Department of Management public lecture

Service Automation: robots and the future of work

Professor Mary Lacity
Curators Professor of Information Systems,
University of Missouri, St Louis

Professor Leslie Willcocks
Professor of Technology Work and Globalisation, LSE

Dr Edgar Whitley
Chair, LSE

Hashtag for Twitter users: #LSErobots
Service Automation
Robots and the Future of Work

Leslie Willcocks and Mary Lacity

Department of Management

London School of Economics and Political Science

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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

Structured Data
Rules-based Processes
Deterministic

Realm of CA

Unstructured Data
Inference-based Processes
Probabilistic
RPA is today’s technology...

Which of the following best describes your organization’s current RPA adoption level?

A. Building mature RPA
B. Launching RPA Proof-of-concepts
C. Considering RPA now
D. Will likely consider RPA soon
E. Decided against/will not likely consider RPA adoption

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.
RPA - Common Business Outcomes

- 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
Other Mature Case Studies

<table>
<thead>
<tr>
<th># processes automated</th>
<th>RPA Adoption Year</th>
<th># robots 2015</th>
<th># RPA transactions per month</th>
<th>ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>35% of back office (15 core processes)</td>
<td>2010</td>
<td>&gt;160</td>
<td>500,000</td>
<td>650% to 800% 3-YR</td>
</tr>
<tr>
<td>35% of back office</td>
<td>2005/2008</td>
<td>300</td>
<td>1 million</td>
<td>200% 1-YR</td>
</tr>
</tbody>
</table>
How was success achieved?

22 action principles

Launch: 7 practices
- e.g., standardise/stabilise processes first

Strategy: 5 practices
- e.g., cultural adoption by C-suite

Change Management: 4 practices
- e.g., Bring IT on board early

Mature Enterprise Capability: 6 practices
- e.g., centre of excellence

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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...

THREATS:
- cybersecurity risks
- integration risks
- compliance risks
- social risks

OPPORTUNITIES:
- New data
- New services
- New combinations

Less human work
More human work

New Technology
Society
ECONOMY
JOBS

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The Great Automaton

Giorgio De Chirico 1925

Sign of the times?

Book can be obtained from sales@stevebrookes.com
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