

RPA Best Practices in Financial Services



Discussion Topics

1 Technology Drivers Today

2 Business Imperatives

3 Key Differences Among Vendors

4 Best Practices around implementation

5 Sample Processes

6 RPA

7 RPA CoE

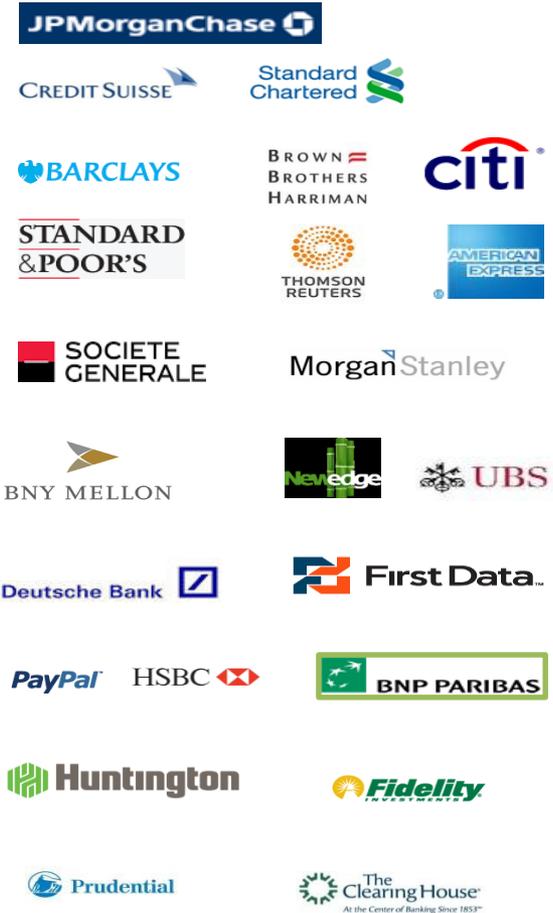
8 Case Studies

9 Closing Thoughts

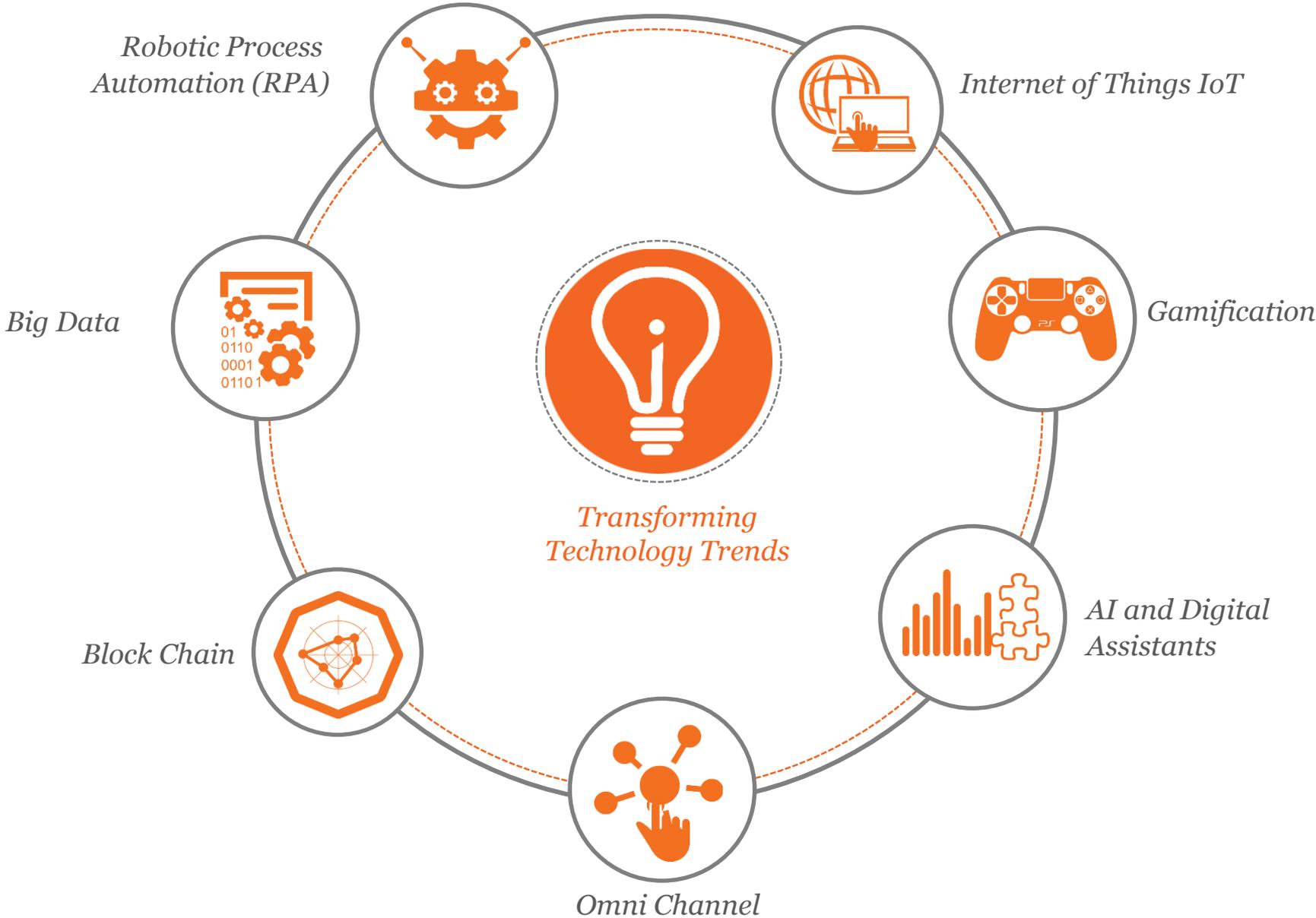
Global IT Consulting & Outsourcing Provider

Virtusa Snapshot

- US Based (Nasdaq:VRTU)
- + \$500M Revenue, 7 year CAGR of 23%
- +10,000 Employees Worldwide
- Global Industries: BFS, Insurance, Healthcare, Media, Telco
- 120+ Clients
- Announced \$350M Acquisition of Polaris Consulting Group



Key Trends Impacting Financial Services Firms



These Trends are driving four key business imperatives

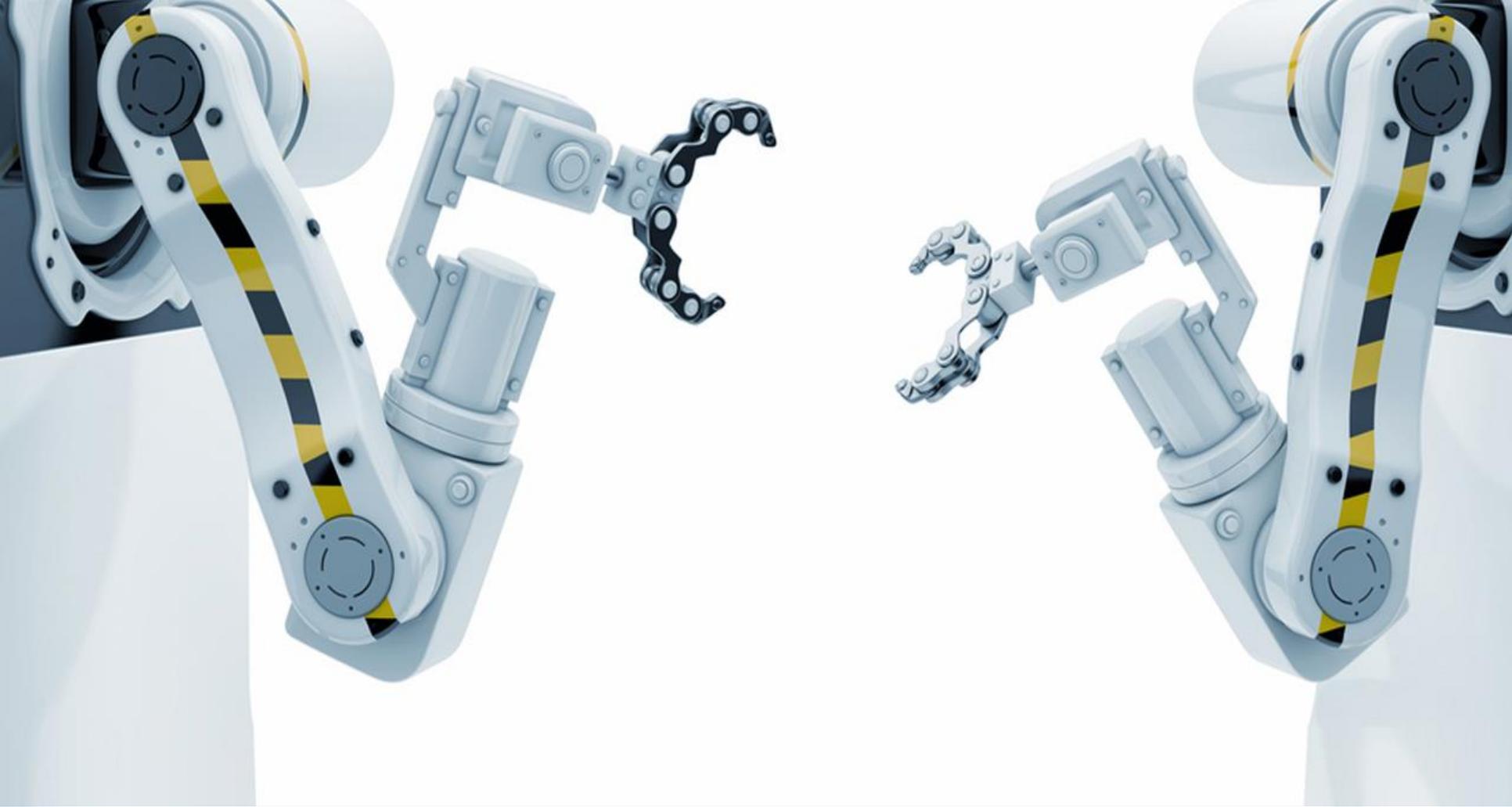
Improve customer experience: cross channel and always available



Create new revenue streams: next-gen services, leveraging intelligence of connected ecosystem

Optimize business processes and cost: improve productivity & enhanced employee performance

Better Address Regulatory : prevent business issues through real-time insights



“110-140 million FTE’s could be replaced by automation tools and software by 2020 ” - *Mckinsey*

Robotic Process Automation

How is RPA defined?



- RPA refers to automation which interacts with a computer centric process through the UI of the software which supports that process and RPA is a subset of Business Process Service Delivery Automation (BPSDA)



INSTITUTE FOR
ROBOTIC PROCESS
AUTOMATION

- Many technologies including artificial intelligence (AI), expert systems and other process of automation have served predecessors to RPA but RPA takes AI and expert systems to an elevated level



- RPA is the use of computer to create a “virtualized FTE or robot” to manipulate existing application software in the same way that a person today processes a transaction or completes a process

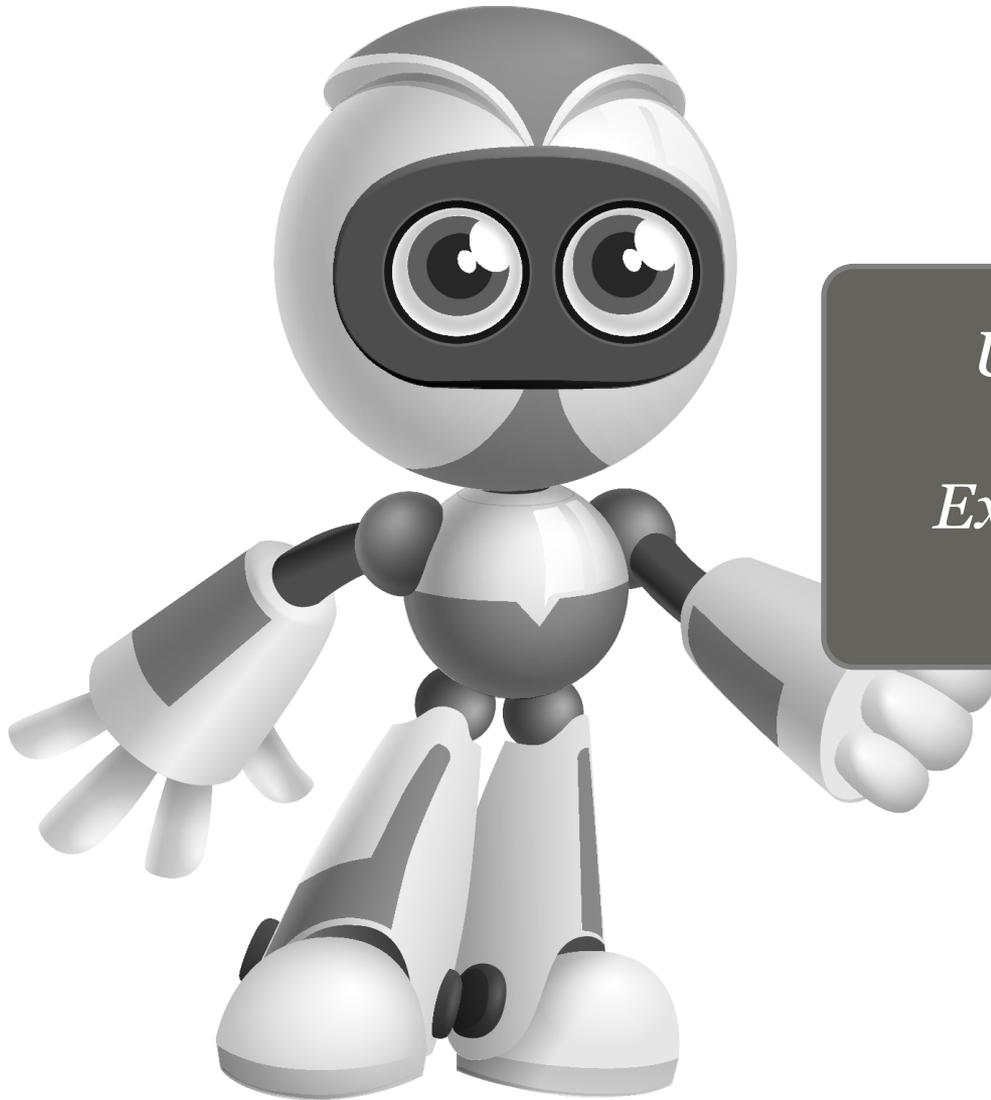
Leading IT robotic automation RPA vendors



RPA versus Traditional Re-engineering and BPM projects

<i>Aspect</i>	<i>RPA</i>	<i>Traditional</i>
Business Approach	Focuses on replacement of FTEs with a “virtualworker”; cost reduction, quality improvement and more productivity	Re-engineering of the underlying process to drive efficiency and create a more consistent customer experience.
Technology approach	To automate processes without changing, replacing, compromising or adding maintenance overhead onto existing applications	Build new application to replace existing; begin with requirements definition leading to design/development/testing
Process Approach	Leave processes as it	Transform and re-engineer processes
Flexibility	With machine learning can adjust	If not defined, then will not be able to support
Time to market	Development and Testing requirements are on very low end	Typically large scale efforts and become capital expense efforts

RPA – how do we get started



*Unemployed Robot
Need Job
Experience with Good
References*

RPA JOURNEY MAP

Assessing Robotic Process Automation

- Gain Understanding of RPA technology, benefits, shortcomings
- Evaluate Product Vendors
- Gain high level business support
- Identify opportunities and conduct several POC

Establish CoE

- Setup a CoE function for at least one LOB
- Provide consulting services to help LOB understand RPA, benefits case and support deployments
- Establish dev environments and processes

Establish Scale

- Expand CoE to support company wide
- Develop Training programs to help business deploy rapidly
- Create integration frameworks and management dashboards
- Standardize security and release governance models

Embed RPA into Normal Day to Day

- RPA becomes part of the operational and technology fabric in the company
- RPA becomes core to any new product development or project
- Virtual workforce becomes part any of annual planning activity

GETTING STARTED – HOW TO IDENTIFY OPPORTUNITIES



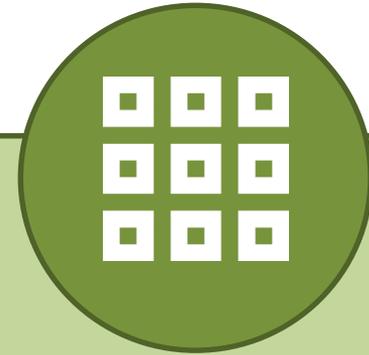
Suitability Analysis

- Functions / processes viable for RPA
- Potential savings on migration



Benefits Analysis

- Quantitative – ROI, ongoing, initial costs
- Qualitative Reduced error, faster processing, etc.



Roadmap & Prioritization

- Business priority
- Quick-wins
- POC
- Robotics COE
- Training
- Technology Plan

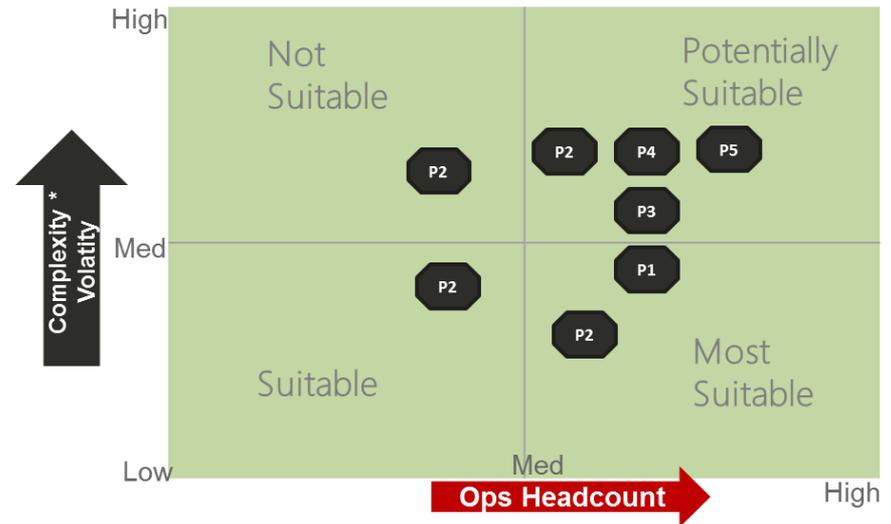
Cross-business assessment framework to evaluate RPA applicability

Analysis – Suitability & Potential Saving

- HC = Headcount

Suitability

- **Most suitable:** Low complexity / volatility and big headcount
- **Suitable:** low headcount / low complexity
- **Potentially suitable:** High complexity with a high headcount
- **Not suitable:** High complexity and low headcount

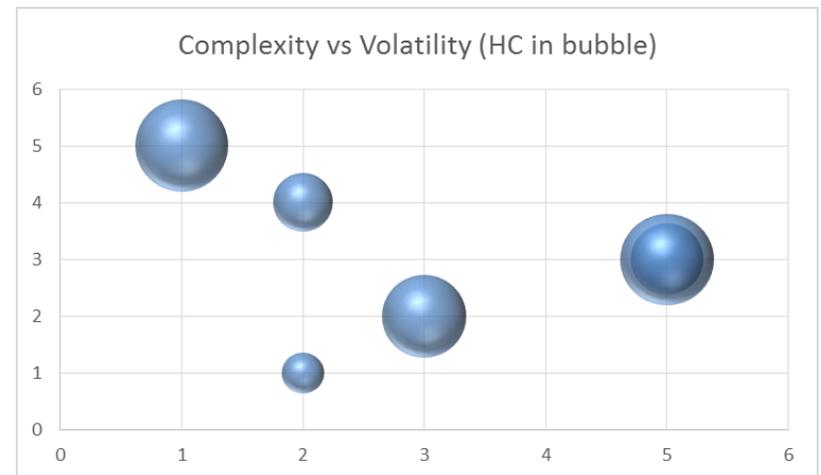


Saving Potential

- **HC Saving:** Complexity factor*HC
- **Support team:** Volatility factor* HC
- **Total HC Saving:** HC saving – support team

Additional factors

- Robots work 24 hours/day without breaks
- Robots work faster than humans (2-3 times)



ROI (Return on Investment)

COSTS

ITEM	FEES (\$ USD)
Robot Licenses Annual licenses for robots. Robot can work on any process.	\$XXXXX FIXED FEE
Robot Training Training the robot on the operational tasks	\$XX T&M ESTIMATE
Ongoing Training /Support Training robot for process changes and support	\$XX T&M ESTIMATE

Robot Licenses

Annual licenses for robots. Robot can work on any process.

\$XXXXX

FIXED FEE

Robot Training

Training the robot on the operational tasks

\$XX

T&M ESTIMATE

Ongoing Training /Support

Training robot for process changes and support

\$XX

T&M ESTIMATE

SAVINGS (Direct/Indirect)

ITEM	FEES (\$ USD)
Operations staff Staff members replaced by the robot or tasks taken up; eliminate attrition and training costs	\$XXXXX
Errors Reduced errors and cost or rework	\$XX ESTIMATE
Time to Market Speed of robot reducing in faster time to market and earlier revenue recognition	(\$XXX) ESTIMATE

Operations staff

Staff members replaced by the robot or tasks taken up; eliminate attrition and training costs

\$XXXXX

Errors

Reduced errors and cost or rework

\$XX

ESTIMATE

Time to Market

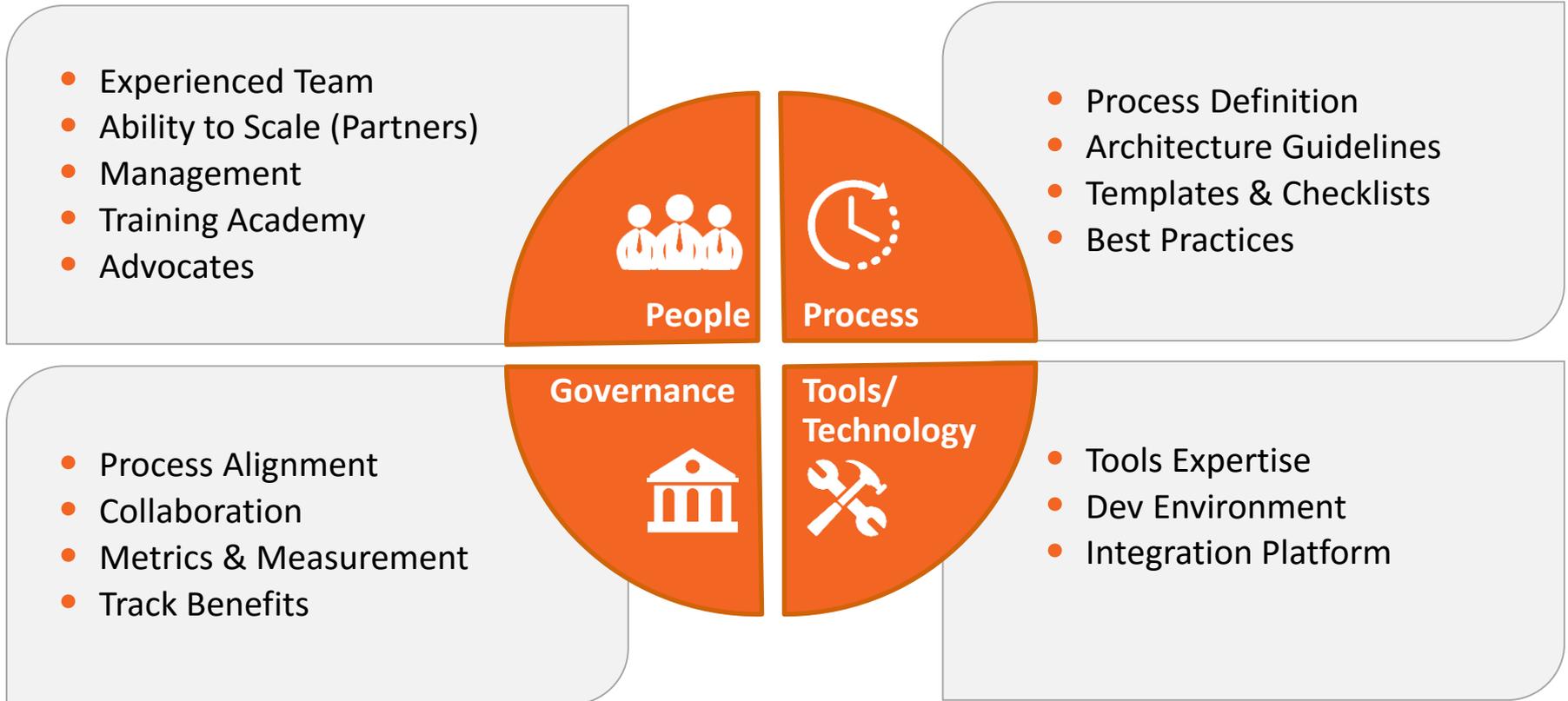
Speed of robot reducing in faster time to market and earlier revenue recognition

(\$XXX)

ESTIMATE

$$\text{Annual ROI} = \frac{[\text{Gain from investment} - \text{cost from investment}]}{[\text{Cost from investment}]}$$

RPA Center of Excellence



Define, Evaluate, Innovate, Monitor and Improve Automation Functions

Key CoE Tasks

Define:

- Governance Framework for evaluating proposed processes
- Process Definition and Alignment
- Management Metrics and Dashboard
- Communications Plan

Evaluate, Review and Approve:

- Research (PoCs) & Recommend Tools and Automation Solutions
- Identify Implementation Partners
- Enterprise level Automation Solution Architecture and Integration Approach
- Security Model
- Automation Orchestration and Management Platform & Svc Portfolio

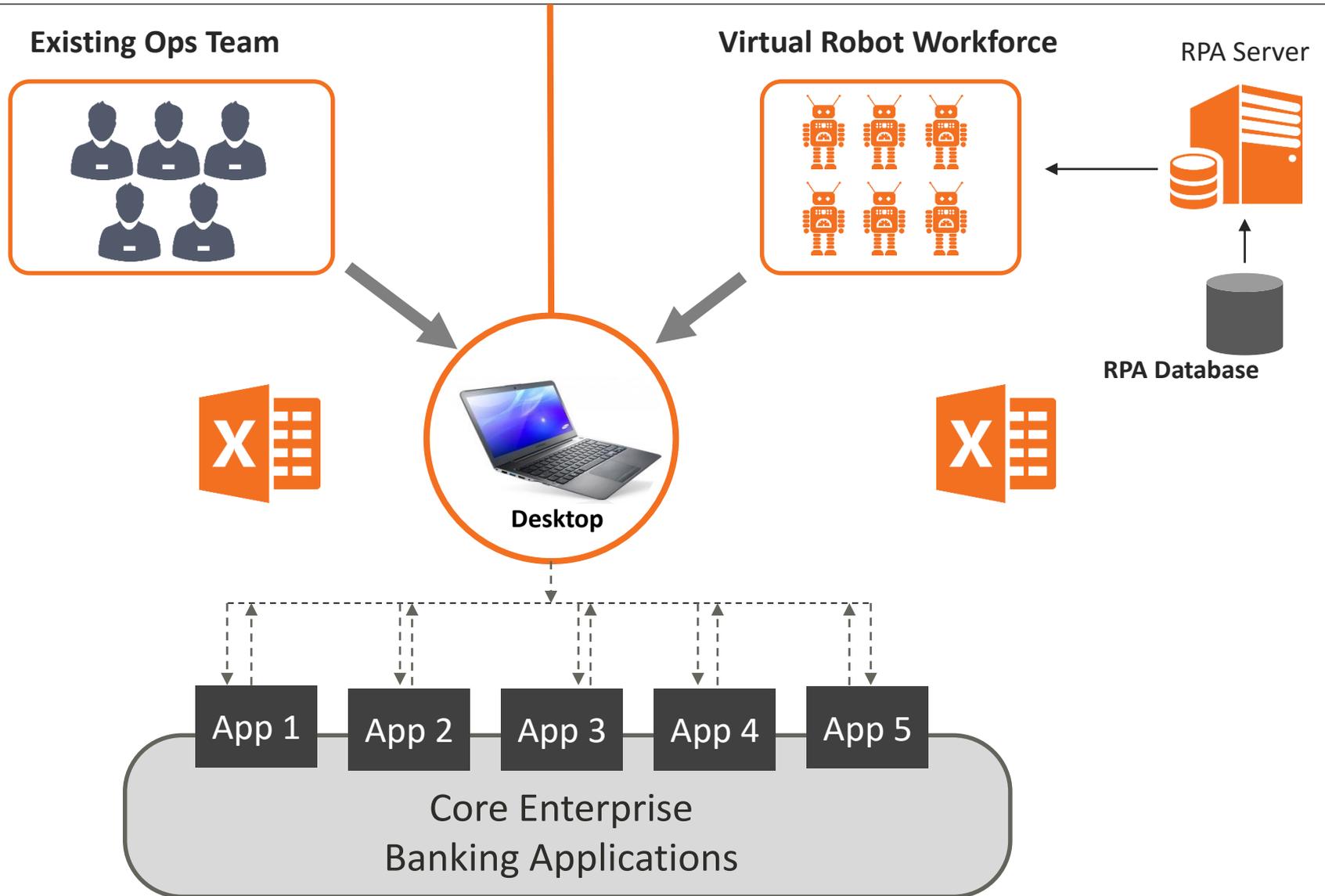
Implement /Innovate

- Maintaining Automation Framework.
- Build Reference Robots and other shell
- Identify Reuse Opportunities
- Internal Utilities to improve Automation Delivery, Deployment, Testing, Maintenance

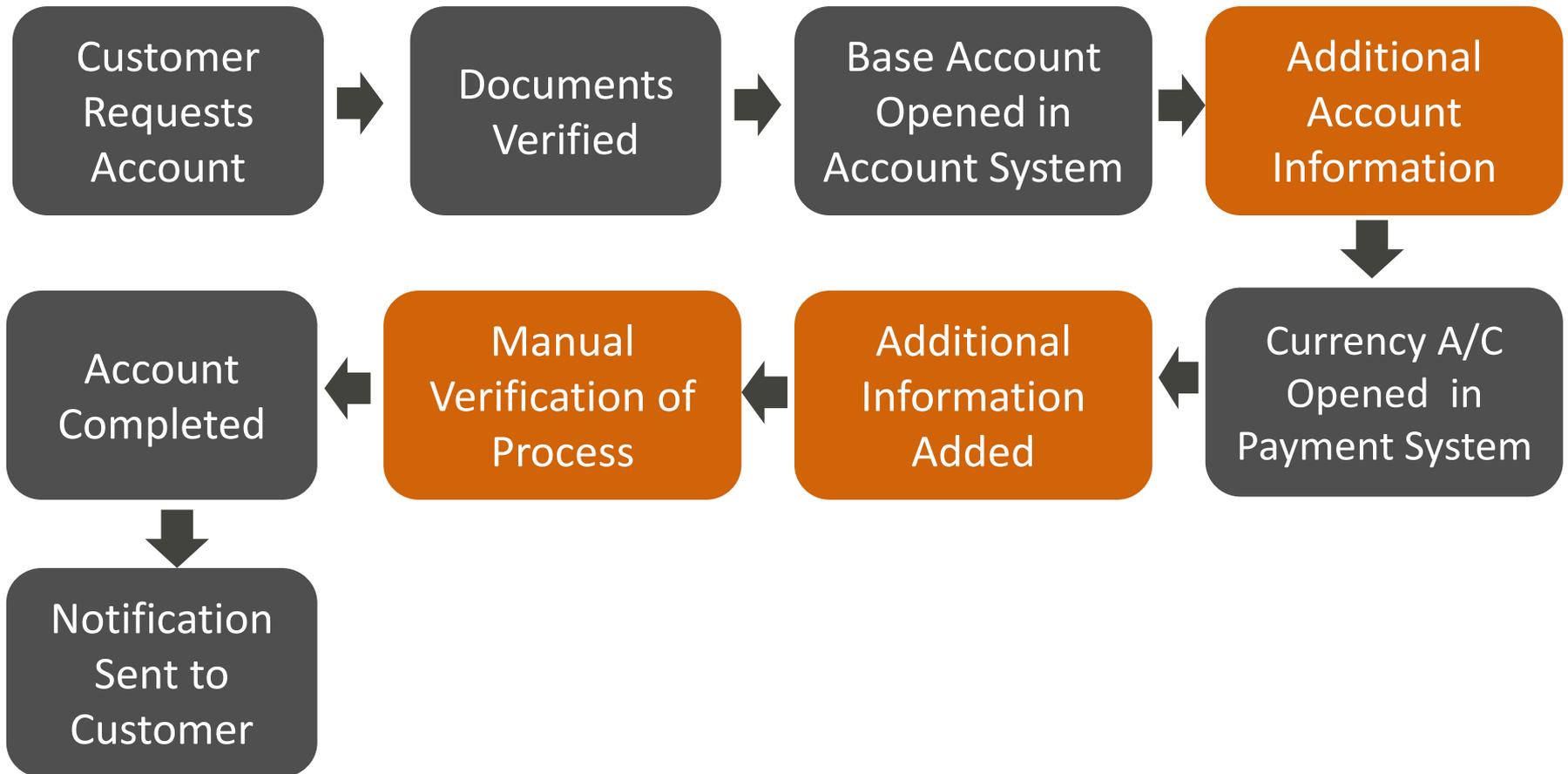
Support, Consult, Educate:

- Provide Expertise, Documentation and ongoing training
- Evaluate and Recommend latest Automation trends and Technology
- Support Change Management
- Focus on Skills and Competencies

Sample Automation Architecture



Global Bank Corporate Account Opening – Africa



Large Global Bank POC Approach – Finance & Operations

Balance Sheet Report Preparation

Customer Balance Sheet Report

- Balances grouped on the basis of products offered to various customer segments and performance of various segments

Financial Balance Sheet Report

- This is a Statement of Financial Position for a reporting date

Sales Scorecard preparation

Scorecard to evaluate the frontline performance with various KPI's for arriving at incentives

- Sales Acquisition Scorecard
- Individual sales frontline summary
- Team Leader roll up

Sales Relationship Manager Scorecard:

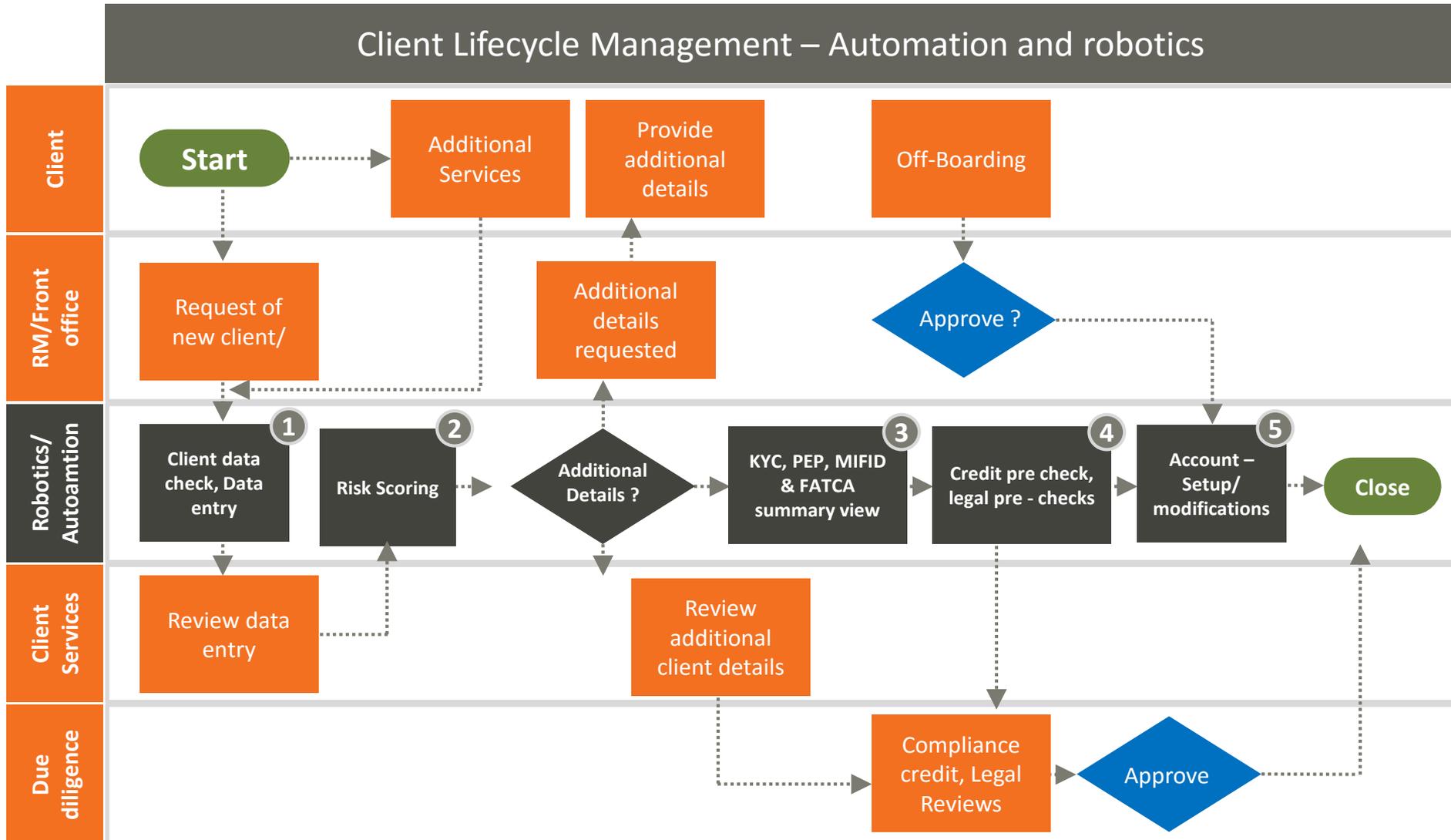
- Individual Relationship Manager Revenue and KPI Summary

Global Finance Report preparation

Monthly financial performance overview:

- Group P&L Summary
- Balance sheet Summary including RWA
- Performance by Client, Product and by Geography
- Metrics including – Returns, Cohort analysis etc.

Client Onboarding with RPA – eliminates steps



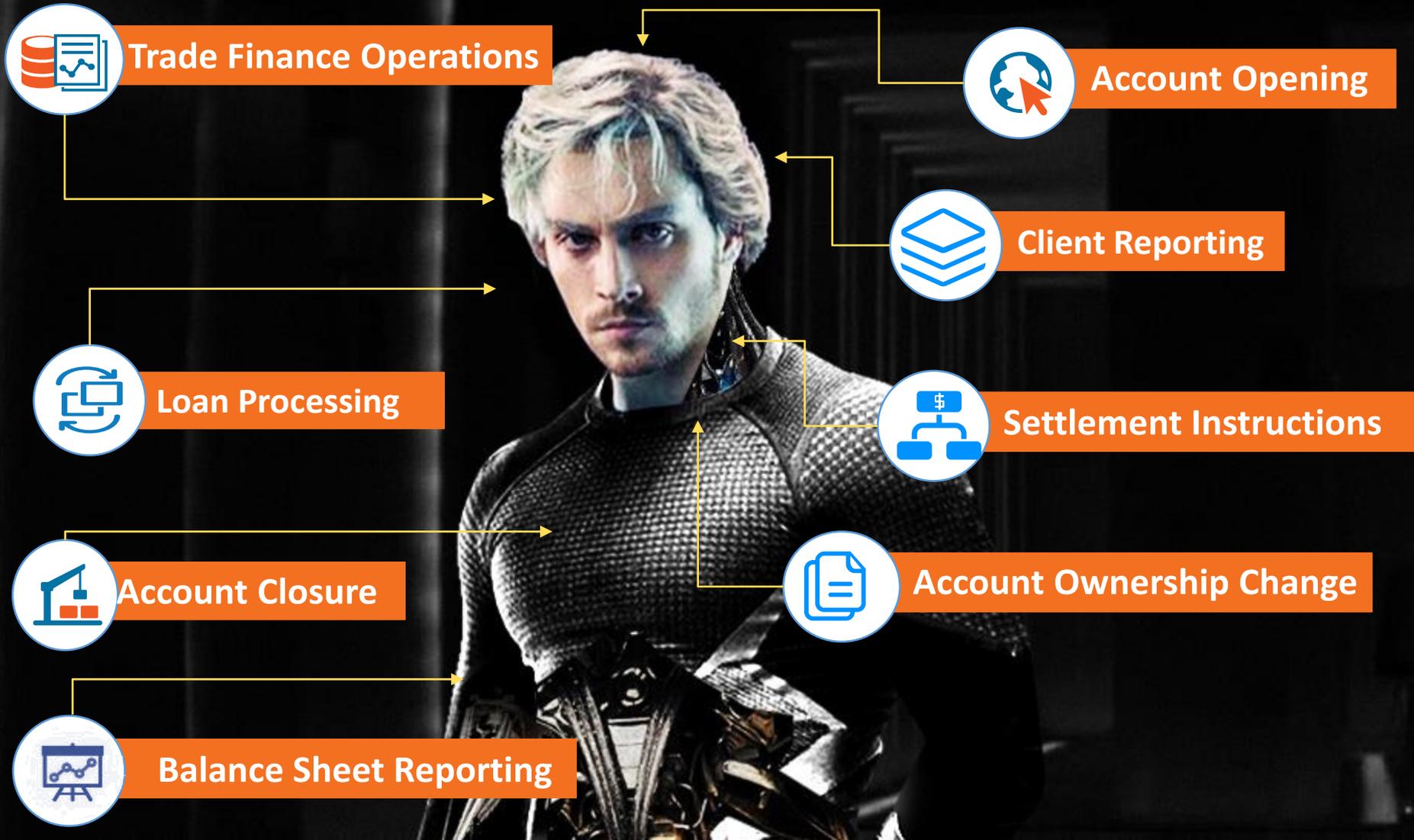
Preparing for the Robot Revolution

Opportunity is big – everyone will want one



Preparing for the Robot Revolution

Or Maybe This one



Phase 1 – Execution Approach *(Indicative)*

Inputs from Stake Holders



- Identify Requirements for Automation Orchestration and Management Platform
- Identify the key layers/components of the Automation Platform
- Prioritize required Components
- Evaluate Third party Mgmt Solutions



Product Backlog with RPA Processes

Create & Design RPA Process List

- Design catalogue of automation API's to interact with the components / layers.
- Design Components and size effort



Sprint Backlog



Sprints
(2 weeks per Sprint)
Design & Develop

1. Pick top 3-5 automation initiatives and evaluate.
2. Improve and deploy
3. Measure
4. Create jump start kit for new dev

Develop Robot Processes

- Build reference implementation for API with sample Robot code.
- Implement High Priority Components of the Automation Orchestration and Management Platform
- Integrate reference Automation Robots with Platform
- Implement Robots in Framework



Deploy

Monitor

- Identify process changes
- Re-train Robot on changes
 - Use Predictive Analytics
 - Use Adaptive Analytics

Move to further Phases

Thank You

Bob Graham

SVP Virtusa

Bgraham@virtusa.com

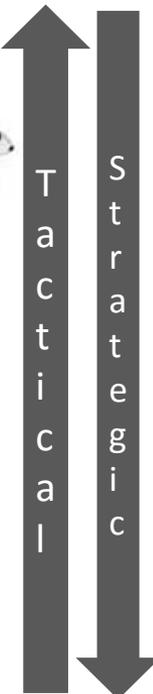
@Bobgraham87

Thank You

Phase 1 – Execution Approach *(Indicative)*

Plan for future to avoid re-engineering later

	Objective	RPA Approach	Mgmt. & Analytics	Process Maturity	Tech Roadmap	Standardization & reuse	Innovation
Application Level: Isolated robots typically	Replace FTE	Individual Robots	Adhoc Monitoring	Automate Process as-is typically Assisted	Desktop/ Citrix based use cases	Adhoc	Static Robots with Manual Changes
Organization level: Tethered Robots, centrally controlled	Augment Specialists	Orchestrated Robots	Systemic Data Collection	Parameterize Existing Processes	End to End Workflow based automation	Basic Program Reuse and sharing	Flexible & Configurable Robots
Enterprise / Advance level: Intelligent Robots	Adaptive Learning	Robot Farms. Expand on demand	Real time monitoring with Dashboard	Configurable & Reusable Processes	Integrated workflow based across systems	Up to date Catalogue of Services	Maturity Level



Data from Nasscom BPM Summit 2014: Keynote