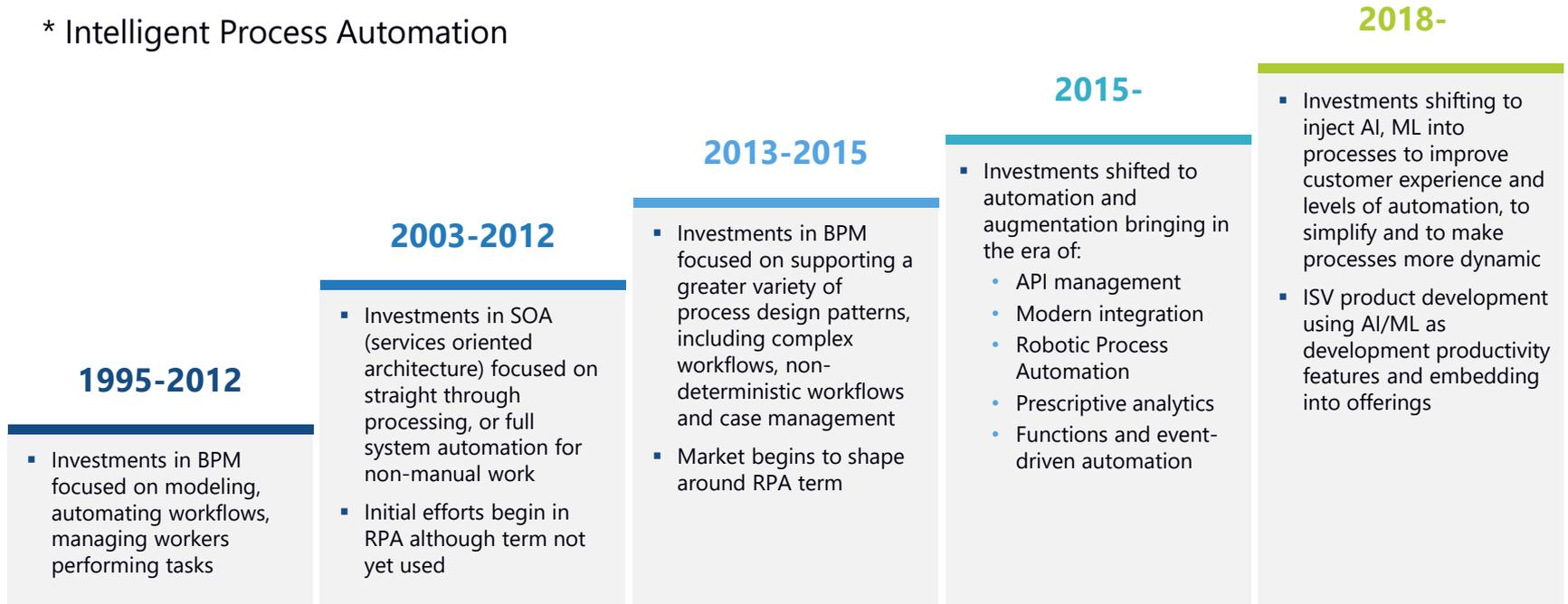
Workflows Suitable for RPA – Cross-Industries



- Rule-based
- Structured data
- Large volume, simple, repetitive, mundane tasks
- Multisystem, interoperable
- Standardized workflow
- Data exchange/integration between heterogeneous systems
- High demand for precision and consistence in data manipulation

Evolution of RPA to IPA*

* Intelligent Process Automation



AI-enabled RPA (IPA) has a wider scope of applications.



- RPA being "dumb" is not necessarily bad — do exactly as trained.
- AI-enabled functions and capabilities help extend RPAs from dumb rule-based tools to more intelligent automation assistants:
 - Handle unstructured data (extension of RPA), such as natural language processing.
 - Learn from experiences/observations, preferably under human supervision.
 - Improve the way RPA interacts with people and business systems.

IDC Market Glance: Intelligent Process Automation



Source: IDC, 1Q19

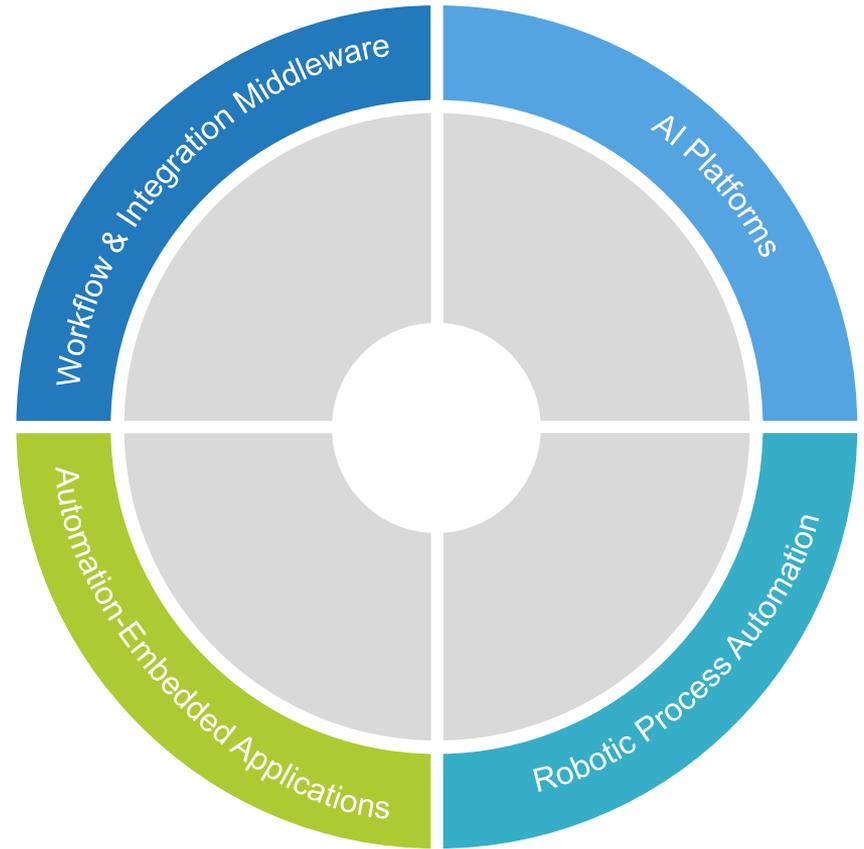
For areas on which IDC publishes market share data, the top 3-5 market share leaders are represented. For areas on which IDC does not publish market share data, vendor selection is up to analyst discretion.

Key RPA Vendors by Bot Type

	Action	UI	Capture	AI	Task Mining
Automation Anywhere	X	X		O	X
Blue Prism	X	X		O	
Conduent	X	X			
Infosys EdgeVerve Software	X	X		O	X
Epiance (EpiGenie)	X				
Exilant (Fusion)	X				
Jacada	X	X			
Kofax Kapow	X		X		
Kryon Systems	X		X	X	
Nice	X			X	
OpenConnect (WorkIQ)	X	X			X
Pegasystems OpenSpan	X	X			
Redwood Software	X				
Softomotive	X		X	X	
UiPath	X	X		O	
WorkFusion	X			X	

Many alternative automation technologies will supplement and compete with RPA, including:

- Chatbots and prescriptive analytics — recommender engines, next best action — will play a bigger role in task augmentation, competing with RPA
- Some RPA functions are replaced by microservices-based composite services that provide an alternative to the current RPA approaches
- RPA functions blend with composite services to expand the number of tasks able to be fully automated.



Case Studies across Industry Verticals

500 Bots



Automate anything from answering employee questions to retrieving useful information from audit documents.

380 Bots



For appointment scheduling, including the pickup and drop-off points, shipment distance and desired delivery timeframe.

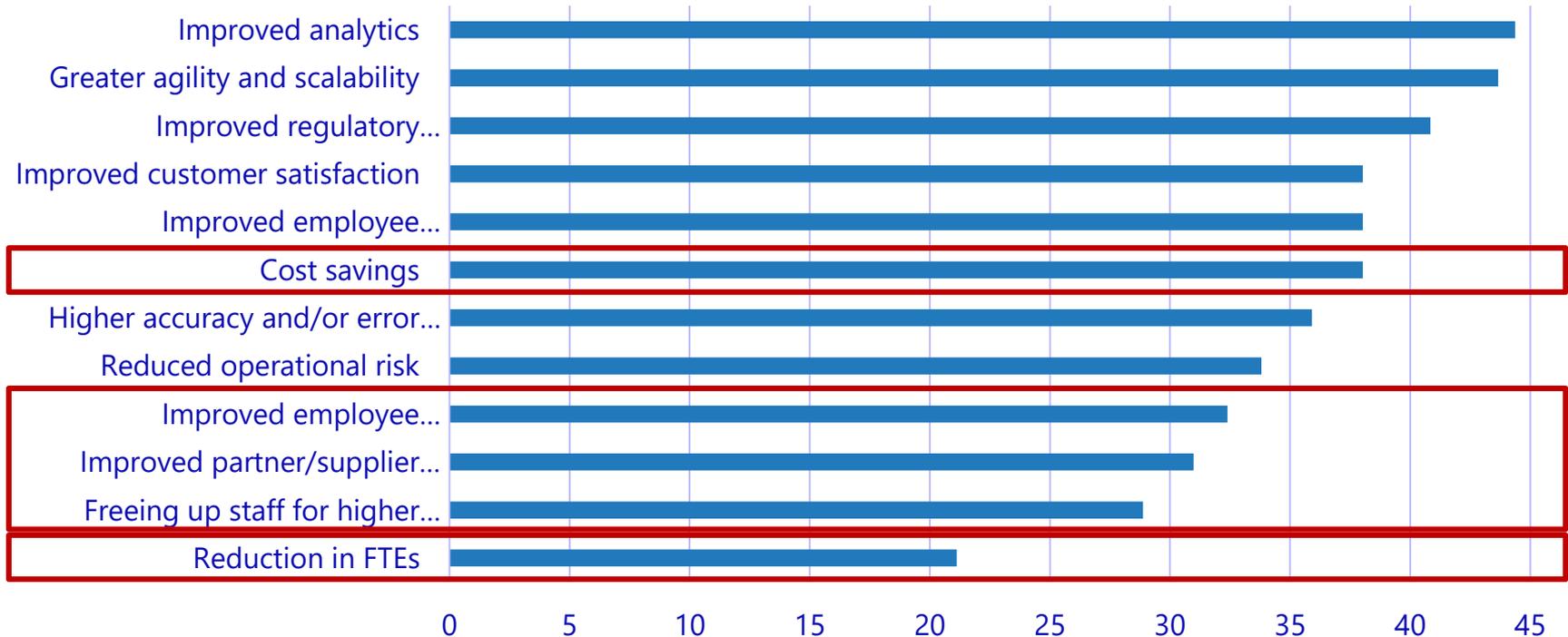
500+ IQBot



Automate 60% of its order processing volume, redeploy 30 FTEs to higher-value tasks

Process Automation Benefits

What benefits are you achieving (or do you expect to achieve) by deploying RPA software?



Closing

Managing security risks is the top priority for RPA.



- Development teams should look broadly at IPA as a blend of technologies where each has its own place in process design
- Plan to invest more
 - Data becomes far more important to modern process automation
 - IPA becomes more event-driven
 - Decision automation becomes more central to IPA



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