

Department of Management public lecture

Service Automation: robots and the future of work

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Hashtag for Twitter users: **#LSErobots**

The logo for LSE events, featuring the letters 'LSE' in white on a red square, followed by the word 'events' in a red, lowercase, sans-serif font.





Service Automation Robots and the Future of Work



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Service Automation: Robotics & the Future of Work

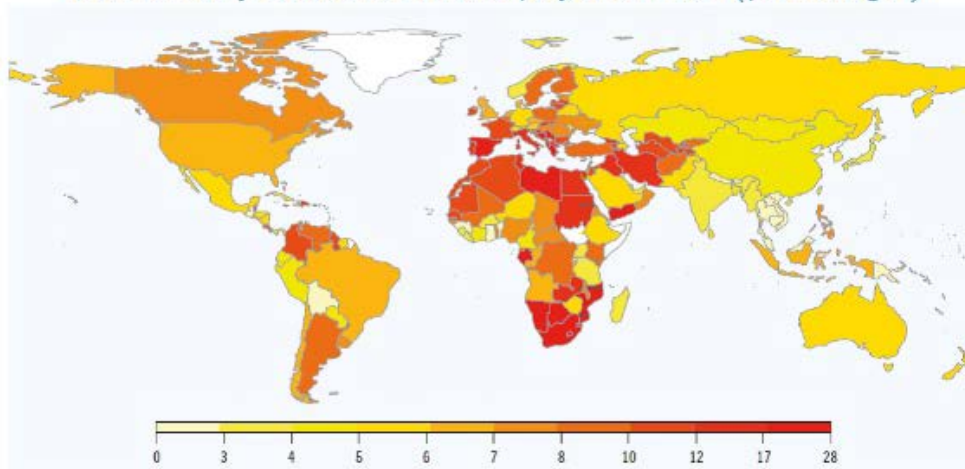
There is plenty of **fear** and **hype** in the popular media about service automation...

Two analytical levels



How are businesses using service automation?

Cross-country variations in unemployment rates (percentages)



What are the implications for global employment rates and the future of work?

Research Method



We studied the automation of *business services*, services performed by organizations, either back office support services or customer-facing services.

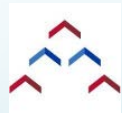
Surveys:

- 🤖 148 delegates at OWS in 2015
- 🤖 198 delegates at OWS in 2016

Interviews:

- 🤖 16 client adoption stories
- 🤖 6 service automation providers
- 🤖 5 advisors

Training and demos



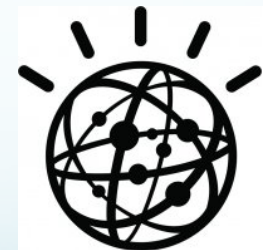
The Service Automation Landscape: SOFTWARE SOLUTIONS

Realm of RPA

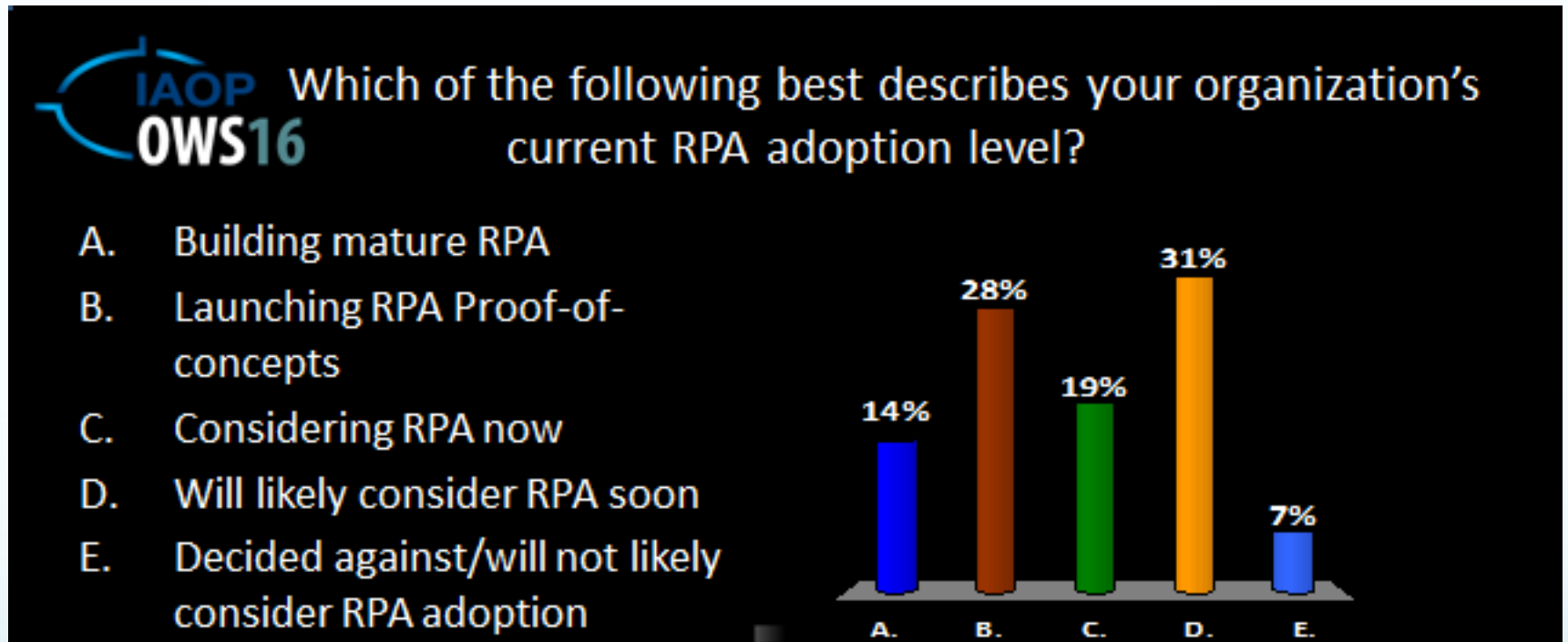
Realm of CA

Structured Data
Rules-based Processes
Deterministic

Unstructured Data
Inference-based Processes
Probabilistic

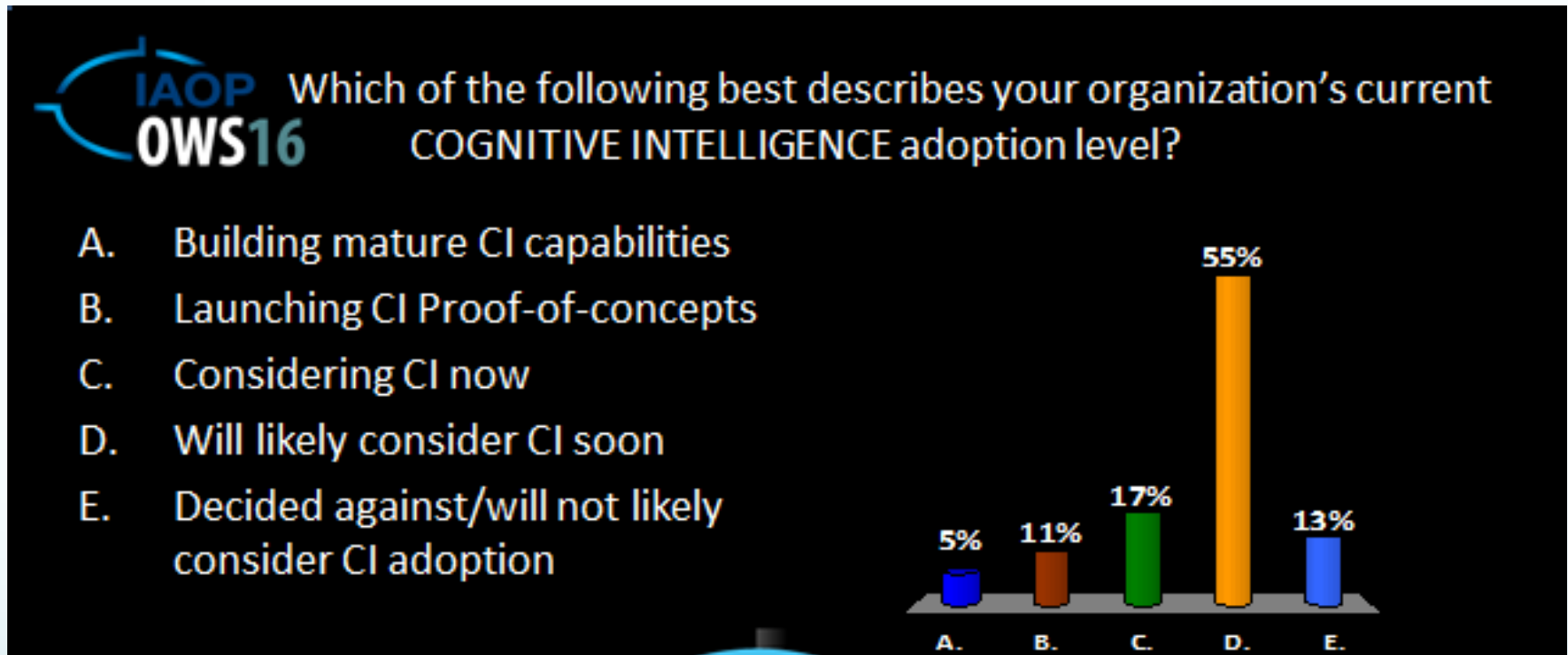


RPA is today's technology...



**RPA Adoption
(n = 188 responses)**

For many organizations, CA is tomorrow's technology...



CI Adoption
(n = 198 responses)

RPA is software that automates a process, acting the way a human does, by logging on and off systems



ERP
CRM
HRM
Legacy










RPA - Common Business Outcomes

SHAREHOLDER
VALUE



CUSTOMER
VALUE

EMPLOYEE
VALUE

-  FTE savings resulting in high ROI
-  Better service quality
-  Faster deployment of new services
-  Higher compliance
-  Increased scalability
-  More flexible workforce
-  Happier, more productive employees

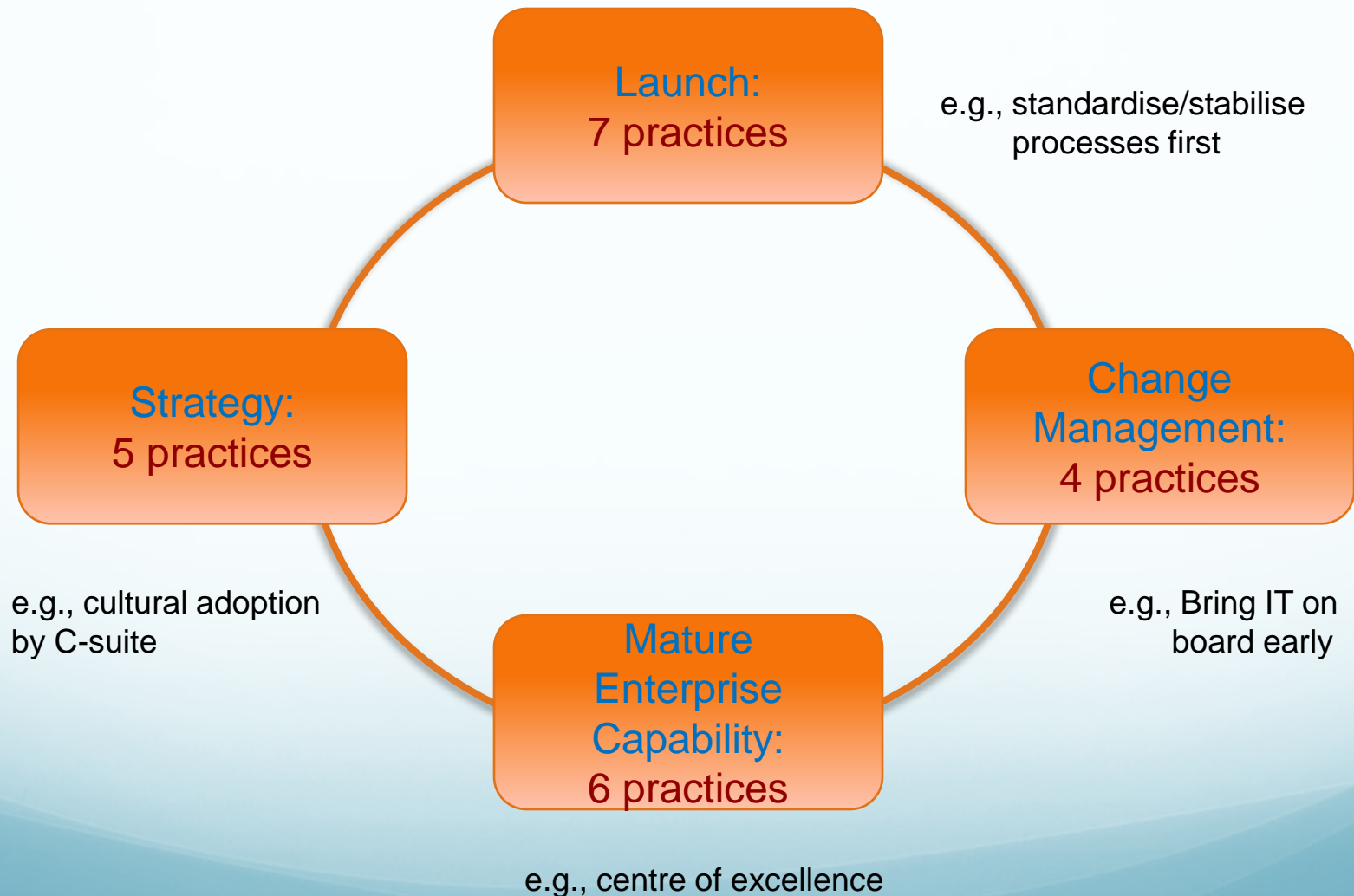
TOOK THE
ROBOT OUT
OF THE
HUMAN

Other Mature Case Studies

	# processes automated	RPA Adoption Year	# robots 2015	# RPA transactions per month	ROI
	35% of back office (15 core processes)	2010	>160	500,000	650% to 800% 3-YR
	35% of back office	2005/2008	300	1 million	200% 1-YR

How was success achieved?

22 action principles



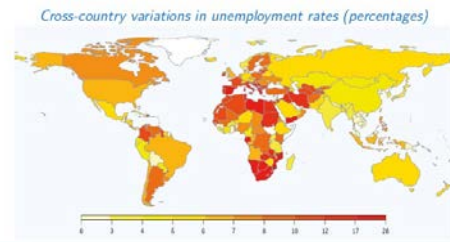


Summary of some of what we did not find:



- Myth 1: RPA is only used to replace humans with technology, leading to layoffs
- Myth 2: Business operations staff feels threatened by RPA
- Myth 3: RPA will bring back many jobs from offshore
- Myth 4: RPA is driven only by cost savings
- Myth 5: RPA replaces an entire person's job

Global Level



Will job types and numbers change dramatically?

Philosophical Views on Technology

“It is unworthy of excellent men to lose hours like slaves in the labour of calculation which could safely be relegated to anyone else if machines were used.”

— [Gottfried Wilhelm Leibniz](#): mathematician, philosopher, and inventor, 1685

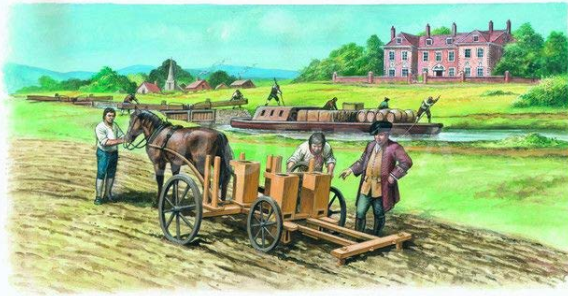
*High technology-caused unemployment
“due to our discovery of means
of economising the use of labour
outrunning the pace at which we can find
new uses for labour”*

— [John Maynard Keynes](#), Economist, 1933

“Technology is a useful servant but a dangerous master”

— [Christian Louis Lange](#); Nobel Peace Prize, 1921

Will This time be different?



Agrarian Economy



Industrial Economy



Service Economy



Digital Economy

Technology effects play out within social, political, economic and environmental contexts...



The Great Automaton

Giorgio De Chirico 1925



Sign of the times?

Book can be obtained from sales@stevebrookes.com

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