

Manitoba's Robot Journey- Chapter 1

Robotic Process Automation - Implications for Service Delivery Leaders

Presentation to Joint Councils

Winnipeg Learning Event - September 24, 2019

Overview

- ▶ Robotic Process Automation - “Meet your new co-worker”
- ▶ Manitoba’s journey to date - From pilot to “Centre of Excellence”
- ▶ Next frontier of RPA ---- Alexa - “I’m sick today.. tell everyone at work”
- ▶ Implications for Service Delivery Organizations - Client facing and back office

What is Robotic Process Automation

What is Process Automation?

Software That Automates Manual Activities By Performing Repetitive Rules-based Tasks



Replaces Repetitive Digital Activities that require low levels of judgement and **allows staff to focus on value-add tasks**



Automations simulate regular software interaction, such as clicking, typing keys, and filling fields



Can **be implemented quickly and managed with limited technical knowledge**, and minimizes the need for costly system integrations or upgrades

Why RPA in Government of Manitoba

- ▶ RPA successfully used in Insurance and Finance industry in Manitoba (buzz)
- ▶ Manitoba actively engaged in transformation and service modernization (e.g. FTE reductions)
- ▶ Leadership instantly recognized potential application of RPA in Manitoba (i.e. heavily manual and paper based, ability to leverage legacy mainframe applications and RPA enables future ML and Cognitive capabilities)
- ▶ Transformation Fund - Funding for innovations with **ROI**
- ▶ Mature partner departments - keen to support, invest and learn

Manitoba's journey to date

- ▶ Deloitte selected to deploy 3 use cases using UiPath (RPA software)
- ▶ Implemented 3 use cases of RPA to learn, understand and validate ROI.
- ▶ Three use cases
 - ▶ Automation of **Courier and Waybills** - Vital Statistics Agency
 - ▶ Automation of **Dental Invoice Processing** - Manitoba Families
 - ▶ Automation of On-line application of Employment Income and Assistance - Manitoba Families
- ▶ Cost - \$829.0 capital , \$130.0 operating
- ▶ Benefits - \$437.0 annual in labour savings
- ▶ Payback - 26 months

Demo 1

Automated Processes

The Courier Shipment and Waybill process was Re-imagined

The Manual Process Today



A Future-State Process Supported By Automation



 Manual Step  Automated Step

Demo 2

Automated Processes

The Dental Invoice Processing was re-imagined

The Manual Process Today



A Future-State Process Supported By Automation



 Manual Step  Automated Step

Results...(early days)

Value for Program Partners

- ▶ Customer Service
 - ▶ Timeliness
 - ▶ Convenience
 - ▶ Ease of Effort
 - ▶ More time with clients
- ▶ Operational Efficiency
 - ▶ Meet demands with fewer staff
 - ▶ Saved staff time moved to value added
 - ▶ Improved Cycle Time
- ▶ Data Quality
 - ▶ 98-99% of transactions processed by Bot
 - ▶ Fewer errors and rework
- ▶ **Unanticipated Benefits**

From an IT Service Provider

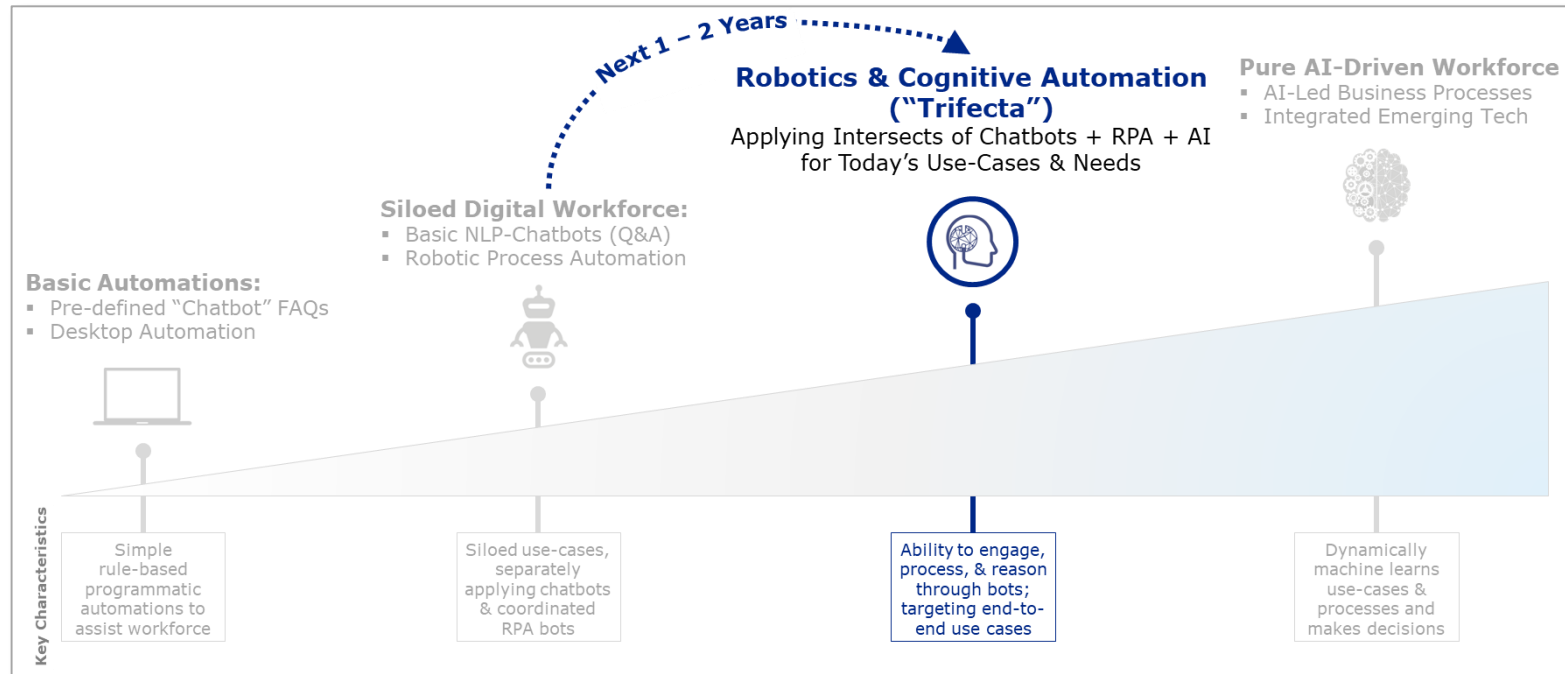
- ▶ RPA is interesting and exciting for staff
- ▶ UI Path product is well suited for our developers
- ▶ Assessment and design critical
- ▶ Daily maintenance and upkeep of RPA Bots more resource intensive than initially expected
- ▶ Many internal IT use cases identified
- ▶ Sustained ROI is achievable
- ▶ Developing operating model (proper mix of internal and external providers) to meet demand is a challenge

Currently Establishing an RPA Service and COE

- ▶ To scale successfully a RPA Service and Centre of Excellence is required.
- ▶ RPA Service - Intake, Assessment, Design, Configure, Deploy, Operate, Enhance, Decommission
- ▶ CoE is critical to govern/partner deliver ROI, and conduct R&D to learn and grow future capabilities (ML, Chatbot, Virtual Agents, AI etc)

Deloitte Predictions for the Future of Automation

Over the next 1-2 years, we forecast a major increase in the use of cognitive and intelligent capabilities to expand the potential for automation and customer service



The Research Trends

"By 2022, 70% of customer interactions will involve emerging technologies such as machine learning applications, chatbots and mobile messaging, up from 15% in 2018."

"Artificial Intelligence, Virtual customer assistants, and Omni-channel engagement are expected to have the biggest impact on CX projects in the next 3 years."

- Gartner Research, Aug 2019.

Predictions for Impact to Public Sector



Customer Service

Improving interactions with employees and the public by freeing up humans to focus on complex tasks



Process Transparency

Improved standardization and auditability of processes through automation and data capture and collection



Cost to Serve

Reduced overall cost to service through augmenting staff, freeing them up to focus on more complex and higher value tasks

The integration of commercial Virtual Assistant, Intelligent Chat and RPA.

Applying Alexa, Kore.ai and RPA together to automate an employee calling in sick to work

The user experience

From the comfort of his home Andy, a nurse at a local hospital, reports unscheduled leave. With one short conversation with Alexa, his chief is quickly notified, can find a replacement and properly serve patients.



The components

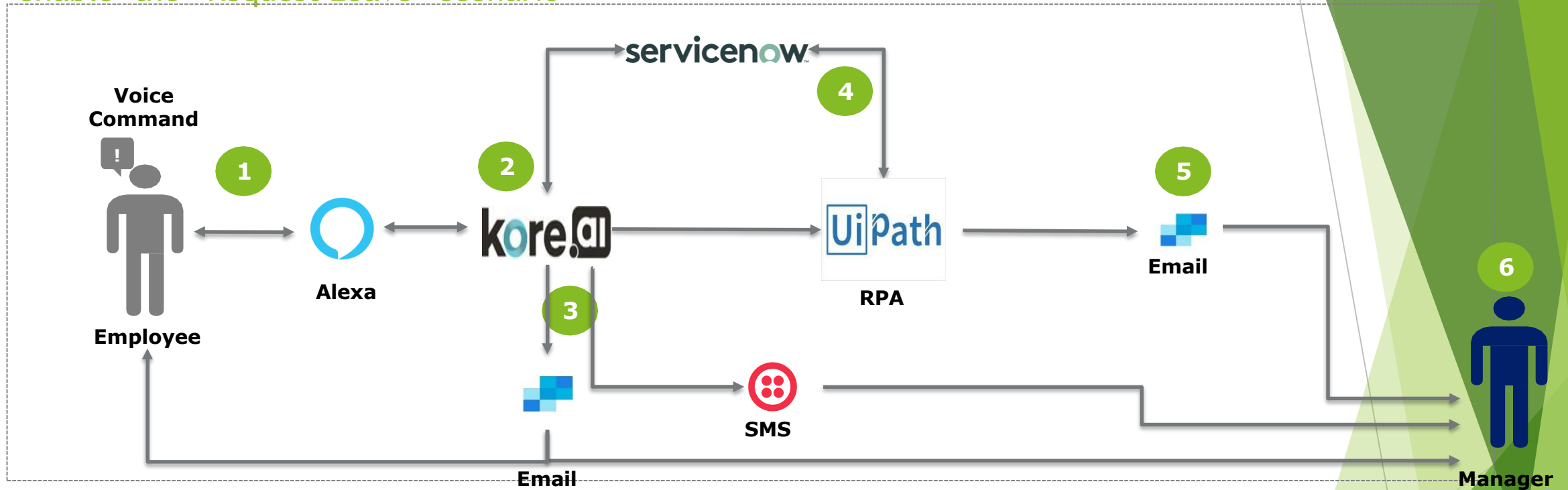
Thousands of Americans interact with Alexa daily. Behind the interaction on the left, there is a combination of AI orchestrated to make it feel like a simple task to users.

This is how:

- ❑ **Virtual Assistant** receives voice commands. It performs speech recognition and integrates with the chatbot to authenticate user with information from CRM/ERP.
- ❑ **Chatbot** controls the conversation and performs intent recognition. Sends SMS to manager and email notification to both the employee and the manager about unscheduled leave.
- ❑ **RPA Bot** logs into corporate app, identifies available resources based on established logic and sends email to manager with contact information.
- ❑ **Manager** receives a timely information and plans shift schedule accordingly. AI assists manager rebalance shift schedule by suggesting available resources based on data in CRM/ERP.

The integration of commercial Virtual Assistant, Intelligent Chat and RPA.

The interaction flow demonstrates how voice and data are shared across platforms to enable the “Request Leave” scenario



1 Employee engages Alexa to report leave via speech interface. Alexa performs automatic speech recognition

2 Alexa passes text to Kore.ai for intent recognition. Authentication is done, data for SMS and email is retrieved from ServiceNow

3 Kore sends SMS via Twilio to manager and e-mail via SendGrid to the user (CCing manager) to record leave

4 Kore sends user's ID and leave date to UiPath orchestrator, triggering bot to log into ServiceNow to identify available resources and pull contact information

5 UiPath bot gathers data retrieved from ServiceNow to email the available resources information to manager

6 Manager can take action to address staffing changes

Implications for Service Delivery Organizations (internal and citizen facing)

- ▶ RPA is a cost effective and powerful tool to
 - ▶ improve service delivery capabilities
 - ▶ redeploy resources and effort
 - ▶ automate good and, or bad processes
 - ▶ extend digital service functionality of legacy systems
 - ▶ enable simple low-cost digital services
 - ▶ test and plan for emerging AI capabilities (e.g. “Alexa” , chat bots, virtual agents)
 - ▶ learn how to design new roles that “marry the strengths” of people and technology
 - ▶ prepare for increased BP Outsourcing