Hidden Challenges of RPA and How to Overcome Them

Successful Business Cases

Hidden RPA Challenges

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Hidden RPA Challenges

RPA - a very attractive concept for Financial Companies:

- Promise of a quick ROI

- Large FTE Savings

- 30-50% of RPA projects fail

Why ?

Hidden RPA Challenges

- How to correctly understand the "As-Is" processes?
  - Typically it takes 40% of project time
  - Risk of misunderstanding the process

- Process improvement before RPA Implementation
  - How to measure the process time?
  - Often processes are automated without prior improvement

- Finding most appropriate process/fragments for RPA
  - Automating processes that are easy to automate, instead of processes bringing significant savings
  - How to calculate ROI before the automation?
  - Practical FTE Savings ~30% instead of expected 60-80%

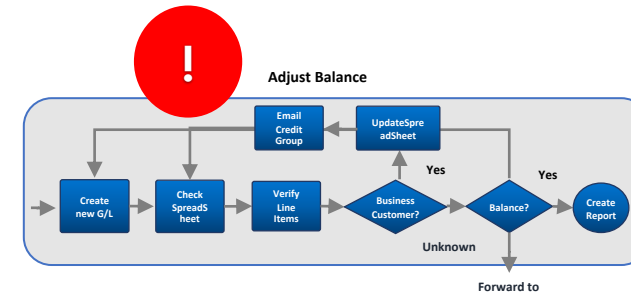- Generating precise RPA input specifications

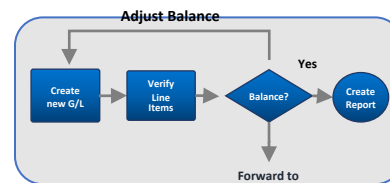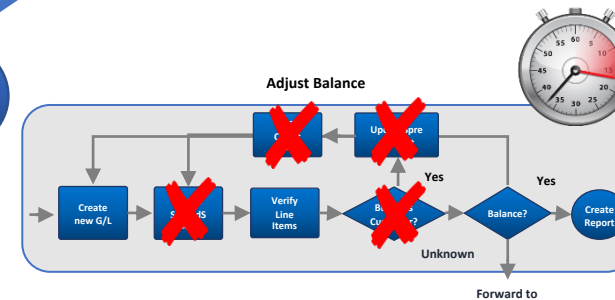# StereoLOGIC Automated Process Discovery & Measurement

stereo logic

Monitors Operations

1

Outsourcing

Back Office

Customer Service / Call Centers

Extracts Processes
& detects errors

2

!

Adjust Balance

Create new G/L | Check SpreadSheet | Verify Line Items | Business Customer? | Email Credit Group | UpdateSpreadSheet | Balance? | Create Report

Yes | Yes | Unknown | Forward to

Measures & Streamlines

3

Adjust Balance

Unknown

Forward to

4

Adjust Balance

Create new G/L | Verify Line Items | Balance? | Create Report

Yes

Forward to

Accelerated Processes for Automation

5X Acceleration, 100% Accuracy

Acceleration of Transformation and RPA

Canadian Bank RPA Acceleration: Business Case with StereoLOGIC

Canadian Bank RPA Acceleration:

Business Case with StereoLOGIC

Acceleration of Transformation and RPA

Executive Summary

GOAL Rapid discovery of bank back office processes and identification of automation opportunities and savings

SCOPE 2-week pilot project

- Recorded 1,276 cases for 2 processes:
  - Discharge: 6 employees, 505 cases
  - Collateral Discharge: 4 employees, 771 cases

RESULT

1. Automatically discovered, measured and mapped both processes with all flows (incl. clean path and exceptions)

2. Generated the list of best candidates for automation based on time-saving criteria

3. Calculated FTE savings for the Automation Business Case:

   - Discharge Process – FTE Savings up to 81%
   - Collateral Discharge Process – FTE Savings: Ontario up to 30%, BC up to 27%

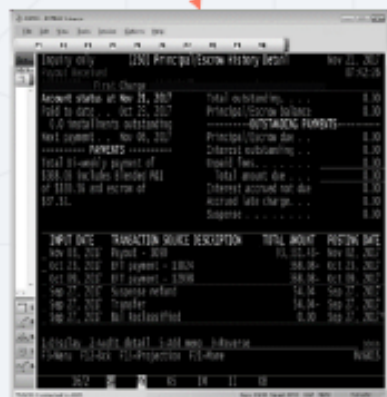Proposed approach enables iterative RPA implementation

How it was done

1. Generated Process Maps and Associated Screens

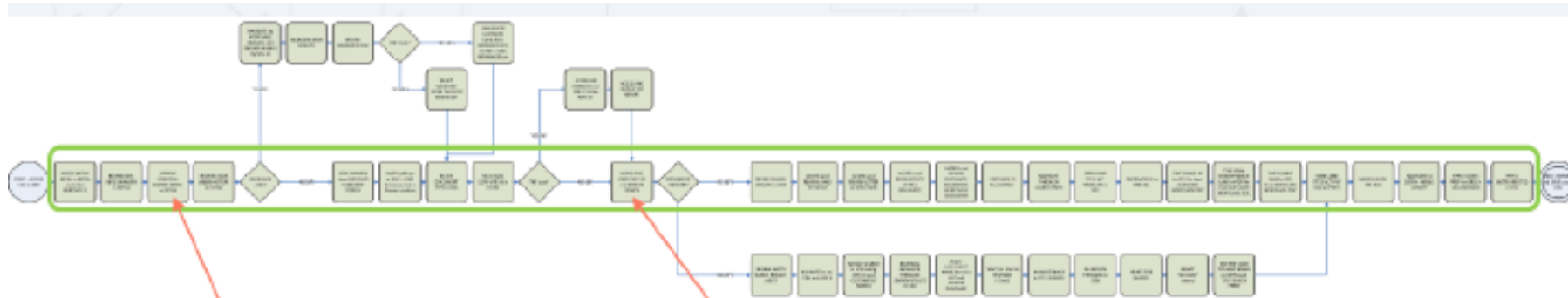Automatically discovered all flows for DISCHARGE process and process maps with associated screens:

Note: "PREP for EREG" flow shown

For the list of process maps and associated screens see folder ...StereoLOGIC/SUBMISSION PACK/ ProcessMaps & DOC

Acceleration of Transformation and RPA

How it was done

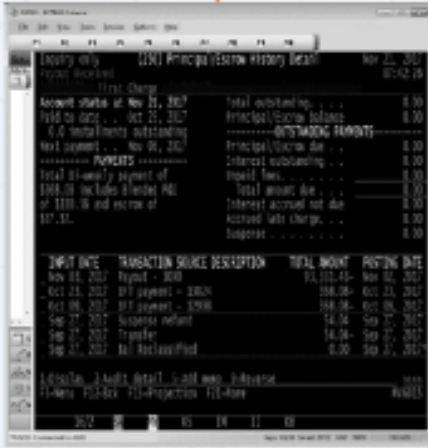## 2. Identified Repeatable Patterns

Note: "PREP for EREG" flow shown

For the list of process maps and associated screens see folder …StereoLOGIC/SUBMISSION PACK/ ProcessMaps & DOC

How it was done

3. Generated Details Time Metrics & Calculated Savings for Each Repeatable Pattern

#	High-level Activities	Detailed Activities	Time	% of Total Flow Time	MIN Saving	MAX Saving
1		START - ACCESS CASE in DDC	00:00:01.508	0.79%		
2	1. Access the Case	ACCESS INITIAL MENU in EXTRA and enter MORTGAGE ID	00:00:06.323	3.31%	3.31%	3.31%
3		REVIEW MTG INFO SUMMARY in EXTRA	00:00:00.988	0.52%	0.52%	0.52%
4	7.63%	REVIEW PRINCIPAL HISTORY DETAIL in EXTRA	00:00:02.002	1.05%	1.05%	1.05%
5		REVIEW LOAN MEMO HISTORY in EXTRA	00:00:03.741	1.96%	1.96%	1.96%
6	2. Transfer Case-related data from one system to another	COPY ADDRESS from MTG INFO SUMMARY SCREEN	00:00:01.512	0.79%	0.79%	0.79%
7		PASTE address to DDC > discharges tab > Primary address	00:00:02.279	1.19%	1.19%	1.19%
8	2.47%	SELECT DOCUMENT TYPE in DDC	00:00:00.921	0.48%	0.48%	0.48%
9		SELECT and COPY MTG ID in EXTRA	00:00:05.111	2.68%		2.68%
10	3. Access and review case-related documents	REVIEW SEARCH RESULTS in ECIF	00:00:02.439	1.28%		1.28%
11		ACCESS and REVIEW LAND TITLES ACT	00:00:06.305	3.30%		3.30%
12		ACCESS and REVIEW LETTER of DIRECTION	00:00:07.774	4.07%		4.07%
13	18.97%	ACCESS and REVIEW STATE of TITLE INSURANCE	00:00:10.553	5.53%		5.53%
14		ACCESS and REVIEW DUPLICATE REGISTERED MORTGAGE DOCUMENT	00:00:04.037	2.11%		2.11%
15		COPY MTG ID from EXTRA	00:00:05.825	3.05%		3.05%
16		NAVIGATE THROUGH SHARED DRIVE	00:00:02.840	1.49%	1.12%	1.49%
17	4. Generate and fill out new Land Title PDF document based on data from previously opened docs	OPEN LAND TITLE ACT TEMPLATE in PDF	00:00:04.344	2.28%	1.71%	2.28%
18		PASTE MTG ID to PDF file	00:00:03.128	1.64%	0.41%	1.64%
19		TYPE PARCEL ID in PDF file from DUPLICATE MORTGAGE DOC	00:00:17.574	9.20%	2.30%	9.20%
20		TYPE LEGAL DESCRIPTION of LAND in PDF file from DUPLICATE MORTGAGE DOC	00:00:35.301	18.49%	4.62%	18.49%
21	55.75%	TYPE CHARGE NUM in PDF from DUPLICATE MORTGAGE DOC	00:00:11.737	6.15%	1.54%	6.15%
22		SEND LAND TITLE ACT PDF DOC to PRINT	00:00:08.184	4.29%	3.21%	4.29%
23		SAVE & CLOSE PDF FILE	00:00:17.524	9.18%	6.88%	9.18%
24		NAVIGATE to EXTRA - MEMO UPDATE	00:00:06.979	3.66%	3.66%	3.66%
25	5. Wrap up and update the logs	TYPE in NOTE: PREP for EREG + CHARGE NUM	00:00:10.124	5.30%	5.30%	5.30%
26		TYPE in INSTRUMENT ID in DDC	00:00:08.305	4.35%	4.35%	4.35%
27	15.18%	END - UNHOLD and SAVE case in DDC	00:00:03.584	1.88%		
		Total flow time	**00:03:10.942**	**100.00%**	**44.40%**	**97.33%**

*time is shown in hh:mm:ss format

Fully automated steps	Partially automated steps

Note: PREP for EREG data shown

97.3% of the flow time can be saved

Acceleration of Transformation and RPA

How it was done

4. Calculated FTE Savings for the Automation Business Case

#	Flows with repeatable patterns	Flows time, hh:mm:ss	% of Total Discharge Time	MIN Potential Savings, % from Total Discharge time	MAX Potential Savings, % from Total Discharge Time
1	Discharge processes	11:02:04	44.11%	21.01%	38.24%
2	Refinance processes	3:29:14	13.94%	5.31%	9.67%
3	Transfer processes	1:13:51	4.92%	1.88%	3.41%
4	PREP for EREG process	3:55:56	15.72%	6.98%	15.30%
5	Other - Unhold with EREG ID update	0:22:55	1.53%	1.53%	1.53%
6	Other - LTSA files submission	0:43:03	2.87%	2.87%	2.87%
7	Based on the work queue agents do not know which cases should not be touched. Therefore, they have to access them, review and comment before closing without any meaningful work:		0.00%		
	- hpp cases	2:10:24	8.69%	8.69%	8.69%
	- already discharged cases	0:07:16	0.48%	0.48%	0.48%
8	There are some cases which are just opened and closed with no action took on them. Most likely, this happens when agents are determining which cases to process first.	0:09:11	0.61%	0.61%	0.61%
9	Other flows (no repeatable patterns)	1:47:05	7.13%		
	Total	25:00:59	100.00%	49.36%	80.80%

15.3% of the entire process time could be saved be automation of this flow.

97.3% X 15.72% = 15.3%

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Proposed approach enables iterative RPA implementation

East West Bank

Jen S. Li., Ph.D., BPMP

FVP, Process Design, East West Bank

Challenges to Robotic Process Automation

- Lack of Enterprise-Wide Understanding and Strategic View of RPA
  - What is Robotic Process Automation?
  - Is there a Enterprise Automation Roadmap?

- Missing IT Leadership and Support
  - Getting IT's involvement as soon as possible
  - Joint effort between IT and Business for RPA

- Missing an end to end effective approach/tool to discover, prioritize, and implement RPA opportunities
  - How to correctly understand the "As-Is" processes
  - Improving Process Efficiency before RPA
  - How to find most appropriate process fragments for automation
  - Generating precise RPA specification

Business Process Management Reality
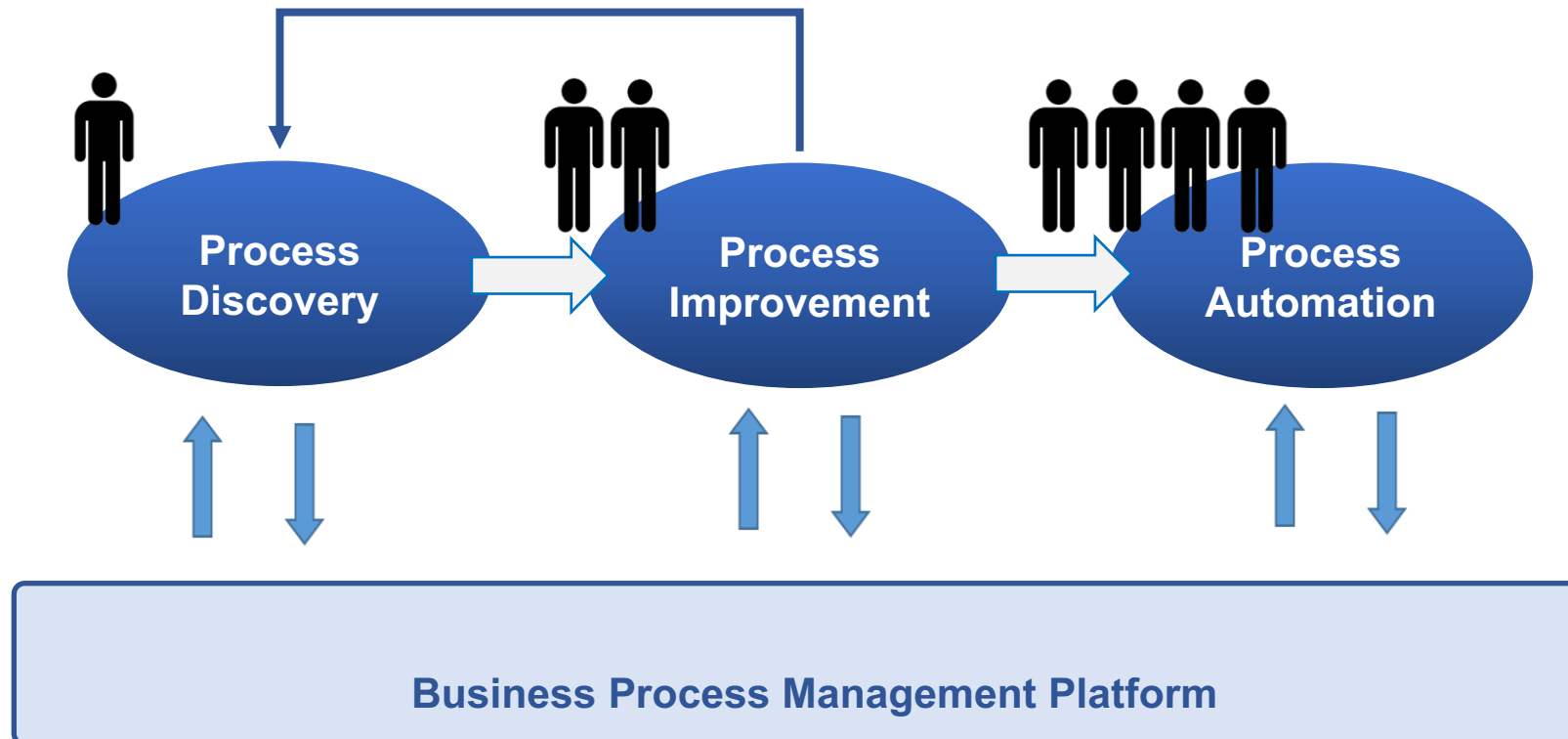
Process Discovery and Improvement Project with StereoLogic Process Analytics

Goal: To accelerate Processes Improvement

- Baseline processes and time
- Standard operating procedures
- Control that all processes' steps are performed
- Measurement of time spent on each step
- Identify inefficiencies, potential points for improvement and automation

Project Time Frame and Processes - 1 week + 3 weeks extension

- People resource used: 1 week + 1.5 weeks extension
- Employees recorded: ~10
- 6 types of processes were analyzed:
  - CTR – Cash Transactions Reporting
  - Non-Post
  - Non-Post – Branch Validation
  - Funding
  - Onboarding
  - Documents production

Post Project – 3 additional months

Acceleration of Transformation and RPA

Project Results

- Documented baseline comprising of several sub processes

- Time measurement of key steps within the process

- Time to resolve each transaction within a single process instance

Non-Post and Branch Validation Processes

- Detected inefficiencies and potential savings – up to 60%

Funding and Onboarding Processes

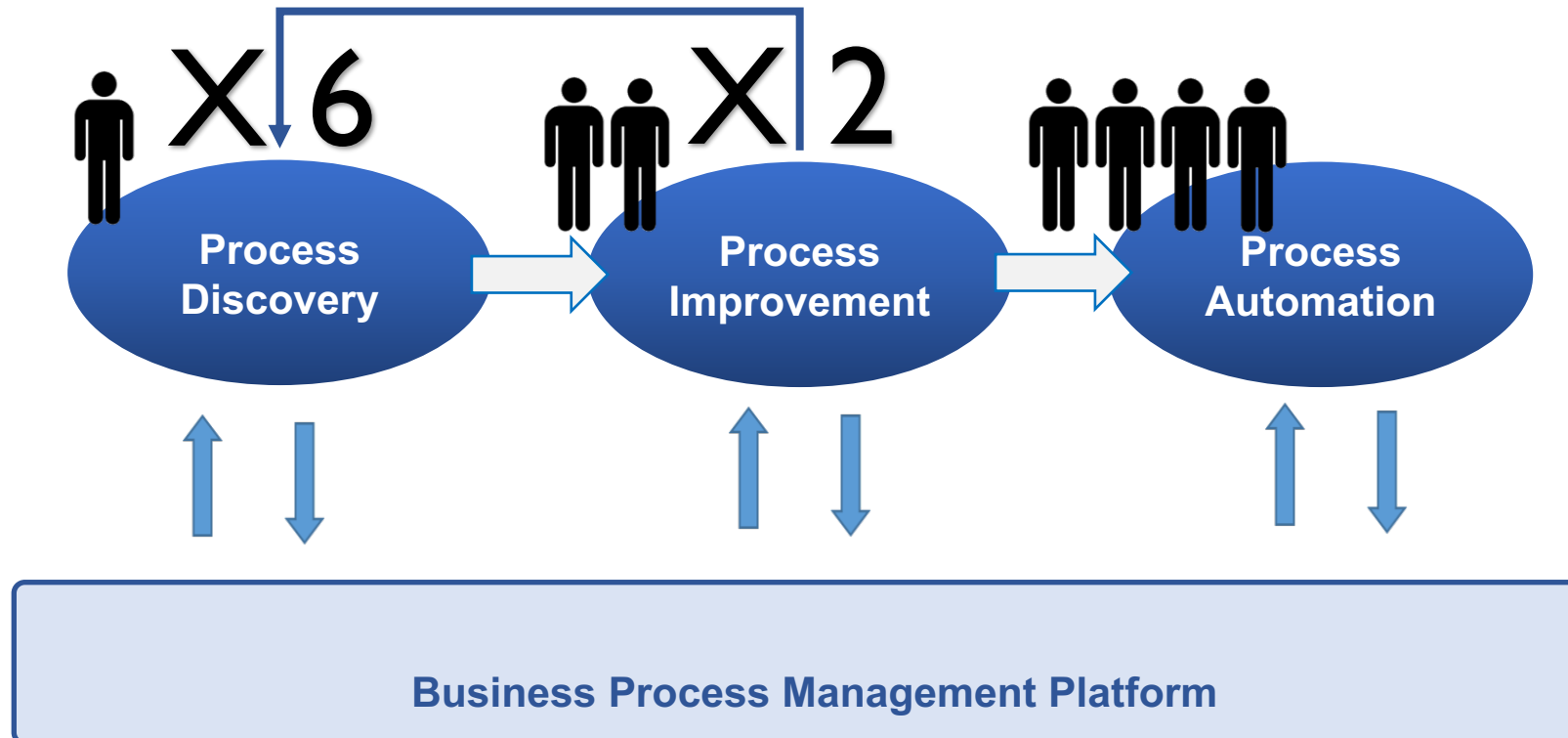- Detected inefficiencies and potential savings – up to 40%

Documents Production Process (HELOC Processes)

- List of data fields transferred between applications

- Time wasted on transferring data fields between applications

- Detected inefficiencies and potential savings – up to 33%

Cash Transaction Reporting:

- Create Desktop Procedure within one week – improvement from months and multiple resources

- Uncover additional improvement opportunities – use Calculator to verify Excel Spreadsheet Results

Acceleration of Transformation and RPA

Business Process Management Reality

X6   X2

Process Discovery → **Process Improvement** → **Process Automation**

Business Process Management Platform

Savings with StereoLOGIC

2.1 - Development Savings

Project Activity	Without StereoLOGIC		With StereoLOGIC
	Conservative	**Max**	
1. Process Analysis			
Analysis (Weeks)	4	4	1
Analysis ($)	$ 10,000	$ 10,000	$ 2,500
2. RPA Implementation			
Initial Development (Weeks)	4	4	3
	$ 10,000	$ 10,000	$ 7,500
3. Re-Work			
Re-Work - Conservative, 25% (Weeks):	1	6	0
	$ 2,500	$ 16,000	$ -
TOTAL COST ($):	$ 22,500	$ 36,000	$ 10,000
TOTAL TIME	9	14.4	4

	Without StereoLOGIC	With StereoLOGIC
BALANCED COST of an RPA project ($) - 25%MAX, 75%CONS:	$ 25,875	$ 10,000
BALANCED TIME of an RPA project - 25%MAX, 75%CONS:	10	4
Total saving per an RPA project ($)		$ 15,875
Total saving per an RPA project (%)		61%
Annual Cost of RPA Development Team ($)		$ 2,400,000
Annual RPA Team Cost Savings with StereoLOGIC		$ 1,472,464

Savings with StereoLOGIC

2.2 - Back Office Team

	Total Annual Cost	RPA savings without StereoLOGIC **(at 20%)**	RPA savings with StereoLOGIC **(at 60%)**
Back Office Staff ($)	$ 15,000,000	$ 3,000,000	$ 9,000,000
Sr. Back Office Staff ($)	$ 2,400,000	$ 480,000	$ 1,440,000
TOTAL COST ($):	$ 17,400,000	$ 3,480,000	$ 10,440,000

Annual Back Office Cost Savings with StereoLOGIC	**$ 6,960,000**

Total Cost Savings with StereoLOGIC	**$8,432,464**