

**CAPCO**

PROCESS EFFICIENCY / MACHINE LEARNING / AUTOMATION



## 2 Process efficiency / Machine learning / Automation





# **FINANCIAL INSTITUTIONS ARE DEPLOYING ADVANCED AUTOMATION CAPABILITIES**

WE'RE HERE TO HELP YOU INTRODUCE THEM  
INTO YOUR ORGANIZATION.

## We live in times of rapidly evolving technology

### THE PACE OF TECHNOLOGY CHANGE IS UNPRECEDENTED

- **It's more powerful:** 100x increase in computing power from IBM's Deep Blue to Watson in seven years.
- **It's cheaper:** \$400 iPhone 4 offers equal computing power to the fastest \$5m supercomputer in 1975.
- **It's more quickly adopted:** It took television 75 years to reach 50 million users. Angry birds took 35 days.
- **It's becoming ubiquitous:** 400+ million increase in the number of users of intelligent digital assistants like Siri and Google Now in past five years.

### WHICH IS ACCELERATING THE PACE OF CHANGE IN THE BUSINESS ENVIRONMENT

- The average lifespan of an S&P 500 company has **decreased from 67 years** in the 1920s to just **15** today.
- **89%** of Fortune 500 companies from 1955 were not on the list in 2014.
- In the next 10 years, **40% of S&P 500 companies will disappear**, in many cases because of the pace of technological change.

### AND CHANGING THE NATURE OF WORK

- **47%** of the US workforce is at high risk of automation.<sup>1</sup>
- **Up to 35%** of Britain's jobs will be eliminated by new computing technology over the next 20 years.<sup>2</sup>
- In 2017, managed services offerings leveraging autonomies and cognitive platforms like IPsoft Amelia and IBM Watson will drive a **60%** reduction in the cost of services.<sup>3</sup>

1. Source: The Future of Employment: How Susceptible are Jobs to Computerization?, by Carl Benedikt Frey and Michael Osborne  
2. Source: Oxford University  
3. Source: Gartner

## Capco defines the solution domain of emulating humans across three areas

### A. PROCESS AUTOMATION

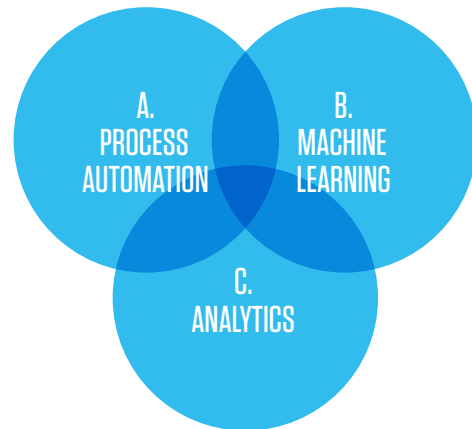
- Using computers to perform the roles of humans based on a set of rules. Typically performed in conjunction with process optimization techniques such as lean, kaizen and business process mapping.
- Typically automation involves carrying out activities where the work is uniform and can be prescribed by a set of rules and where the work yields few exceptions that require human judgment to resolve.

### B. MACHINE LEARNING

- Enables computers to recognize patterns and make decisions based on patterns of data including voice, documents and economic transactions.
- Machines are able to improve their performance without having to perform programming. Cognitive process automation applies the pattern matching of machine learning with the repetitive tasks of automation.

#### Rules Based Systems

- Rules based systems include technologies such as Robotic Process Automation. These systems execute processes or make decisions based on rigid coding, process steps or a set of prescribed rules.
- These systems are often integrated between systems. Graphical User Interface based automation systems (most frequently referred to as Robotics), emulates humans by clicking and entering data on the user interfaces of systems which requires less integration coding.



#### Computers Learning through Patterns

- Through machine learning, computers can be trained to recognize patterns, react and make decisions accordingly, without the need to change coding. These include the ability to understand speech (NLP), recognize images, and detect suspicious patterns of activity in trading, payments and information security.

### C. ANALYTICS

- Makes sense out of large data sets to identify and distill trends in data through statistical analysis and classification.

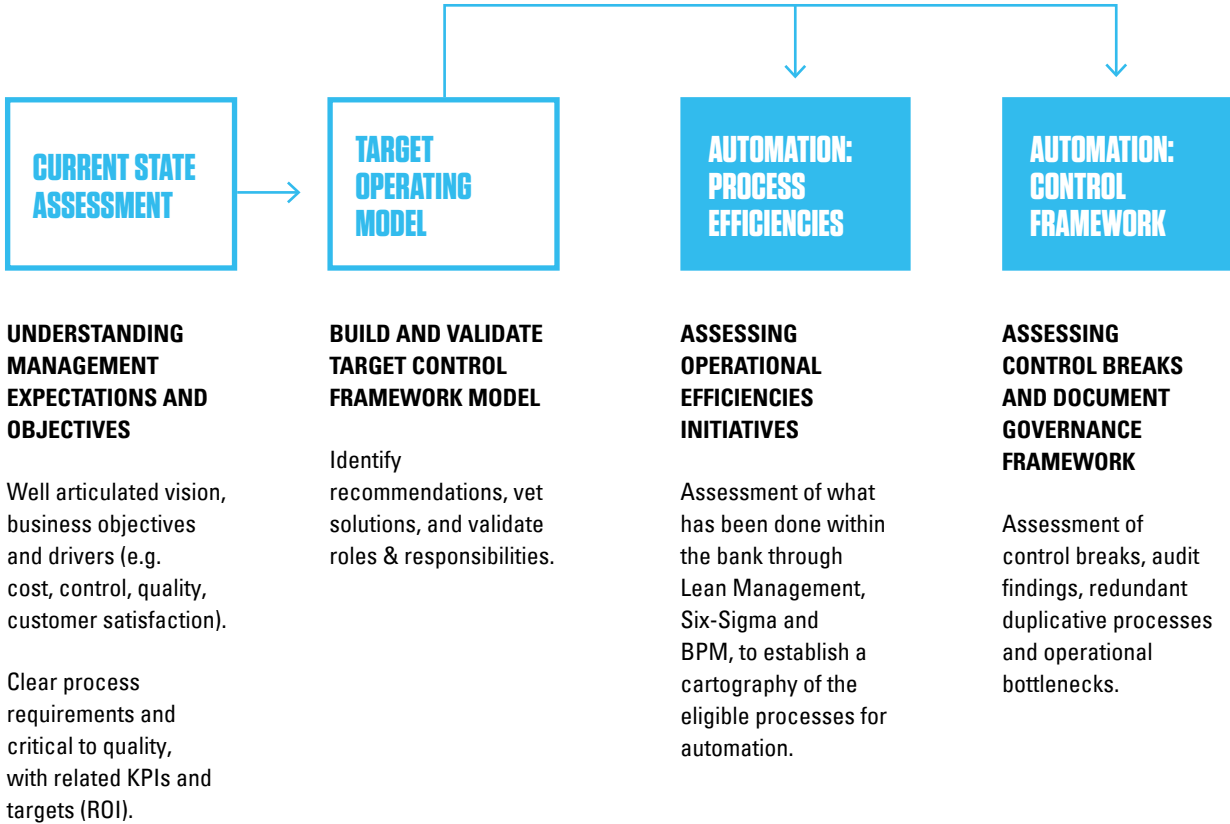
## Solutions with immediate application

- **Client On-boarding**
  - Fat fingering errors
  - Repeatable processes
  - Lack of workflow
- **Trading & Clearing**
  - Manual order taking
  - Lack of customization in terms of offerings
  - Manually driven break resolutions
  - Lack of real-time reconciliation resulting in potential losses
  - Optimizations across business lines
- **Risk Management**
  - Lack of real-time monitoring and controls
  - AML / KYC
  - Lack of real-time notifications regarding funding and credit risk measurement

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# Capco can get you started



## Capco's approach

### ALIGN ON CRITERIA

- Tailor the list of criteria to be applied to each process
- Align on the scoring methodology

### COLLECT SPECIFICS ON WORKSTREAM

- Gather specifics on the process, existing materials and data
- Analyse the processes vs. the selected criteria

### ORGANIZE SCORING AND DECISION

- Formalize the selection assessment and recommendation
- Get decision on processes to be selected

### SELECTION CRITERIA

- **Costs / Benefits:** Potential / expected benefits outweigh the costs
- **Specifics:** Defined in terms of specific customers and business requirements. Project scope and boundaries clearly defined
- **Measurable:** existing reliable measurement methodology, with preferably a system in place (hand-offs, % STP, error rates, number of locations)
- **Repetition:** existing reliable measurement methodology, with preferably a system in place
- **Resources:** adequate support, existing project / program governance
- **Timing:** defined constraints, dependency on project and solutions
- **Propagation:** similar process identified, opportunities to replicate and scale-up broadly
- **Ownership:** Project / Program Sponsors, identified process owners and Accountable Executives
- **Impact:** Quantifiable savings to business / impacts on Customers "Critical to Quality"



## Automation opportunities

Examples of key areas where we see automation being applied to solve our financial services clients' challenges today.

### COMMON USE CASES

- Fraud Chargeback Processing
- Low Risk Arrears Review
- Medium Risk Arrears Review
- Direct Debit Cancellations
- Personal Account Closures
- Payment Processing
- Internet Application Processing
- Business Account Audit Requests
- Business Account Onboarding
- Excess Transaction Approvals
- Excess Check Approvals
- Excess Customer Letters
- Amend Standing Order Details
- Amend Direct Debit Details
- Amend Address Details
- Pre-Charge Offs
- Transaction Duplication
- Right of set-off
- Automated Fraudulent Account Closure Process
- Automated Branch Risk Monitoring Process
- Personal Loan Application Opening
- New Loan Product Blitz
- Data Cleansing
- Payment Protection Insurance Claims Processing
- Customer Complaints automation
- Compliance Reporting automation
- Insurance Product administration automation

### COMMON FUNCTIONAL AREAS

#### Compliance & risk

- AIFMD
- AML | KYC

- Basel III
- BCBS 239
- EMIR
- FATCA Bios
- FATCA People Authority
- KYC Remediation / Sanction List
- LEI Mapping
- MIFID

#### Corporate actions

- Actions Change Detection
- Bond Announcements
- Deep Links Announcement Extraction
- M&A Transaction Status
- M&A Transactions Announcements
- News Extraction
- Real-time Dividend Announcements

#### Client driven events

- Client Onboarding
- Standard Settlement Instructions (SSI)
- P2P

#### Entities & instruments

- Verify Company Locations
- Bank Qualified Bonds
- Business Classification
- ETF Attributes
- Filings Extraction
- GIINS Filings
- Filings Extraction
- Hierarchies / Taxonomies
- Legal Entity Monitoring
- Loan Data Extraction
- Products and Services
- Shares Outstanding Monitoring
- Web Activity



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## ABOUT CAPCO

Capco, an FIST™ company, is a global management consultancy with a focus in financial services including banking and payments, capital markets, and wealth and asset management, plus a dedicated energy division. Our professionals combine innovative thinking with our unrivalled first-hand industry knowledge to offer our clients consulting expertise, complex technology and package integration, and managed services to move their organizations forward. Through our collaborative and efficient approach, we help our clients successfully, innovate, increase revenue, manage risk and regulatory change, reduce costs and enhance control. We serve our clients from offices in leading business centers across North America, Europe, Asia Pacific and Africa.

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