

A yellow industrial robotic arm is shown in the foreground, holding a metal part. The background is a blurred factory floor with people and other machinery. The text is overlaid on the image.

**Morgan Lewis**

# **SOURCING AND TECHNOLOGY**

**The Next Frontier: How Robots and Automation Are  
Changing Outsourcing and Technology Agreements**

# PARTICIPANTS



**Michael Pillion**

**Partner**

Morgan Lewis

T: +1.215.963.5554

E: [michael.pillion@morganlewis.com](mailto:michael.pillion@morganlewis.com)



**Peter Watt-Morse**

**Partner**

Morgan Lewis

T: +1.412.560.3320

E: [peter.watt-morse@morganlewis.com](mailto:peter.watt-morse@morganlewis.com)

# Presentation Topics

1. Robotic Process Automation and Artificial Intelligence
2. Adjusting to Shifts in Services and Pricing Models
3. Addressing Robotics and Automation – Contractual Issues

# **ROBOTIC PROCESS AUTOMATION AND ARTIFICIAL INTELLIGENCE**

What are they?

What are the drivers?

Who are the providers?

What are the trends and projections?

# What is Robotic Process Automation (RPA) Technology?

- Software “robot” that executes a business or computing process that is repetitive, repeatable and rules-based
- Partially or fully automates tasks that otherwise require a human to perform such as the administrative task of transferring data from multiple input sources like email and spreadsheets to an ERP or CRM system
- Software that operates at the graphical user interface layer, “on top” of a company’s IT infrastructure and therefore does not require changes to the underlying systems and does not need a lot of IT support
- Business people without programming expertise can, after being trained, automate processes with RPA tools

# What Are the Drivers of RPA?

- Reduced cost of performance
- Outsourcing deals to date have primarily been based on taking advantage of less expensive labor, wherever it may be located. (India was especially attractive because of its large English-speaking population and highly educated labor force.)
- Cost benefits of labor arbitrage now not as good with labor costs of Service Provider personnel, including in India and other offshore locations, on the rise
- Need to find cost saving alternatives
- Evolution? Customer personnel → Service Provider personnel → Robotic software
- Everest Group/The National Association of Software and Services Companies (NASSCOM): RPA implementation can provide companies with a “cost reduction of 35-65 per cent for onshore process operations and 10-30 per cent in offshore delivery...[and] an investment recovery period as short as 6-9 months . . .”

# What Are the Drivers of RPA?

- Reduced error rate, increased consistency
- Decreased cycle times and improved throughput: Software robots are designed to perform tasks faster than a person can and do not require sleep — making 24x7 operations possible.
- Scalability at a fixed and known level of price and service quality
- No loss of institutional knowledge when workers leave
- Reduced training and other costs associated with employee turnover capability
- Reduced risk of theft or misuse of information by Service Provider personnel
- Use in DR/BCP plans – less risk?

# What Are the Drivers of RPA?

- Potential increase in employee morale as employees are relieved of repetitive and monotonous tasks and processes and can be refocused and redirected to more rewarding and higher value activities.
- Detailed data capture: The tasks performed by a software robot can be monitored and recorded at every step, producing valuable data and an audit trail that can support further process improvement and also help with regulatory compliance.
- Lower costs while improving service quality, increasing compliance (because everything the software does is logged), and decreasing delivery times

# Some Providers of RPA

- **IPsoft**



- IPcenter – IT services management platform
  - IT infrastructure management and first line IT problem identification and support.
  - Automatic detection and resolution of database failures
  - Determines why the failure occurred and takes steps to prevent future occurrences
- IPsoft case study:
  - Gentiva Health Services, US's leading provider of home healthcare services
  - Infrastructure management contract with IPsoft, under which IPsoft provides server and network infrastructure management with both IPcenter and human-delivered services
  - Enabled Gentiva's growth strategy, replacing older legacies technologies that were slow and at risk of failure
  - Annual savings of 32% in Gentiva's IT infrastructure budget, and additional annual cost avoidance of more than \$1.3M a year over the five years of the contract

# Some Providers of RPA

- **Automation Anywhere**



- Task Bots – “automate rules-based, repetitive tasks, in areas like HR administration, procure-to-pay, quote-to-cash, IT services, and much more, leading to immediate improvements in productivity, cost-savings, and error reduction”
- Meta Bots – facilitates scalability for complex, scalable processes
- Automation Anywhere case study:
  - Core Digital Media, leader in the online marketing and customer acquisition business
  - to deliver high-quality leads to end clients, Core had to manually extract information from around 50 different online publishers in formats including email, websites, and FTP — process that took six hours daily
  - Automation Anywhere Bots enable automated data-extraction processes for its key online publishers
  - Core saves 300 person-hours per month — \$150,000 per year

# Some Providers of RPA

- **UiPath**



- UiPath Studio is a tool that enables business users with no coding skills to design robotic processes
- UiPath Robots execute processes and run either unattended in a virtual environment in a datacenter (Back Office Robots) or on a desktop shared with a human (Front Office Robots).
- UiPath Orchestrator is a browser-based server application that enables a customer to manage robots and processes. Provides ability to deploy, start, stop, and schedule processes and monitor their execution by the robots.

# Some Providers of RPA



- **Blue Prism**

- Blue Prism’s Virtual Workforce is code-free and automates any processes that are clerical or administrative in nature –“automates any application and supports any platform”
- Scalable and can be deployed either in cloud or on-premises
- Blue Prism case study:
  - As of April 2015, Telefónica O2 (second-largest mobile telecommunications provider in UK) deployed over 160 “robots” that process between 400,000 and 500,000 transactions each month, yielding a three-year return on investment of between 650 and 800 percent
  - Reduced the turnaround time on some processes from days to just minutes.
  - Reduced customer follow-up calls by over 80 percent per year due to increased accuracy of performance
  - Scalability – the robotic workforce could be doubled almost instantly when new products were about to be launched—and then scaled back down after the surge
  - FTE reduction at India-based BPO service provider to Telefónica O2 “in the hundreds”

# Artificial Intelligence

- AI is intelligent software with human-like capabilities, such as recognizing handwriting, identifying images, and natural language processing.
- Can either directly assist people in the performance of nonroutine tasks or automate the tasks.
- AI tools are typically used to provide leverage to existing functions, focusing on increasing value rather than reducing cost.
- Unlike RPA, which requires a human expert to hard code a script or workflow into a system, AI can process natural language and unstructured data

# Examples of Artificial Intelligence

- In 2011, IBM's Watson won a highly publicized game of Jeopardy!. Since then, the marketplace has begun to develop, and pioneering enterprises are leveraging AI for assorted purposes.



# Examples of Artificial Intelligence

- IPsoft's "Amelia" virtual service desk software that responds to email, answers and responds to phone calls.
- According to IPSoft, Amelia can, after two months of learning from her human colleagues, handle over 60% of support tickets on her own.



# Examples of Artificial Intelligence

- Global banks are leveraging AI to improve the regulatory compliance processes by monitoring all electronic communications of employees for indicators of noncompliant activities.
- Global banks are also employing AI to improve fraud monitoring and detection.
- AI engine matches Airbnb guests with the housing they want
- Manufacturers use AI to predict when their machines will break (and fix them before they do)
- Doctors use AI to go through databases of medical images to identify and diagnose diseases
- Salesforce.com recently announced adding AI-based component called Einstein to its software, designed to automate tasks, predict behavior and highlight trends, prospects and other relevant information.

# Examples of Artificial Intelligence

- ROSS, an “Artificially Intelligent Lawyer”



- Powered by IBM’s Watson technology
- ROSS “helps human lawyers research faster and focus on advising clients”
- Currently used for research, but plans to add abilities to review and draft contracts, conduct e-discovery, etc.

- DoNotPay robot parking ticket appeal “attorney.”



- Q&A chat with software bot, available for free online
- Has successfully appealed some \$3 million worth of tickets, saving drivers the cost of hiring a lawyer for the appeal

- Human lawyers remain ethically responsible for AI software’s mistakes

# Trends and Projections

- Transparency Market Research: the market for IT robotic automation globally is forecast to reach \$4.98 Billion by 2020, increasing by more than 60% per year
- RPA product offerings are more mature than AI offerings
- Everest Group/NASSCOM:
  - Of the amount spent on business process services, the “spend impacted by RPA is low” but over 2014-2015 it grew by more than a 100% compound annual growth rate
  - RPA is likely to impact 30-40% of the business process service spend in the long term
- International Data Corp. predicts the worldwide market for AI to grow from \$1.6 billion in 2015 to \$16.5 billion in 2019, increasing by more than 60% per year.
- The coming years will be about replacing some labor with RPA and AI

# **ADJUSTING TO SHIFTS IN SERVICES AND PRICING MODELS**

# Effect on the Traditional Outsourcing Providers

- Limits of labor arbitrage have or will be reached. While service providers previously relied on lower offshore salaries for savings, increased demand for labor has increased the costs of offshore outsourcers (and reduced labor arbitrage opportunities). But customers want to see continued savings.
- RPA and AI threaten the traditional model of many traditional outsourcing providers. Many large global outsourcing providers built their business model around employing more people.
- Service Providers forced to adapt or lose business
- Offshore Service Providers starting to focus on higher-skilled services, using higher priced personnel (with reduced turnover). Services requiring more human intellect or required by law to have specifically licensed or trained humans perform (e.g., a regulated service offering such as care management).
- Services that are closer to Customers' core business?
- Traditional FTE-based pricing model giving way to transaction-based pricing models
- Move back onshore/in-house?

# Effect on the Traditional Outsourcing Providers

- Infosys has a deal with IPsoft.
  - Infosys using IPsoft's IPcenter platform for its own infrastructure management and network management service delivery
  - Infosys including IPcenter in its ADM and BPO service offerings
- Cognizant and WIPRO also entered into deals with IPsoft
- Now, outsourcing firms are now taking the next step and acquiring/building their own RPA and AI capabilities.
- Cognizant acquired Trizetto.
- Wipro has created an AI platform called Holmes.
- TCS is working on an AI platform called Ignio.
- Infosys has announced its development of an AI platform.

# Effects on the Existing Outsourcing Contract

- Most existing contracts were not negotiated to contemplate RPA and AI. But the contracts, if drafted to be flexible and contemplate change, may have some available “hooks”
  - If service providers implement and reduce their costs of providing services, does the contract provide for a sharing of the cost savings by the customer?
  - Is there a benchmarking provision?
  - Will the benchmarking provisions apply as written if there are few other on-point deals with RPA/AI?

# Effects on the Existing Outsourcing Contract

- If the pricing model is based on the number of service provider FTEs, what is the service provider's incentive to employ RPA and reduce the cost of delivery and improve service levels?
  - Again, a benchmarking provision may be helpful
  - Is there a provision requiring the service provider to use evolving technological advancements in delivering the services and to improve the methods of delivering the services?
  - Is there a provision requiring service provider to use commercially reasonable efforts to improve quality and efficiency of services to keep pace with industry practices?
- Are there any other specific continuous improvement obligations of the service provider that are relevant?
- Mid-term change order? Requested by customer and agreed to by service provider to solidify the customer relationship?
  - Who pays for implementation?

# Effects on the Existing Outsourcing Contract

- Elimination of service provider personnel
  - Applicable labor laws
  - Efforts to re-deploy
  - Wind-down costs
- SLA burn in?
- Need to beef-up provisions relating to audits of service provider's systems?
- Need to modify pricing provisions to reflect a transaction or output-based model?
- Need to re-assess the IP provisions?

# **ADDRESSING ROBOTICS AND AUTOMATION CONTRACTUAL ISSUES**

# Discussion Topics

- Applicable Contractual Provisions
- Pricing and Cost Considerations
- New Service levels – Documenting Benefits
- IP issues – New Developments
- Personnel provisions
- Back end considerations

# Contractual Provisions

- State of Art Technology and Service Level Improvement Provisions
  - Typically Hardware Systems, Network and Operating Software
  - Provision need to include current applications software and automated and robotics software
  - Typically service level improvement – need to also include cost/price improvement
  - Annual reviews – topic and review of state of industry
  - If no specifics provision, incorporated in operational / executive governance meetings

# Contractual Provisions

- Benchmarking Provisions
  - Not Just Price
    - Service Level Provisions
    - Impact on Customer Processes and Costs
  - Timing
    - Not one time/short term process
    - Right to benchmark if significant technology change
  - Expertise
    - Technology as well as price

# Contractual Provisions

- Change Process
  - Party requesting
  - Issue – Change in Services vs. Method of Providing Service
    - Provide case for change in services / service levels
    - Add provision regarding technology changes:

# Technology Changes

- In the event that Customer wishes to introduce new technology or a major change or shift in then-current technology with respect to any of the Services, Customer may upon notice to Supplier elect to add, modify or remove a Service for purposes of reflecting the new technology or change in technology. Upon notice from Customer of such election, the Parties promptly shall (a) assess the impact to staffing and, if applicable, costs and (b) agree on, and amend the Master Services Agreement to reflect, the appropriate Services Levels and any changes to fees and rates applicable to such change, including up-front, baseline and variable costs/fees.

# Pricing and Cost Impacts – Consider the Overall Impact

- **Costs of Automation.** Automation projects – at least at the outset – may not be without incremental expense. When considering an automation project it is important to consider the one-time and ongoing incremental costs and balance those against the anticipated efficiencies and benefits. Costs of automation may include:
  - *Software licensing and maintenance.* For proprietary products, many vendors are licensing their automation software as a standalone offering with standalone pricing. There also may be third party license and maintenance costs if the proprietary products require specific operating systems, Middleware or application software to operate.
  - *Software configuration, interfaces and implementation*
  - *Incremental infrastructure and capacity*

# Pricing and Cost Impacts – Consider the Overall Impact

- **Personnel costs**

One impact of automation may (or may not) be the reduction of required headcount. If there is a reduction in headcount because less people are needed to provide a service that is not “automated,” will there be an adjustment to the fees? What are the adjustments? Will there be an adjustment regardless as to whether the vendor can actually reduce the headcount? Consider including a requirement that headcount cannot be reduced until the vendor can demonstrate that the documented benefits have been realized.

# Cost Responsibility

- Sharing of Reduced Costs.
  - Contractual Provisions
  - Change Management Process
  - Issue: Customer cost reductions
- Example
  - In no event shall Customer or any Customer Entity or third party service provider be responsible for incurring any incremental costs or expenses (including for personnel, tools and infrastructure capacity and requirements) associated with Supplier's provision, implementation and ongoing support and operation of process and other improvements associated with achieving the Committed Productivity. Customer's approval of any changes to, or the introduction of new, processes or tools is not a dependency for Supplier's commitment to meet the Committed Productivity and Customer's non-approval shall not relieve Supplier of its obligations with respect to the Committed Productivity.

# Better Service Levels

- Examples
  - Speed to respond / answer
  - Speed to report
  - Speed to resolve
  - Better accuracy
- Better monitoring
- Real time and better reporting

# Documenting Benefits

- **Documented Benefits (upfront and ongoing).** Automation sounds great, but what are the real benefits, As with any implementation, it is important to document the intended benefits of a project and the impact on the existing scope. Will there be a change in services? Will there be different or better service levels and / or reporting?

# Example

**% of total regression test cases automated**

**Total number of regression test cases automated / Total number planned regression test cases, expressed as a percentage to the second decimal point.**

# IP Issues

- **Ownership of Customer Data**

- Data provided by Customer
- Customer Data developed by Automated Tools
- Deliverables – Data and Reports
- Use by Vendor
  - Aggregation – identification issues
  - Removal on termination of agreement

# IP Issues

- **Ownership of Software / Algorithms**
  - Customer-specific processes and learning methods
    - Difficulty in distinguishing from automated tool
    - Competitor use issues
    - Removal upon termination of agreement vs. license
  - General purpose algorithms
    - Ownership vs. license rights
    - Competitor use issues
    - Cost issues
- **Third Party Tools**
  - Review contracts
  - Direct contracting

# Personnel Issues

- Relooking at staffing models
- Reshaping personnel projections
- What if the projected benefits are not achieved?
- Example:
  - Notwithstanding step downs in the headcount set forth in XXX, Supplier shall not decrease any of the headcount (i.e., implement the step downs) for the Services if Supplier cannot reasonably demonstrate, to Customer's reasonable satisfaction, through reasonable documentation of process and other improvements that it is able to meet the year over year Committed Output

# Back End Considerations

- Term and Termination
  - Supplier knowledgebase/experience
    - Extended term (both transition and full terms)
    - Limit Supplier Rights to terminate
    - Strong Benchmarking / Change Management provisions
- Expiration/ Termination Assistance
  - Continued services / flexibility on transition date
  - Knowledge transfer
    - Before, during and after transition
    - Specific requirements – key personnel

# Back End Considerations

- IP Provisions Key
- Customer Data
  - Need data provided by Customer and data developed by Automated Tools
    - Processes during term – access, delivery and storage of data
    - Format and organization of data
  - Use of Customer Data by Vendor
    - Maintenance until transfer – survival period
    - Transfer/cooperation with successor vendor
    - Aggregation – continued use past termination
    - Removal

# Back End Considerations

- Customer-specific processes and learning methods
  - Part of transfer
  - Testing issues – dual operations and back-up
  - Ownership issues – “catch-all license”
  - Removal upon termination
- General automation tools
  - Post termination use of Vendor Tools
    - Terms (Costs and Restrictions)
    - Support and Maintenance
  - Development of Vendor Tools
    - Ownership vs. license rights
    - Use following termination
    - Competitor use issues

# Back End Considerations

- Third Party Tools
  - Continued Use
    - Vendor Terms – assignment/sublicensing
    - Direct contract
    - Successor vendor
  - Support and Maintenance
- Most Important - Establish up-front
  - Service Description / Statement of Work
  - Change Orders
  - Technology Development

# Attorney Profile



## **Michael Pillion**

Philadelphia

T +1.215.963.5554

[Michael.pillion@morganlewis.com](mailto:Michael.pillion@morganlewis.com)

Michael L. Pillion brings more than 25 years of experience navigating high-stakes transactions to his outsourcing, technology, and commercial transactions practice. He has a diverse client base that spans the health insurance, life sciences, energy, financial services, and real estate industries. He counsels clients in structuring, negotiating, realigning, and terminating information technology (IT) outsourcing and business process outsourcing (BPO) transactions, technology transactions including software as a service (SaaS) and cloud deals, complex commercial transactions including joint ventures, and real estate leasing deals.

# Attorney Profile



**Peter Watt-Morse**

Pittsburgh

T +1.412.560.3320

[Peter.watt-morse@morganlewis.com](mailto:Peter.watt-morse@morganlewis.com)

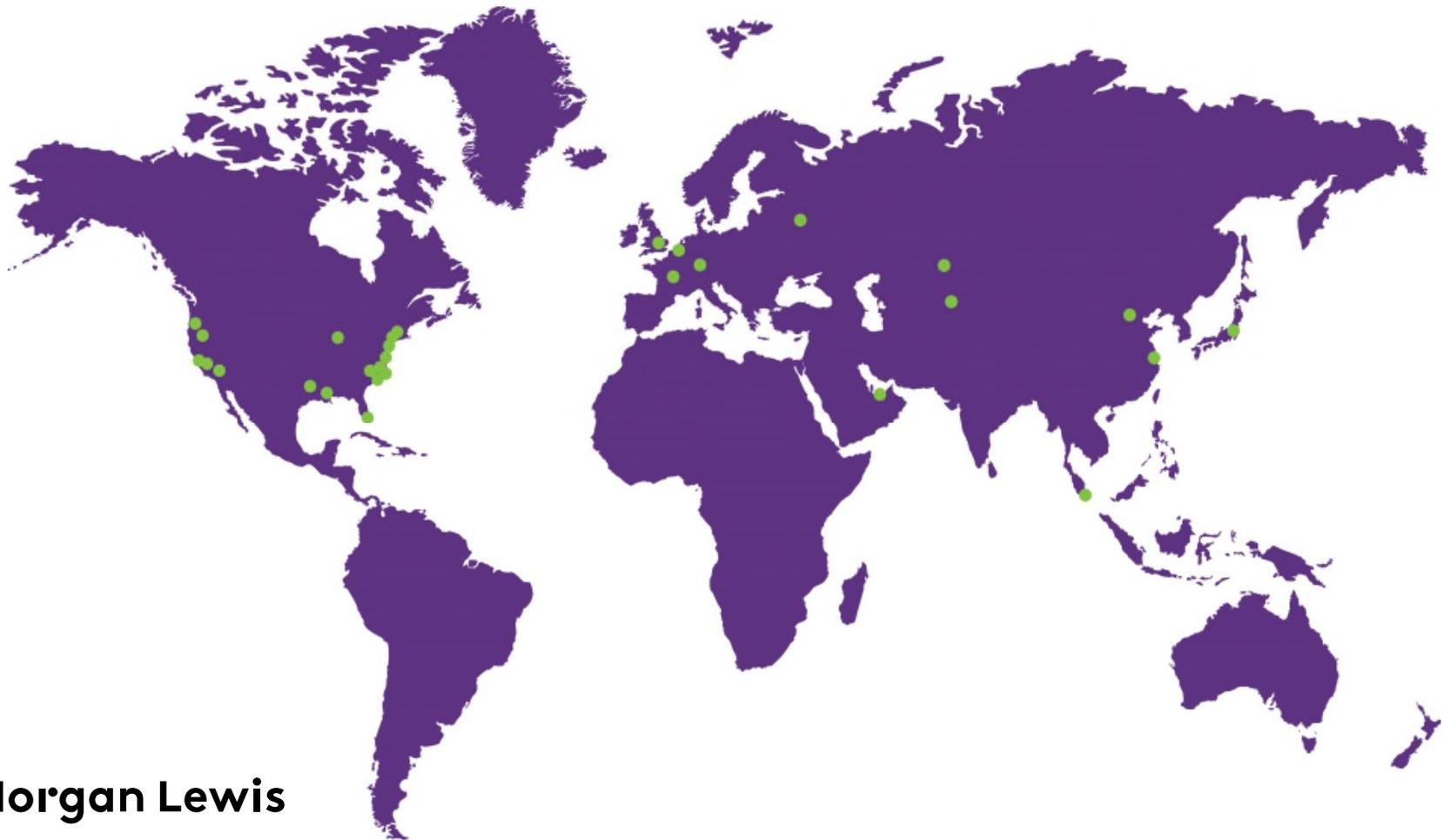
Peter M. Watt-Morse, one of the founding partners of the firm's Pittsburgh office, has worked on all forms of commercial and technology transactions for more than 30 years. Peter works on business and intellectual property (IP) matters for a broad range of clients, including software, hardware, networking, and other technology clients, pharmaceutical companies, healthcare providers and payors, and other clients in the life science industry. He also represents banks, investment advisers, and other financial services institutions.

## Our Global Reach

Africa  
Asia Pacific  
Europe  
Latin America  
Middle East  
North America

## Our Locations

Almaty  
Astana  
Beijing  
Boston  
Brussels  
Chicago  
Dallas  
Dubai  
Frankfurt  
Hartford  
Houston  
London  
Los Angeles  
Miami  
Moscow  
New York  
Orange County  
Paris  
Philadelphia  
Pittsburgh  
Princeton  
San Francisco  
Santa Monica  
Shanghai  
Silicon Valley  
Singapore  
Tokyo  
Washington, DC  
Wilmington



**Morgan Lewis**

# THANK YOU

This material is provided for your convenience and does not constitute legal advice or create an attorney-client relationship. Prior results do not guarantee similar outcomes. Links provided from outside sources are subject to expiration or change. Attorney Advertising.

© 2016 Morgan, Lewis & Bockius LLP

**Morgan Lewis**