THE FUTURE OF GOVERNMENT BACK OFFICE OPERATIONS

TRANSFORMING TO IMPROVE CITIZEN SERVICES

MAY 2018
GOOD ENOUGH FOR GOVERNMENT IS NOT GOOD ENOUGH

% of citizens that expect the same or higher quality from government digital services as they do from commercial organizations

SEVEN IN TEN CITIZENS FEEL THAT PUBLIC AGENCIES COULD PROVIDE A BETTER CUSTOMER EXPERIENCE BY USING THE LATEST TECHNOLOGIES

Source: Accenture
ARE GOVERNMENT BACK OFFICES READY? CAN THEY SUPPORT DIGITAL CITIZEN SERVICES?

By 2020, enterprises that continue to invest in heavily customized, traditional, monolithic ERP solutions will be 75% less effective in supporting digital business strategies.

—Gartner

Are you investing in large, traditional ERP solutions?

OR

Are you getting ready for the future so you can support better digital citizen services?

Source: Gartner, Government CIOs Should Consider Postmodern ERP to Modernize Legacy Business Applications (pub. May 18, 2017)
ERP IS TRANSFORMING
FROM FOCUS ON ‘CONTROL’ TO ‘VALUE’

1st Generation
Custom ERP
Delivered & customized
to 1,000s of client
requirements

2nd Generation
Process Led ERP
Standardized to
leading processes
Customized only
where required

3rd Generation
Platformed Back
Office
Focused on
commoditized
cloud-based systems

4th Generation
Augmented Back
Office
Combines digital and
human workforce via RPA
and AI

The market is here
“It is expected that the service-based approach for IT will become the preferred option over the software-based approach over time, as end-user organizations look to downsize the operation side of their IT portfolios.”

—Gartner

Source: Gartner, Magic Quadrant for Enterprise Integration Platform as a Service (IPaaS), 30 March 2017
WHY MOVE TO PLATFORMED BACK OFFICE?

COMPELLING VALUE PROPOSITION

**Current**
- Fixed Costs
- Cumbersome
- Capital Intensive
- High Maintenance and Run Costs
- Security Issues
- Business Lagging
- Out-dated

**Future**
- Pay by the Drink’
- Agile
- Capital Light
- 20%+ Lower Maintenance and Run Costs
- Managed Security
- Business Leading
- New Technologies
ERP IN TRANSFORMATION

PLATFORMED BACK OFFICE IS GROWING

States are investing in Cloud-based systems:

83% implemented or deployed cloud in multiple agencies

—Center for Digital Govt\(^1\)

Primary examples are content and document management, business intelligence, health applications, and GIS systems

By 2020, **50%** of ERP spending will be SaaS-based and underpinned by hybrid modernization strategies

—Gartner\(^2\)

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\(^1\)Source: Center for Digital Government, Future of ERP Report, 2015

PLATFORMED BACK OFFICE

WHAT IS IT?

Business services, delivered through 3 possible models:

**ON-PREMISE ERP**
With Infrastructure as a Service
- Current version of ERP software
- Straightforward, periodic upgrades
- Customizations are necessary or regulated
- Delivered through Cloud-based Infrastructure as a Service (IaaS)

**HYBRID MODEL**
Some, but not all, Cloud Components
- Core ERP processes with little change
- Maintain control over critical data/ functions
- Capital investment in On-Premise ERP
- Adopt best-in-class cloud modules
- Deliver through IaaS

**UNIFIED CLOUD PLATFORM**
All in with Cloud
- Replace multiple legacy systems or new solution
- Cloud is “Case for Change”
- Employee engagement: mobile, social, collaboration, seamless UX
- Recent implementation (<12 months)

As-a-Service
ONE EXAMPLE OF HOW IT MIGHT WORK

POTENTIAL BUSINESS SERVICES
in a HYBRID MODEL:

- Core HR
- Benefits
- Payroll
- Learning Management
- Compensation Management
- Performance Management
- Mobility and Collaboration
- Workforce Analytics
- Recruiting
- ESS
- MSS
PLATFORMED BACK OFFICE

HOW WOULD I DECIDE?

1. Identify business process / determine value
2. Keep it internal? Or external service provider?
3. Business process purchased ‘a la carte’
4. Create an integration platform
5. Business service roll out based on need and value delivered
“Unsexy specialties such as contract management, tax compliance and regulatory tools are getting a fresh glitter of promise for what’s possible.

That is because the future of machine learning for extracting new data insights and heading off corporate risks could save corporations enormous costs.”

—The Wall Street Journal
ERP IN TRANSFORMATION
AI FOR BACK OFFICE IS JUST GETTING STARTED

Organizations are investing in AI and are seeing positive results:

55% of private sector enterprises plan to invest in AI in the next 12 months

45% of organizations are seeing positive results from their AI projects

50% of organizations who had invested in AI said that the results from their AI investments met or exceeded their expectations.¹

More of the IT workforce will focus on AI related functions:

By 2019, more than 10% of IT hires in customer service will mostly write scripts for bot interactions.

By 2020, 20% of companies will dedicate workers to monitor and guide neural networks.²

¹Source: Forrester, Artificial Intelligence: A CIOs Guide to Al’s Promises and Perils, January 9, 2017
²Source: Gartner, Predicts 2017: Artificial Intelligence, 23 November 2016
AI is having an impact, inside and outside of your organization.

AI’s impact will be felt throughout the economy.

AI has the potential to double the annual economic growth rates by 2035 for developed economies.

In the same time frame AI can boost labor productivity by 40 percent.

The Economic Impact of AI

Source: Accenture and Frontier Economics
AND CONSUMERS ARE GROWING MORE COMFORTABLE WITH USING AI

1/3 are interested in using a voice-enabled digital assistant in smartphones

52% interact through AI-powered live chats or mobile apps on a monthly basis

62% are comfortable with an AI responding to their query.

82% reported that the top benefit of AI advisors over human is they are available anytime.

Source: Accenture Digital Consumer Survey 2017
AI IS A **BROAD CONCEPT** AND CAN PERFORM MANY FUNCTIONS IN THE BACK OFFICE

Artificial Intelligence

is a:

**System** that possesses human-like intelligence and learning capabilities

**Collection** of technologies that, together, enable human-like intelligence

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**Technologies**

- Computer Vision
- Audio Processing
- Sensor Processing
- Gesture Recognition
- Facial Recognition
- Biometrics/Identity
- Context-Aware Computing

**Applications**

- Natural Language Processing
- Knowledge Representation
- Speech to Text
- Video Analytics
- Text Analytics
- Semantics/Ontology
- Context-Aware Computing

**Sense**

- Comprehend

- Machine Learning
- Deep Learning
- Reinforcement Learning

**Act**

- Inference Engines
- Expert Systems
- Mini Bots
- Robotic Process Automation
- Virtual Assistants
- Augmented Reality

Source: Accenture Research

Disclaimer: Technologies vs. Applications/Capabilities are broadly classified here, subjective to individual interpretation
AI FOR GOVERNMENT BACK OFFICE
A SIMPLER WAY TO THINK ABOUT APPLYING THE TECH

CURRENT STATE
- Standardized rigid processes
- Manual entry and monitoring of repetitive tasks

SIMPLE
- RPA perform repetitive actions efficiently
- Minimal oversight
- Requires no decision making.

MEDIUM
- AI for decision making, orchestration, or communication
- Works through learned behaviour.
- Capable to “run-the-show”
- Calls RPA to perform tactical actions.

COMPLEX
- Expanded capabilities
- AI + RPA + Data leads to the Digital Workforce capable of augmenting human counterparts.

BENEFITS

LOWER WORK TEDIUM
Remove redundant low level tasks from your workforce

LABOR REALIGNMENT
Enable resources to be used much more effectively and valuably

INNOVATION
Increase engagement with your citizens and employees
ONE GOVERNMENT IS USING AI TO TRANSFORM THEIR MODEL OF CUSTOMER SERVICE

HELP DESK EMPLOYEES WERE SPENDING THE MAJORITY OF TIME ON ROUTINE CUSTOMER QUERIES

Client wanted to reduce the time, cost and effort of repetitive tasks so employees focused on complex tasks

ACCENTURE PROPOSED AUTOMATING THE PROCESS WITH AI

Virtual Agent (VA):
- Understands / process natural language
- Autonomously handles calls / webchat using cognitive-semantic analysis and machine-learning algorithms.

VA IS ALSO ABLE TO UNDERSTAND THE CONTEXT IN CUSTOMER REQUESTS

VA can:
- Extract what customers are looking for
- Support decision making process with variables
- Customers receive answers by querying data / documents in natural language or a form through voice, assisted by agent
AI HELPED **DECREASE TASKS** FOR THE FIRST LEVEL OPERATOR BY ~85% WHILE **INCREASING CUSTOMER SATISFACTION**

### PROJECT IMPLEMENTATION

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**3 Months - 2 FTE to Analyze and Build the Virtual Assistant**

**1 Months - 1.5 FTE to train the Virtual Assistant**
ONE WASHINGTON
One Washington is a comprehensive business transformation program to modernize and improve aging administrative systems and related business processes.

There are four key business areas with Change Management and Business Intelligence touching all areas:

- Financials
- Procurement
- Budgeting
- Human Resources
- Organizational Change
The state has selected Accenture as the long-term strategic partner to help develop a multi-year blueprint to transform their back-office systems.

### BUILDING ONE WASHINGTON

- **BUILD**
  - Future Budget Requests
  - Future Budget Request

- **DESIGN**
  - $5.8m Supplemental Budget
  - $6.5m Biennial Budget

- **PRE-DESIGN**
  - $2m Biennial Budget

### ONE WASHINGTON PROGRAM

#### BUILD

- 2022-26
  - Future Budget Requests
  - Budget and HR Systems Implementation
  - Business Process Transformation

- 2020-24
  - Future Budget Request
  - Finance and Procurement Systems Implementation
  - Business Process Transformation

#### DESIGN

- 2018-19
  - $5.8m Supplemental Budget
  - 2019 Finance and Procurement Software Selection
  - Business Process Transformation

- 2017-19
  - $6.5m Biennial Budget
  - 2018 Program Blueprint
  - 2018 Business Intelligence Strategy
  - 2018 Integrations Strategy and Plan
  - 2018 Mainframe Plan

#### PRE-DESIGN

- 2015-17
  - $2m Biennial Budget
  - 2016 Chart of Accounts Future State
  - Strategic Partner Selection
  - Business Process Transformation and Readiness

- 2013-15
  - $2 Biennial Budget
  - 2014 Business Case
  - Establish the One Washington Program
• The deployment approach for Finance and Procurement will be a phased functionality and agency
  • Wave 1 will be a pilot roll-out followed by a Wave 2 for the remaining agencies, Wave 3 will be reserved for agencies that require expanded functionality
• Budget and HR Payroll will be deployed in one release for all agencies

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ACCENTURE AND ONE WASHINGTON WILL HELP THE STATE

• Deploy an integrated SaaS solution
• Replace hundreds of disparate legacy systems
• Lower risk of system failures and security breaches
• Provide transparent, reliable information, dashboards and analytics for decision makers
• Improve data accuracy through consistent, common business processes and common systems
• Enable statewide collection of critical information and consolidated business intelligence
• Provide a platform to innovate and improve services to citizens
QUESTIONS

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TO LEARN MORE ABOUT BACK OFFICE TRANSFORMATION