The Continuum of Intelligent Automation

How RPA, Autonomics and Cognitive are Coming of Age

New York, December 3rd, 2015

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Overview

- Charles Sutherland is the Chief Research Officer at HfS. Charles is responsible for the overall research agenda for HfS across the "as a service" economy. He personally covers the areas of automation, business platforms, supply chain, procurement and various vertical processes. Since joining HfS in 2013, Charles has had the opportunity to speak at various industry forums including NASSCOM and has had his research covered widely in the business and outsourcing press as well.

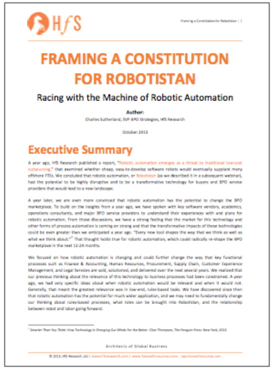
Previous Experience

- Charles has been in the business services market for 20 years including previous roles as the Chief Strategy Officer for a BPO service provider and the Managing Director, Growth & Strategy for Accenture's Operations Growth Platform. In these roles he has had a breadth of experience in thought leadership, strategy development, acquisitions, business development and long term investment planning in both BPO and ITO.
- Charles has also had Growth & Strategy roles for Accenture in Infrastructure Outsourcing and for the Communications, Media and High Tech Operating Group. Prior to that he was a Strategy Consultant in London for Accenture serving clients in the Media, Communications and Consumer Goods industries. If you go even further back in time he was also a Marketing Director for Olivetti in Canada and Europe.

Education

- MBA from INSEAD in Fontainebleau, France
- Honors BA in Economics and Political Science from the University of Toronto.

HfS Research Has Been Writing About Intelligent Automation for 3+ Years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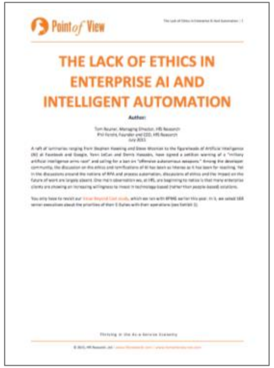
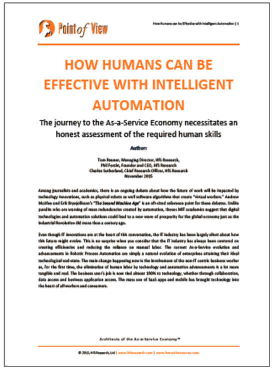
FRAMING A CONSTITUTION FOR ROBOTISTAN

Racing with the Machine of Robotic Automation

Executive Summary


Point of View

THE LACK OF ETHICS IN ENTERPRISE AI AND INTELLIGENT AUTOMATION

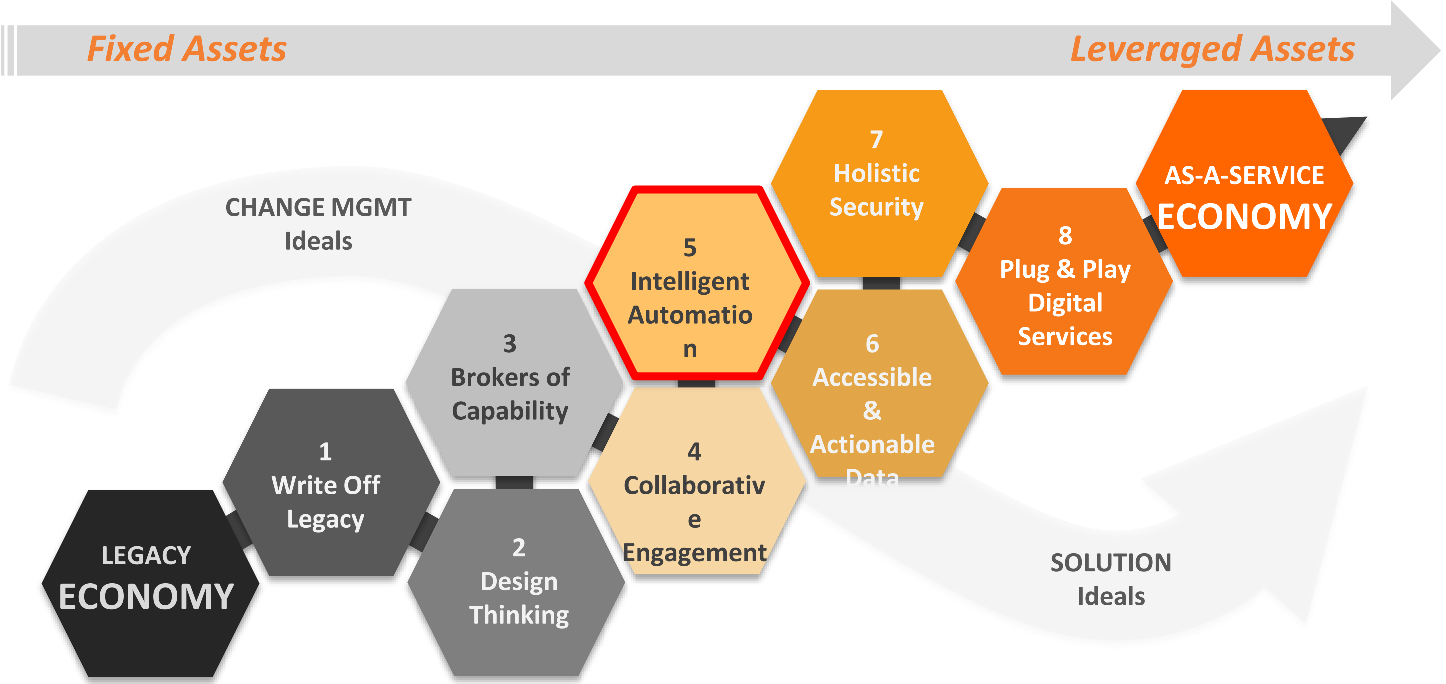

Point of View

HOW HUMANS CAN BE EFFECTIVE WITH INTELLIGENT AUTOMATION

The journey to the As-a-Service Economy necessitates an honest assessment of the required human skills

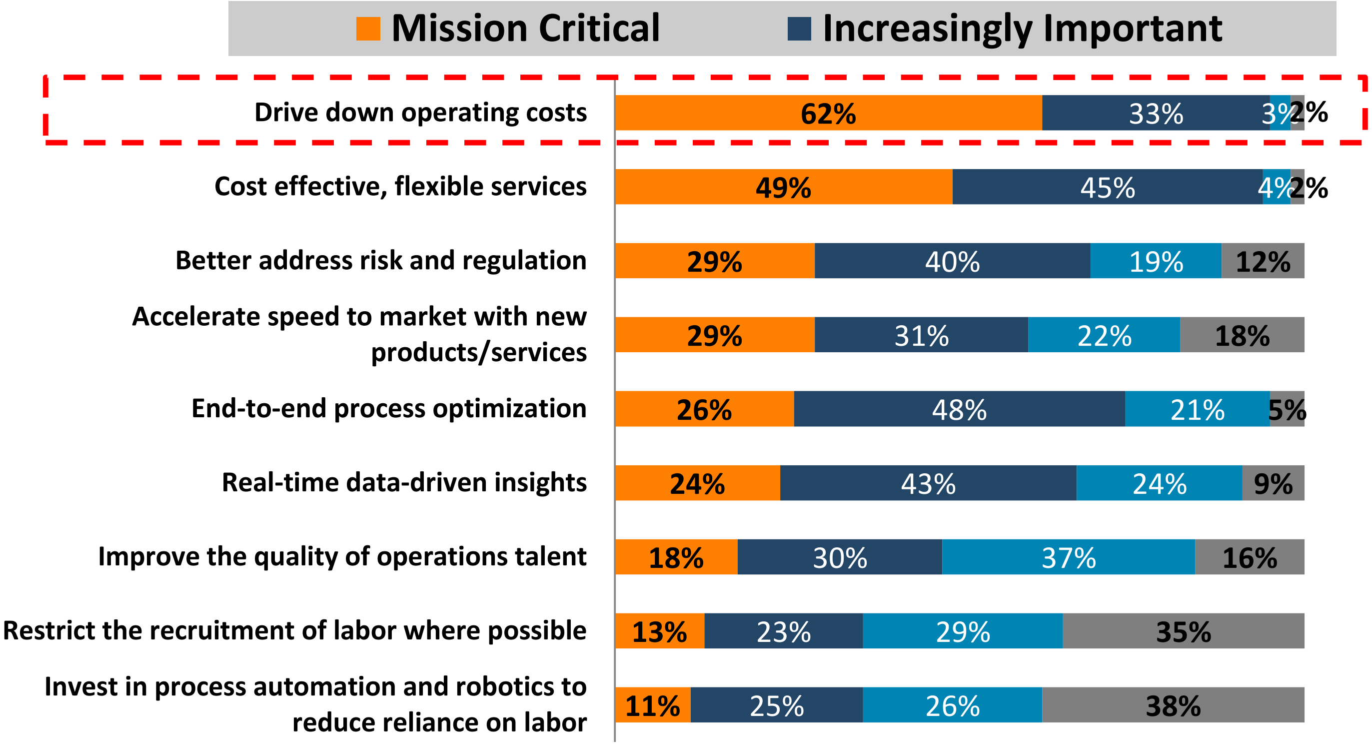
We Are Moving Toward An As-a-Service Economy

- Intelligent Automation is *one* building block, but not the panacea
- Change Management, in particular new organizational are critical



While It Is Tempting To Look At Automation Only For Cost

How critical are the following C-Suite priorities/directives, in terms of shifting from a Cost Focus to a Value Focus with your operating model?

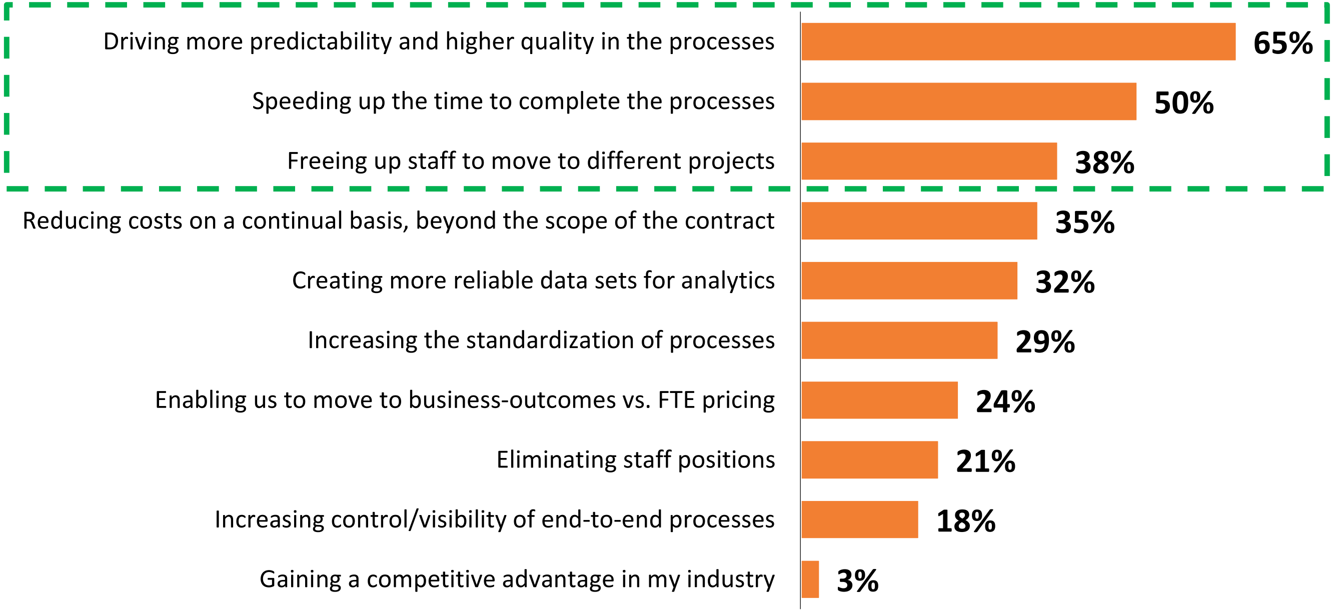


Source: HfS Research and KPMG LLP, 2015

Sample: 168 Enterprise Buyer Executives from "Achieving Value Beyond Cost" Study, November-December 2014

We Need To Focus On Intelligent Automation Also Being About Quality, Predictability and Speed

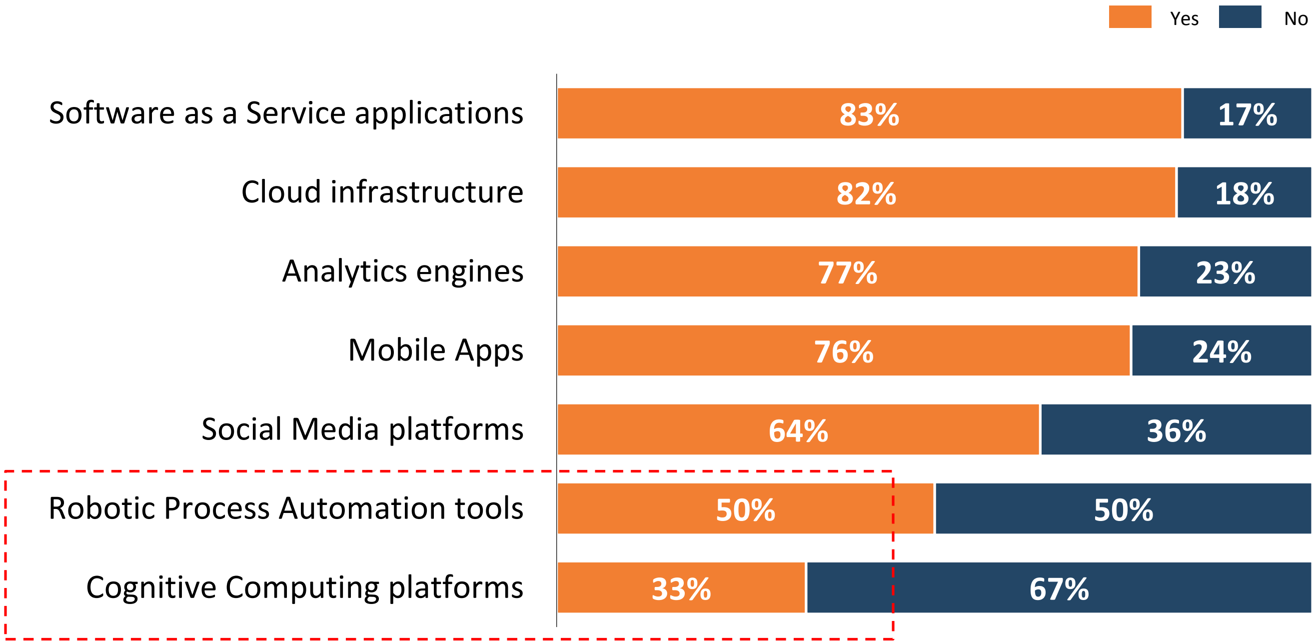
What do you believe to be the most important components of the value proposition for Robotic Process Automation? *(Choose Top 3)*



Source: "Ideals of As-a-Services" Study, HfS Research 2015
Sample: Total = 716; Enterprise Buyers = 178; Advisors/Consultants = 176; Service Providers = 372

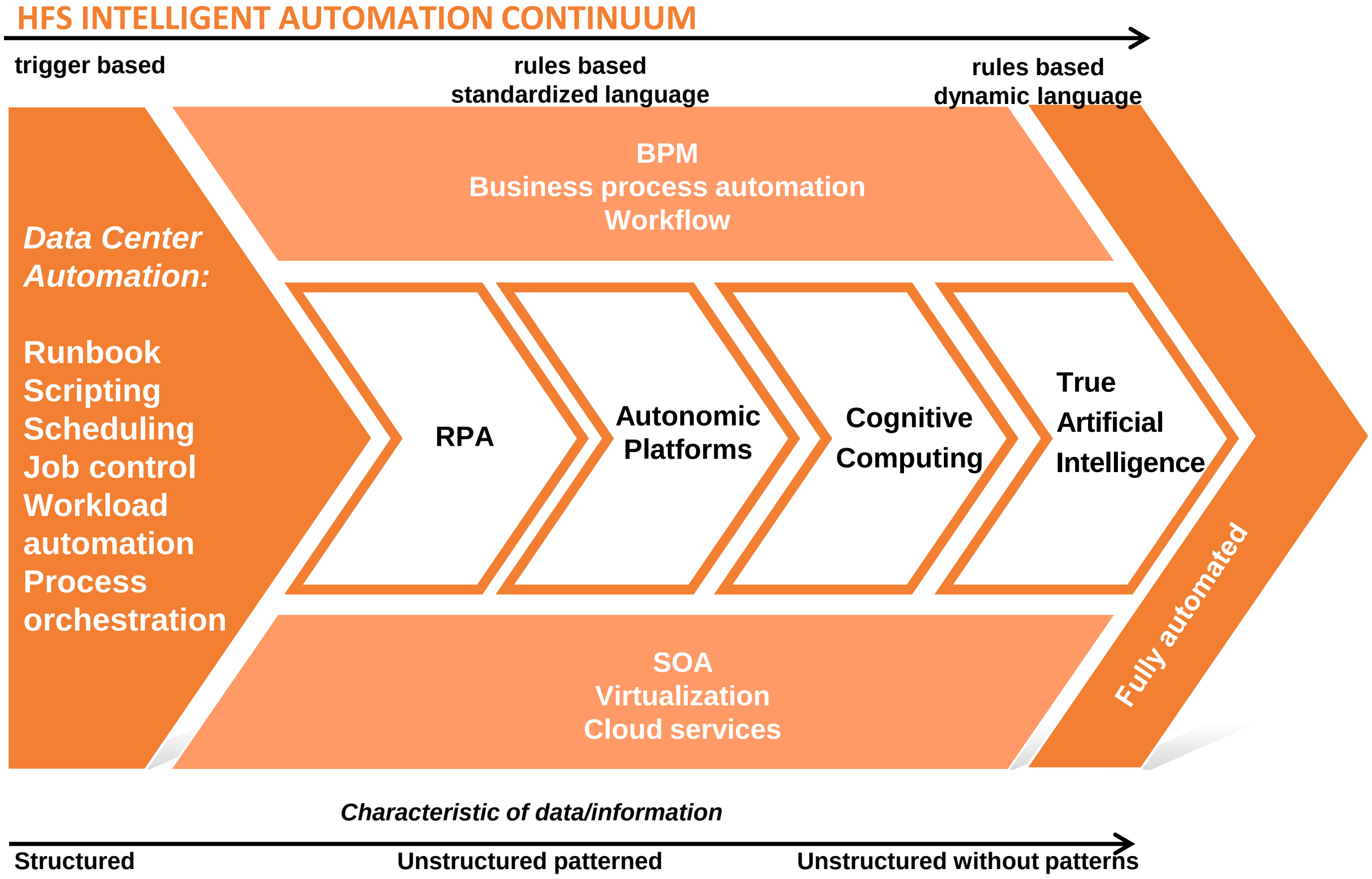
This Conflict May Be Because Many Enterprises Don't Really Understand Intelligent Automation Today

Do you fully understand the value propositions for the following enabling technologies for your enterprise?



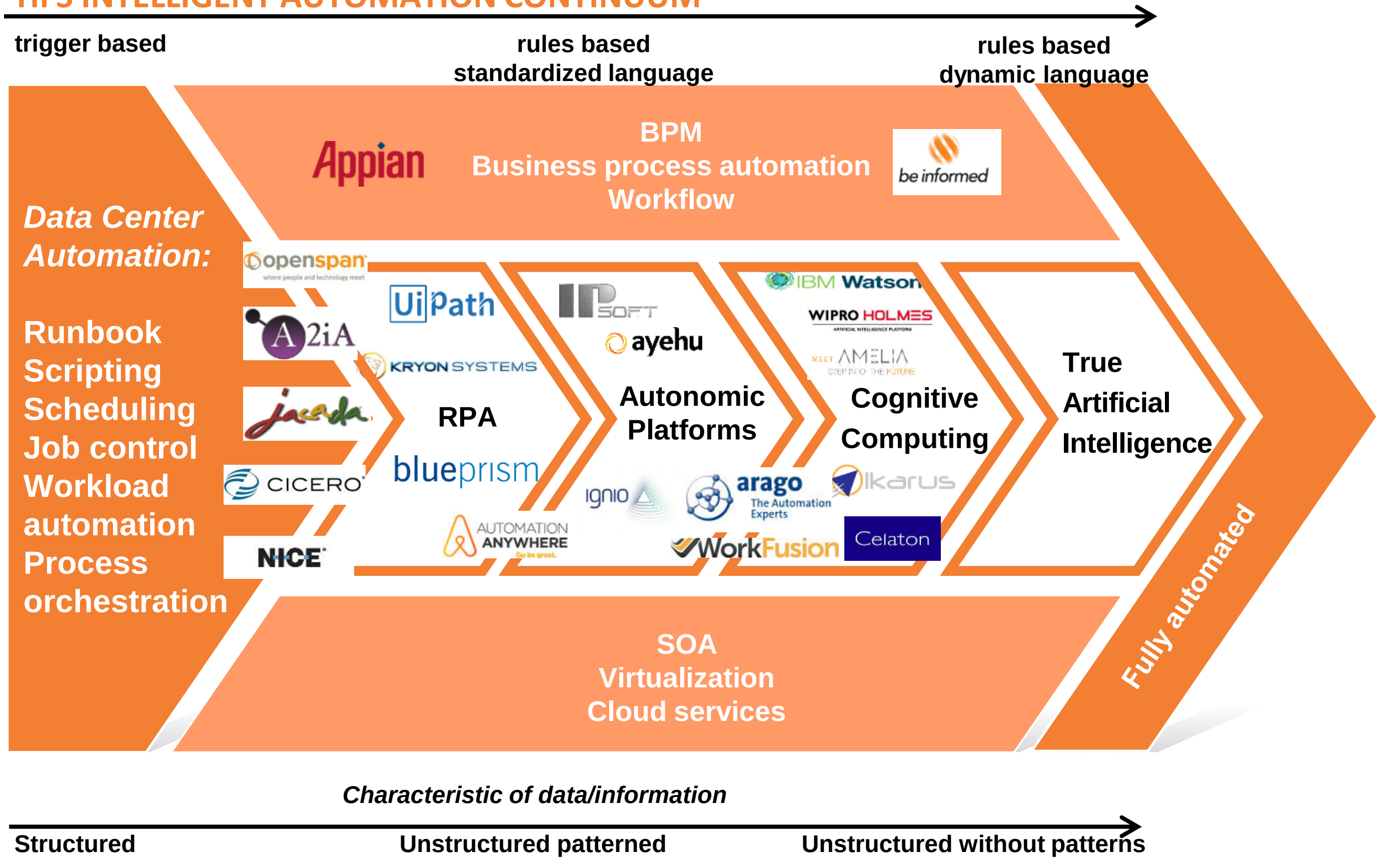
Source: "Ideals of As-a-Services" Study, HfS Research 2015
Sample: Enterprise Service Buyers = 178

HfS Sees Intelligent Automation As A Continuum Today



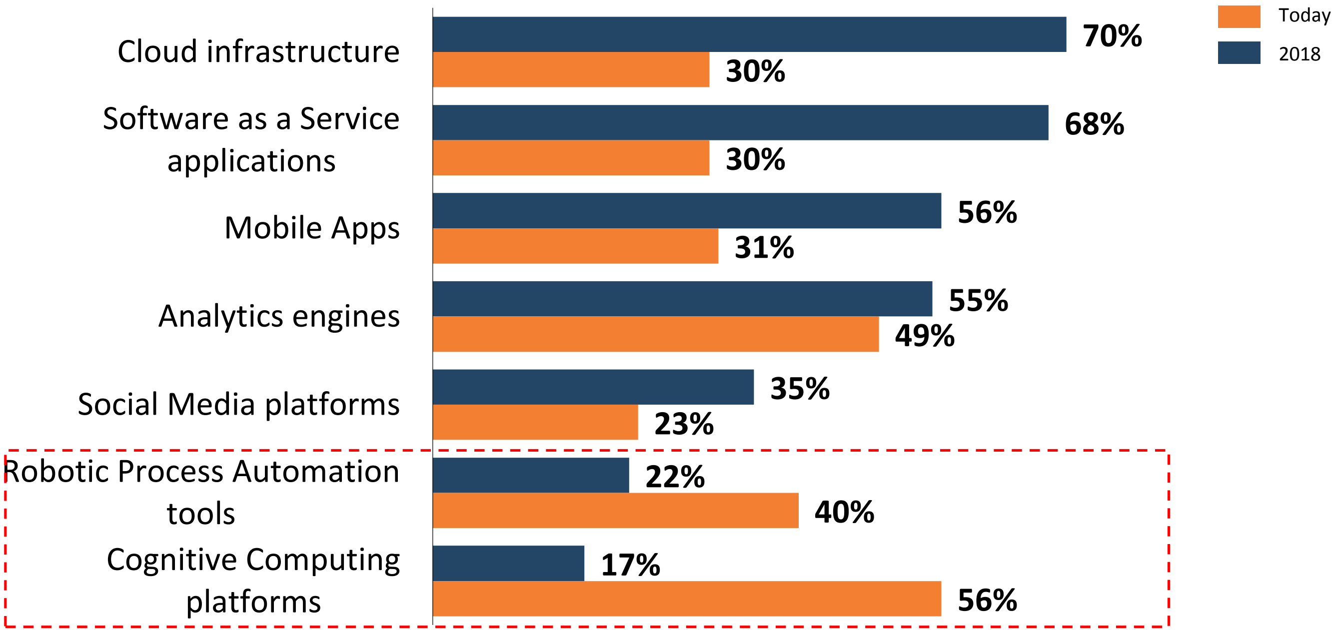
With An Ever Increasing Variety Of Solutions

HFS INTELLIGENT AUTOMATION CONTINUUM



Many See Intelligent Automation As A Technology For The Future

What are the most significant enabling technologies TODAY in your move to the "As-a-Service Economy" and which do you think will be the most significant in 2018?



Source: "Ideals of As-a-Services" Study, HfS Research 2015
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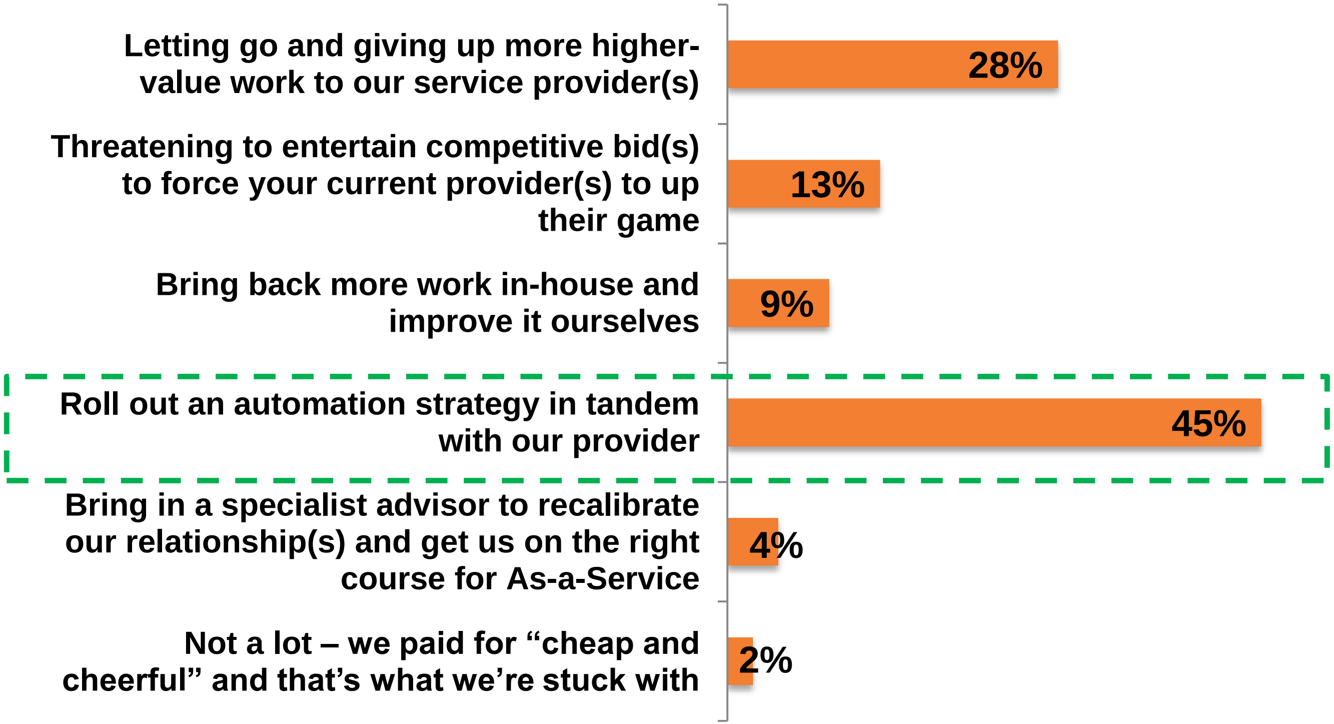
And It Is A Nascent But There Are Broad Lessons Already

- This is a nascent market, service providers are not (yet) educating the stakeholders while software vendors are trying
- Amongst service providers there is a lack of understanding of impact on revenue models as well as fear of transparency
- Perception is dominated by RPA – Autonomics or broader impact of Cognitive Computing largely not discussed
- But the narrative is shifting from a narrow cost, FTE replacement focus toward transformation and business agility – akin cloud discussion
- Most implementations are very client specific and often on sub-process level
- Solutions are beginning to address unstructured data, less well defined processes and broad notions of Cognitive Computing and AI

There Are Also Specific Lessons From The Trenches of F&A BPO Deployments Of Intelligent Automation

- It's easy to create a software "bot". It's hard to industrialize them to deliver significant benefits
- RPA in particular can be confused as process transformation, many times it is being deployed as a more efficient way of running a bad process
- Position Intelligent Automation within your IT roadmap - is it a short-term fix while major technology refreshes come on stream or more
- A lack of process standardization continues to be an automation bottleneck (e.g., requests received by email with subjective instructions)
- Accessing applications through the UI, especially via Citrix can be challenging and fragile
- Use an agile implementation approach but do not take on too many parallel projects. Start small and simple and build momentum

Buyers Want To Roll Out Intelligent Automation With Their Service Providers As A Leading Way To Improve The Quality of Relationships



Source: The HfS Working Summit for Service Buyers, December 2015

HfS Has Taken These Lessons To Drive An Updated RPA Maturity Model That Looks At The Sell-Side And Buy-Side

Level 4: Integration of Automation

Service Providers	*Enterprises – Shared Services*
Level 3: Institutionalization	Level 3: Standardization
Level 2: Industrialization	Level 2: Viral Deployment
Level 1: Initialization	Level 1: Experimentation

Today HfS Is Sharing For The 1st Time, The New Service Provider RPA Maturity Model – *Strategy Components*

	Leading Goal of RPA Effort	Targeted Process Types	Deployment Model	Scalability Focus	Vision For Automation Impact on Process	Leading Use of RPA Data	Plan For "Bot Lifecycle"	Holistic Intelligent Automation Alignment
Integration	End to End Process Coordination	End to End Processes Between Enterprise and Provider	Integrated "Bots" but Managed Independently	End to End Enterprise Processes	Re-Engineered Processes Using Common Components	Total "Bot" Data Integrated E2E and Used to Reengineer Processes	"Bots" As a Shared Capability Available To Each Client As Needed	Coordinated Across Technologies Between Client and SP
Institutionalization	Standardized Process Delivery	Processes with Significant Judgment Based Tasks	Shared Pool of Coordinated "Bots"	Across Standardized Processes	Re-Engineered Processes Using Common Components	Total "Bot" Data Integrated E2E and Used To Reengineer Processes	"Bots: As a Shared Capability Across Clients On As Needed Basis	Investigating Alignment Between IA Technologies
Industrialization	Improved Process Efficiency	Processes with Unstructured Data	Coordinated "Bots"	Common Shared Sub-Processes	Looking for Common Process Components	For Improved Process Efficiency	Dependent on Each Client's App and Process Plans	RPA Initiatives Dominate
Initialization	Quick Cost Reductions	Simple, Rules Based, Screen Centric Processes	Individual Desktop "Bots"	Customer Specific Processes	Maintain Processes As-Is	For Performance Management	Not Specified	No Alignment

There Is Even More Now To The New Service Provider RPA Maturity Model – *Operations Components*

RPA Program Owner	RPA Expertise Owned By	Primary RPA Program Funding Source	Technology Sourcing	Commercial and Contractual Models	Program Governance	RPA Integration	Organizational Focus	QA Approach
Service Provider and Enterprise Steering Committee	Mutual IA COEs With Shared Governance	Individual Funding With Governance on Recovery	Shared Understanding of Market and Common Partnerships	Complete Shared Transparency	Coordinated Long Term Shared Plan and Goals	Integrated Into E2E SP and Enterprise Application Environment	Continual Re-Evaluation of Roles and Skills Required In The Two Organizations	Continuous QA Integration Between IT and Process Owners in All Parties
CTO/COO	Intelligent Automation COEs	Central Subsidized Funding	Partnerships Based On Full Market Understanding	Willing to Bring into FTE Models and Share Benefits With Clients	A Jointly Developed Roadmap for RPA and IA	DevOps Mindset to Client and SP Application Integration	Driving Change In Recruiting and Training To Adapt To New Mix of Required Skills	QA Process and Method Redesign To Account For Greater Role of Automation
Global Process Owner / 6Sigma Lead	Global Process Owner / 6Sigma Lead	Limited Central OPEX with Client Recovery	Ad Hoc but Based on Understanding of All Tools Available	Willing to employ in Gainsharing But Reluctant on FTE Models	Service Provider Shares RPA Plan and Requirements	Limited Integration Into Service Provider Tools and Applications	Formal Plans To Re-Skill and Re-Deploy Impacted	Adapted QA Methods and Staffing To Recognize New Realities
Individual Client Teams	Individuals	Project or Client Based Recovery	Reactive to Each Situation	Focus on Transactional Contracts	Deployment Behind Delivery "Firewall"	No Integration, Through Citrix Only	Sourcing and Training of RPA Leads	Unchanged From Standard QA Practices

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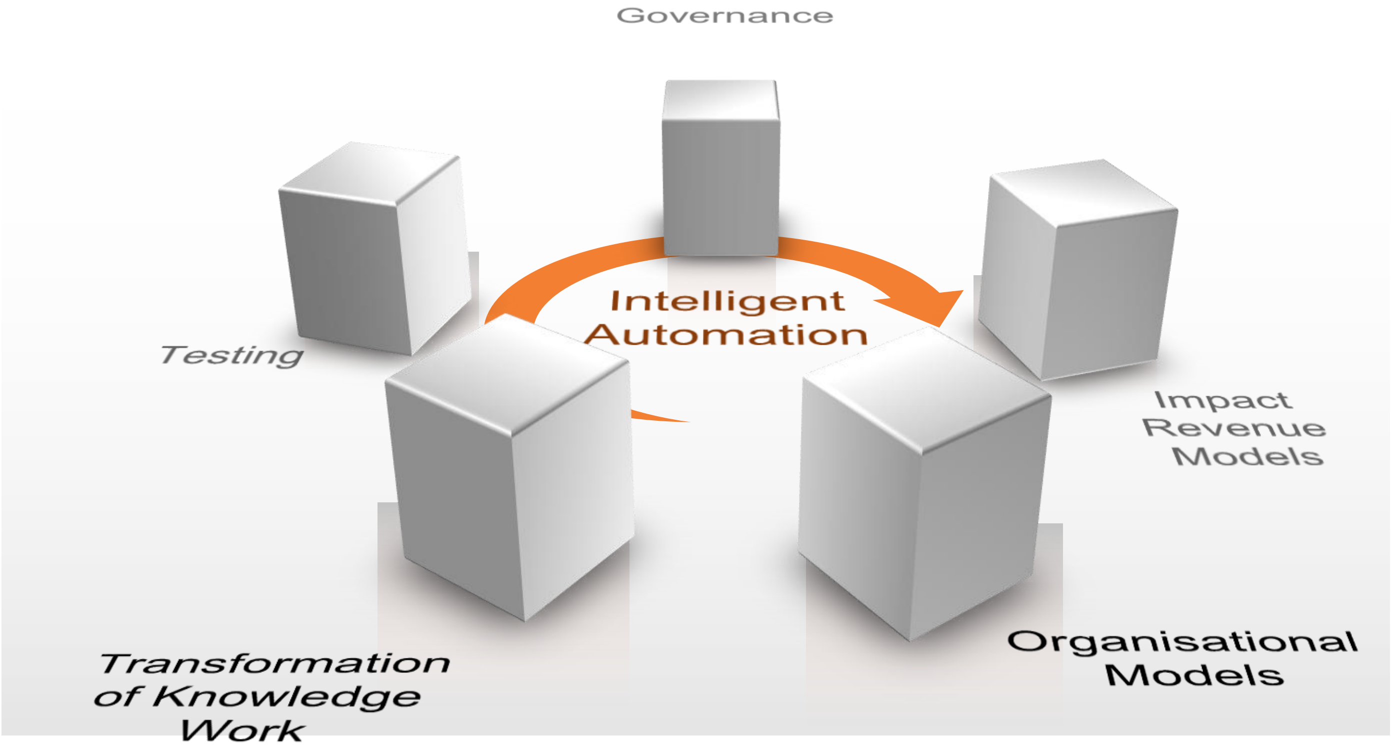
The Maturity Model Highlights That New Topics Have To Be On The (Automation) Center Stage



There Will Be Fallout from Intelligent Automation: The Three Rs

Redundancy

Re-skilling

Re-badging

So We Need To Transform What Knowledge Work Means

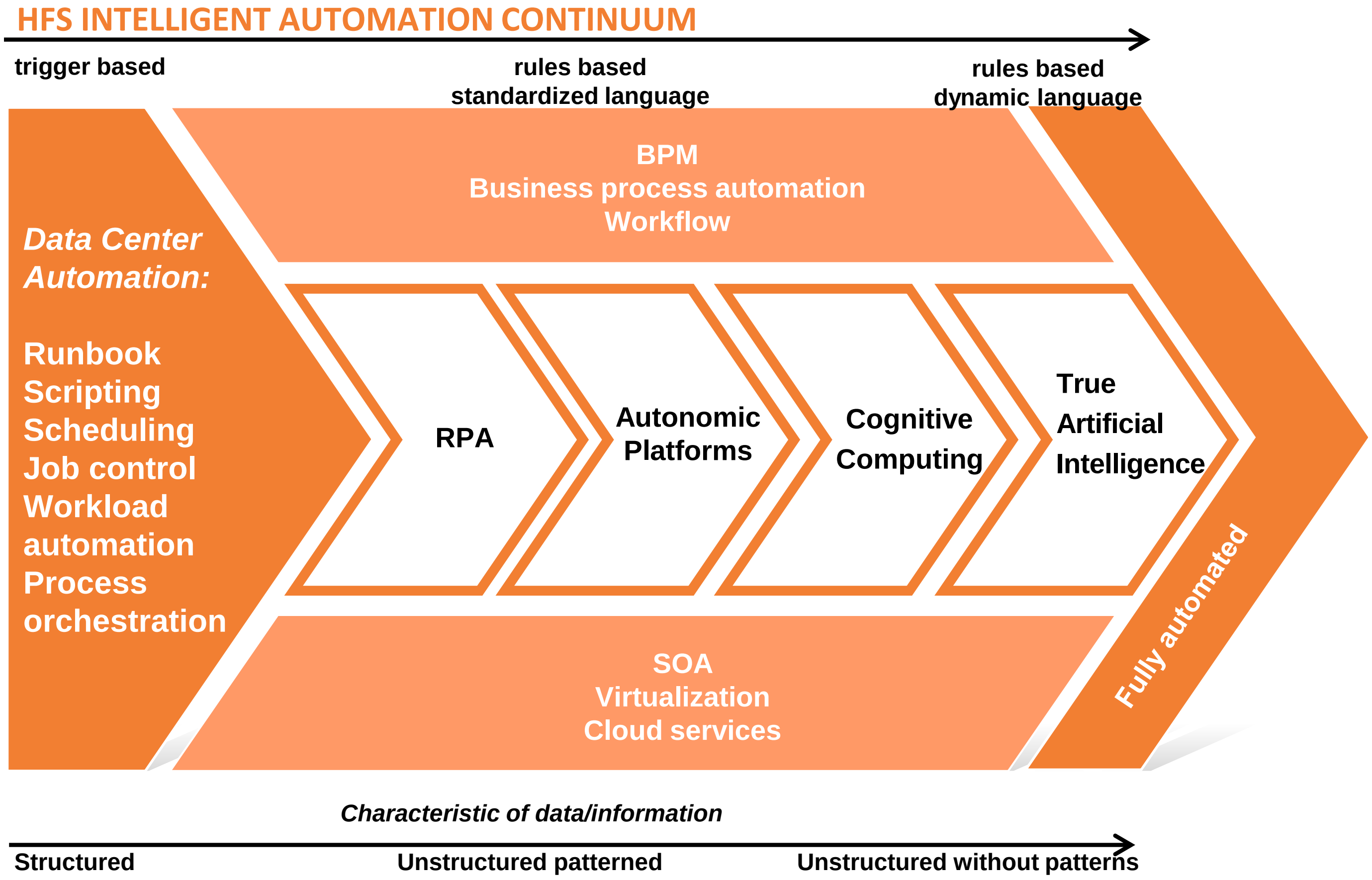
New Jobs

- Data Insight Manager
- Augmentation Integrator
- Visualization Interpretation
- "Bot" Employee Oversight
- Automation Overlord

Endangered Jobs

- Data Entry
- Abstracting & Indexing
- Data Reconciliation
- L1 Customer Support
- Master Data Management

Which Will Be Felt From Across The Continuum



To Measure This Impact HfS Is Using Autonomics As A Broader Way Of Looking At Service Provider Progress In Intelligent Automation

The full Autonomics Premier League will be available today:

Horsesforsources.com in blog format

and in detail for premium members on hfsresearch.com

The 2016 Autonomics Premier League (1st-12th)

2016	Service Provider	Comments
1	**IBM**	Pervasiveness of Watson, acceleration of Dynamic Automation program, scaling out of IPsoft's IPcenter
2	**NTT Communications**	Pioneer of IPcenter deployments, largest scale to date, adopting Amelia in mainstream scenarios
3	**Accenture**	Strong vision, building out artificial intelligence engine and Artificial Intelligence Lab
4	**Cognizant**	Strong thought-leadership, proprietary HPE tool as differentiator
5	**Capgemini**	Strong vision of BPO unit, scaling out Autonomics PaaS platform
6	**TCS**	Strong focus on proprietary capabilities, ignio platform starting to get traction
7	**Syntel**	Holistic strategy with SyntBots platform
8	**Wipro**	Building out Holmes platform with broad capabilities that need to mature
9	**Infosys**	After pioneering IPsoft partnership, refocusing on proprietary platforms
10	**Dell**	Sound vision, pervasive build out across IT Ops and provisioning/release automation
11	**HP**	BPO has solid strategy, while Infra is lagging in buildout
12	**Xerox**	Mature approach around its Automated Intelligence platform within the Automation Suite

Questions?

About HfS Research

HfS Research is the leading analyst authority and global network for IT and business services, with a specific focus on global business services, digital transformation, and outsourcing. HfS serves the research, governance, and services strategy needs of business operations and IT leaders across finance, supply chain, human resources, marketing, and core industry functions. The firm provides insightful and meaningful analyst coverage of best business practices and innovations that impact successful business outcomes, such as the digital transformation of operations, cloud-based business platforms, services talent development strategies, process automation and outsourcing, mobility, analytics, and social collaboration. HfS applies its acclaimed Blueprint Methodology to evaluate the performance of service and technology in terms of innovating and executing against those business outcomes.

HfS educates and facilitates discussions among the world's largest knowledge community of enterprise services professionals, currently comprising 150,000 subscribers and members. HfS Research facilitates the HfS Sourcing Executive Council, the acclaimed elite group of sourcing practitioners from leading organizations that meets bi-annually to share the future direction of the global services industry and to discuss the future enterprise operations framework. HfS provides sourcing executive council members with the HfS Governance Academy and Certification Program to help its clients improve the governance of their global business services and vendor relationships.

In 2010 and 2011, HfS Research's Founder and CEO, Phil Fersht, was named “Analyst of the Year” by the International Institute of Analyst Relations (IIAR), the premier body of analyst-facing professionals, and achieved the distinctive award of being voted the research analyst industry's Most Innovative Analyst Firm in 2012.

In 2013, HfS was named first in rising influence among leading analyst firms, according to the 2013 Analyst Value Survey, and second out of the 44 leading industry analyst firms in the 2013 Analyst Value Index.

Now in its seventh year of publication, HfS Research’s acclaimed blog “Horses for Sources” is widely recognized as the most widely read and revered destination for unfettered collective insight, research, and open debate about sourcing industry issues and developments. Horses for Sources today receives over a million web visits a year.

To learn more about HfS Research, please email research@HfSResearch.com.