

Digital Transformation



Building Blocks for Automation

API and Cloud Computing

IIoT & Smart Manufacturing

Digital Twin



AI/ML & BigData



Blockchain & Provenance



AR/VR/MR



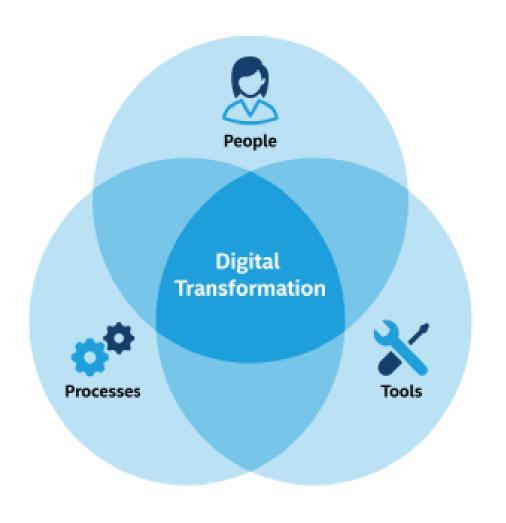
3D Printing



Nanotech

Types of digital transformation





RPA vs IPA Case study

Enterprise Supply Chain: Invoice Processing Case Study

Level 4 Invoice Compliance Process: Compliance Check of Third Party Invoices processed for payment through Procure to Pay system

Overview of the Process

Low coverage: 10% checked only

Highly unstructured: Invoices from Third party vendors in pdf or tiff format

High-volume: 1000s of transactions/month **Time-sensitive:** Same Day Processing

Global: 80 countries

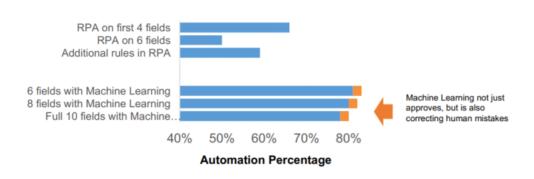
Intelligent Automation Solution

Phase 1: RPA

Testing how much can be accomplished with RPA

Phase 2: SPA

Machine Learning-based compliance based on 3000 transactions



Business Value Outcome

Average of 60% STP with RPA, 86% STP with SPA/Machine Learning Applied 93% Quality (increase of >20% from Manual Process)

Decreased Invoice cycle time from 6-8 minutes to 30 seconds (3,000+ volume/mo), which decreased SLA breach by 70% Replicatable process and configuration for accelerated roll out in subsequent Invoice Processing areas

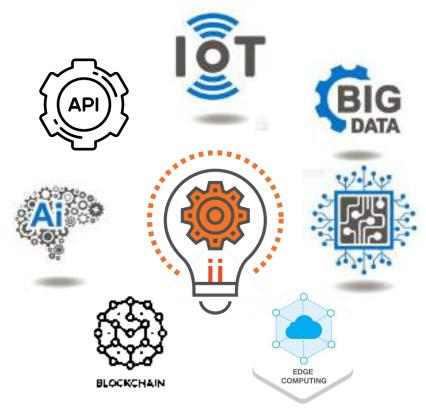
67 FTE savings @ \$60,500 fully loaded cost per FTE (\$4.05MM)

Most successful Use cases:

- Customer or Employee Sourcing & Onboarding
- > CRM update & enrichment
- Procurement to Payment
- Customer Service (Sales & Aftersales)
- Software Installation & Distribution
- Data Extraction, Migration, Mapping, Entry & Reconciliation
- Loans & Claim processing
- Logistics, Supply chain & Trade Finance

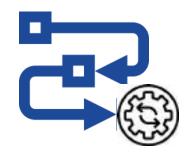
Source: Workfusion

RPA 5.0: SIA



SIA (SMART INTEGRATED AUTOMATION)

Overview of SIA



Process Analyzer & Best Practices Bank



Data & Policy Broker



Blockchain based Bot Marketplace

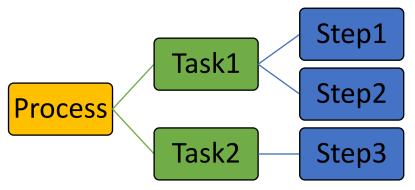


Standardized Universal Orchestrator



AaaS & Automation Packs

Process Analyzer & Monitor



Process Decomposer and task dependency mapper using tagged recorder

celonis



Auto RPA, Process Sandboxing, Scenarios and Simulation

Cloud AutoML^{BETA}







Task Suitability, Collaboration, Value Added Analysis, Priority, Benchmarking and <u>Standardization</u>

Process Monitoring and Root Cause Analysis (RCA)

Data and Policy Broker



Data aggregation, mapping, scheduling, enrichment, transformation, insights, distribution and life cycle management





Data Policy Broker. OUPD framework & DPML based encapsulation for regulatory compliance. (GDPR, PDPA, CDPR etc.)

Read More about OUPD

Bot Marketplace



Bot development and delivery on Hybrid Blockchain



Smart Contract allows better SLA, pricing & payment



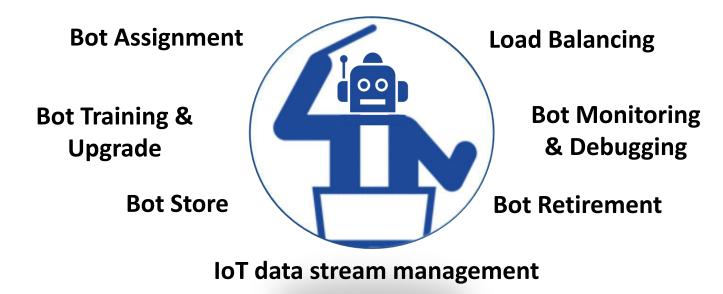
Secure Decentralization reduces implementation cost



Standardized Universal Orchestrator



Management of API & Other services



AaaS and Bundled Service Packs







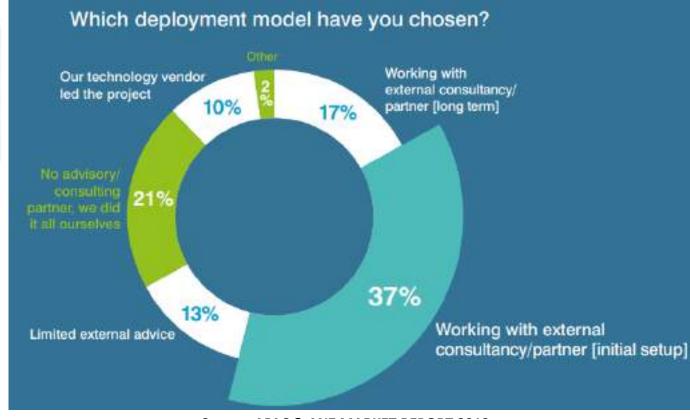


TASO^{SII} is Quale's "Robotics-as-a-service" offering



CoE.exe

Innovative Centre of Excellence (CoE) setup for managing automation, chatbots and wider artificial intelligence initiatives in your organisation



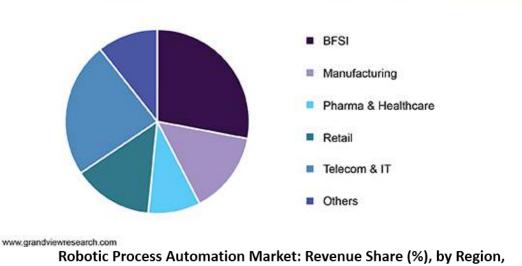
Source: APAC & ANZ MARKET REPORT 2019

Impact & Value Creation

PA adoption pot	ential by buyer indus	stry and function		Low Low	High	Illustrative processes with higher potential
Function	F&A	Procurement	Human resource	Contact center	Industry-specific processes	
Industry	Accounts receivable, accounts payable, general ledger	Invoice processing, requisition-to- purchase order	Payroll, hiring, candidate management	Customer service		
Banking & financial services						 ✓ Cards activation ✓ Frauds claims discover
Insurance						 ✓ Claims processing ✓ New business preparation
Healthcare						✓ Reports automation ✓ System reconciliation
Manufacturing						 Bills of material (BOM) generation
Hi-tech & telecom						 ✓ Service order management ✓ Quality reporting
Energy & utilities						 ✓ Account setup ✓ Meter-reading validation

Impact & Value Creation

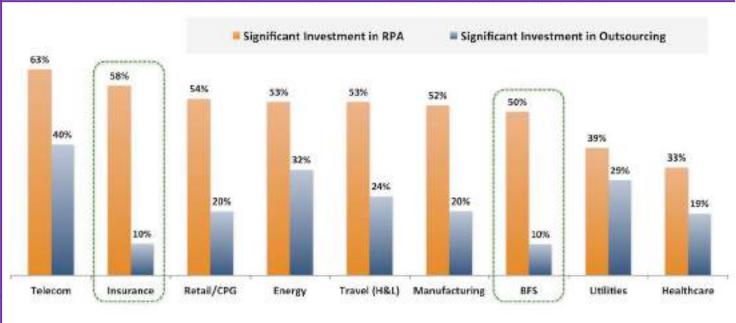
Global robotic process automation (RPA) market share, by application, 2017 (%)



Global, 2017



2018 Investment intentions in RPA and Outsourcing, 2018

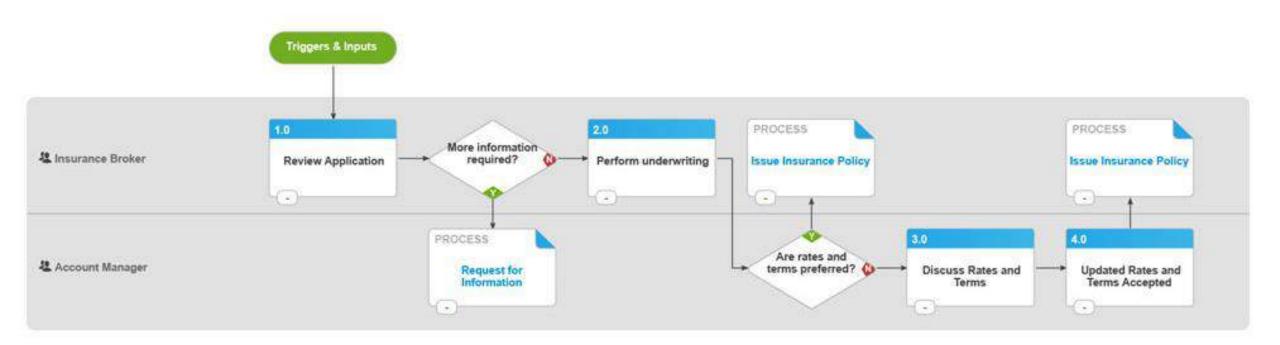


Source: HIS Research in Conjunction with KPMG, "State of Operations and Outsourcing 2018, April 2018 Sample: Global 2000 Enterprise Buyers = 381

Over the next 3 years Telecom, Insurance, BFSI, Travel and Retail will attract around \$4bn incremental investments. Volume wise SMEs & Startups will be critical new market segment to capture.

Process Planning & Mapping

A **process map** is a planning and management tool that visually describes the flow of work and various tasks. Using **process mapping** software, **process maps** show a series of events that produce a result.



Process Mining

Process mining is an analytical discipline for **discovering**, **monitoring**, and **improving** processes as they actually are (not as you think they might be), by extracting knowledge from event logs readily available in today's information systems.

- ✓ The Assumed Process is Not Your Real Process
- ✓ Context needs to be Preserved during analysis
 - ✓ What if analysis
 - ✓ Identifying Bottlenecks

Example of Analytical Questions

- ✓ Is this the normal process path? Let's look at some example cases.
- ✓ Some cases take more than one month? Which teams are handling them? Can you filter them and look at them in more detail.
- ✓ This path is impossible! Let's drill into that and look at an example case to see what is happening.

Frugal Automation & Cost Savings: Process Documentation

• Use of Microsoft Steps Recorder



Use of Folge.me



Bot Costing & Strategies

Overall licensing cost on an average accounts for 25-30% of the cost of RPA. Remaining 70-75% presents itself as a combination of the following:

- ✓ Yearly RPA license renewal fees
- ✓ Training and/or hiring for internal SMEs
- ✓ Consulting costs for implementation (via the RPA vendor or a third-party)
- ✓ Infrastructure setup
- √ Third-party integrations and renewals (cost of complementary software like process mining, process discovery, etc.)
- ✓ Costly break-fix cycles that limit RPAs true potential

Bot Costing & Strategies (Cont...)

- Total cost (unattended bot) = Infra (Cloud or On premises) + License (RPA Tool) + Implementation (approx. 2 to 3 times license cost) + Maintenance {It is distributed in 3 years to get the completed ROI}.
- Total Cost (Attended bot) = License (RPA Tool) + Implementation (Approx. 2 to 3 times license cost) . {Instant ROI}
- Per bot per annum fixed price vs Per bot per run time price dynamic pricing
- Tier I Bot platforms like AA, UIPath, BluePrism, Kapow etc:
 - Attended: \$800-2000 per bot per annum
 - Unattended: \$2000-8000 per bot per annum
- Tier II Bot platforms like JiffyRPA, Foxtrot etc
 - Attended: \$200-\$500 per bot per annum
 - Unattended: Not suitable for complex processes

