



# UBS

**2019 UBS  
Group Chief Operating Officer (GCOO)  
Case Challenge**

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**Tortoise Honey**  
Presents  
**RemIT**

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# 2



## Agenda

- ▶ Process Analysis and Recommendation
- ▶ Solution Design
  - ▶ Architecture
  - ▶ Security
- ▶ Financial Analysis
- ▶ Execution Plan
- ▶ Moving Forward



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# Process Analysis and Recommendation

# 4

## Objectives of Process Re- Engineering



Improve Customer  
Experience



Better  
Compliance



Improve  
Service Quality



Cost  
Savings



Environmentally  
Sustainable

# 5

## Key Issues



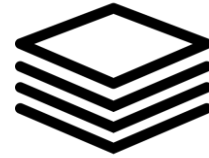
Inefficient and  
Highly Manual



Incomplete  
Information



Single Point  
of Failure



Huge  
Carbon Footprint

# 6

## Key Issues



Incorrect  
Payments



Inefficient  
Verification



No Urgent  
Instructions



Regulation  
Risk

# 7

## Overall Statistics of As-Is Process

### Process Statistics per Payment Instruction



Time Taken

90.50 minutes



Cost Incurred

\$30



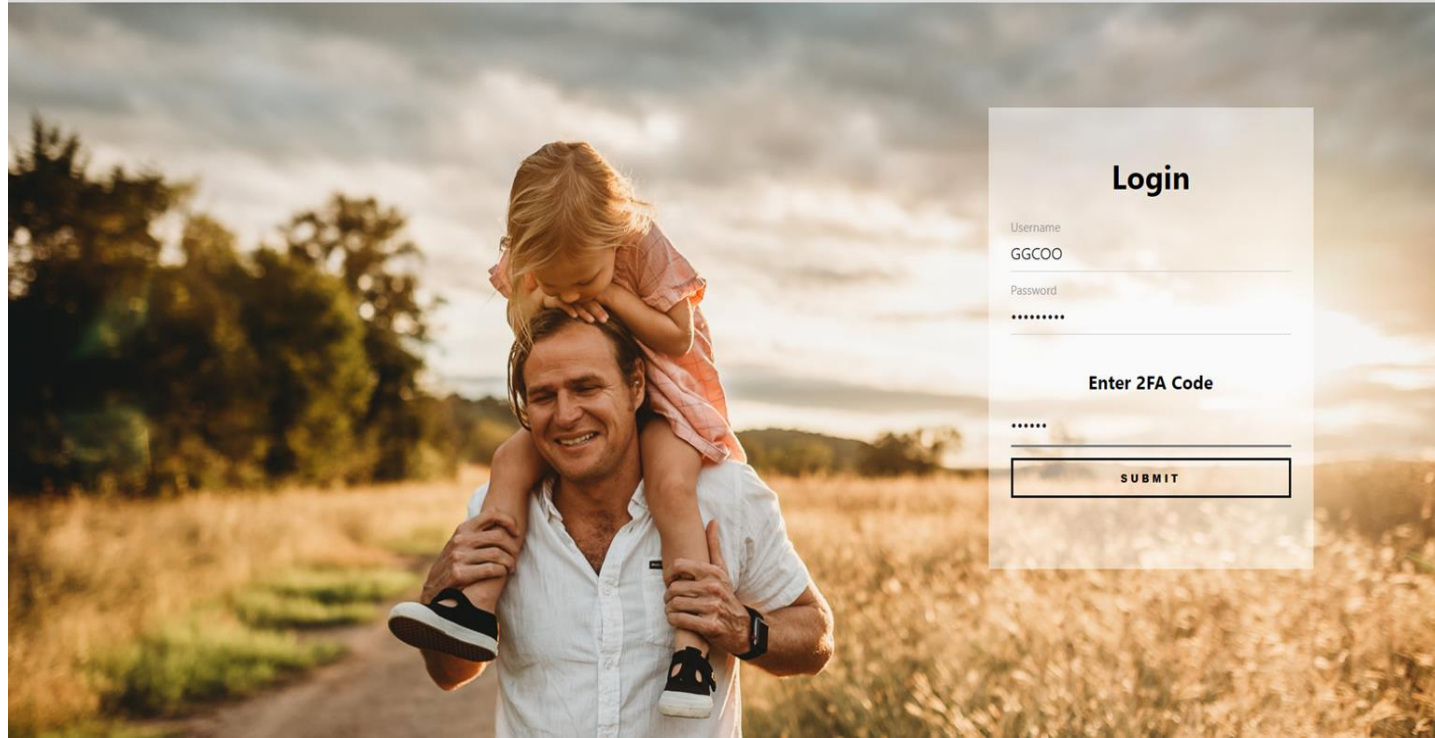
Total Executable per  
Day

5 (8 hours)

# 8

## Recommendations

### Replaces Signatures with 2FA





# 9

## Recommendations

# Replace Front Office with Web Form

GGC00 ▾

## Payment Instruction

### Account

Account Name

Account Number

Currency

Amount

Value Date

Reason

### Beneficiary

Beneficiary Account Number

Beneficiary Name

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## Recommendations

# Replace Front Office with Web Form

### Account

Account Name

Account Number

Currency

USD

Amount

Value Date

Reason (UAE)

ACM: Agency Commission

### Beneficiary

Beneficiary Account Number

Beneficiary Name

### Beneficiary's Bank

BIC

ABNAAEADAUH

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## Recommendations



## Application to Automate Process

# 12

## Recommendations

# Upgraded CashOut Application

CA1 ▾

### Payment Order

Process

Payment Method

Ticket ID

Callback ▾

Order of

Order Issued With

Person Instructing

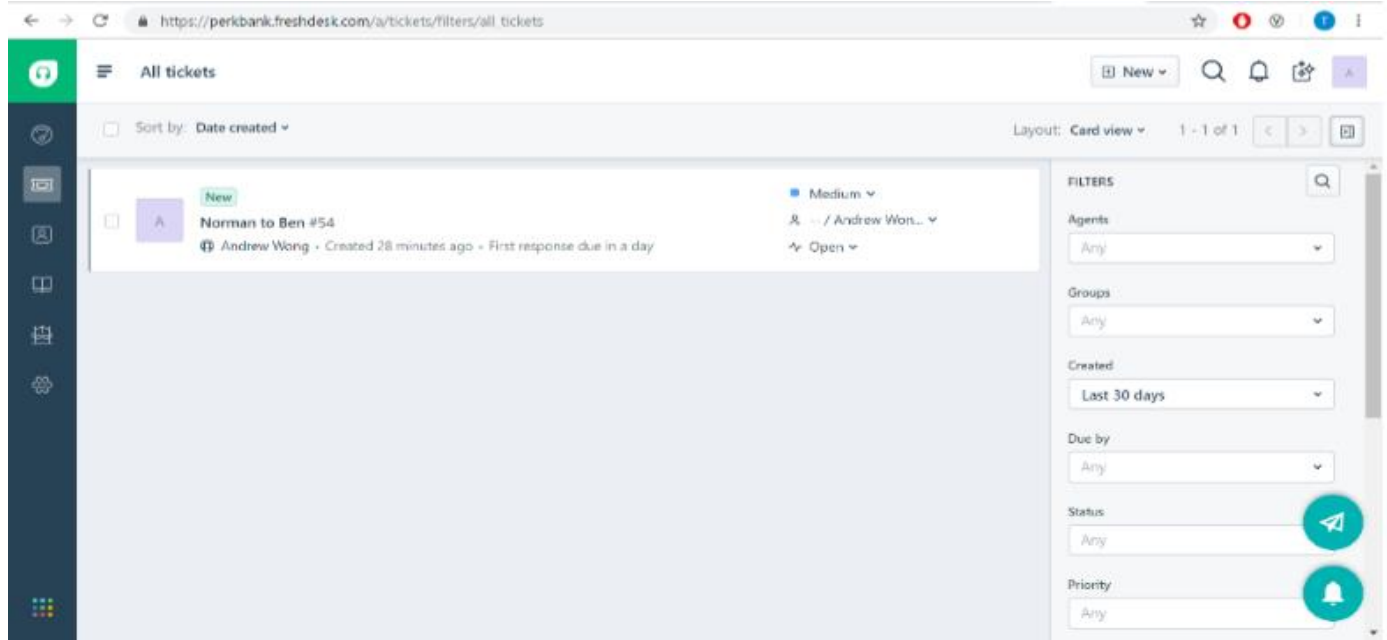
### Account

Account Number

# 13

## Recommendations

# Upgraded CashOut Application



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## Recommendations

# Upgraded CashOut Application

The screenshot displays the Freshdesk ticketing system interface for a ticket titled "Norman to Ben". The URL in the browser is <https://perkbank.freshdesk.com/a/tickets/54>. The ticket is currently "Open" and was reported via the portal by Andrew Wong, created by Tan Wei Young. The ticket is marked as "New".

**Ticket Details:**

- Subject:** Norman to Ben
- Reporter:** Andrew Wong (reported via the portal)
- Created by:** Tan Wei Young
- Status:** Open
- First Response Due:** by Wed, 03 Jul 2019, 01:59 PM
- Resolution Due:** by Wed, 03 Jul 2019, 02:59 PM

**Properties:**

- Tags:** (empty field)
- Type:** (dropdown menu)
- Status:** Open (dropdown menu)

**Contact Details:**

- Name:** Andrew Wong
- CA1:** (empty field)
- Email:** ubsgcooca1@gmail.com

**Time Log:** (empty field)

**To-Do:** (empty field)

**Update:** (button)

**Ticket Content:**

Andrew Wong reported via the portal, 29 minutes ago

acc\_name Norman  
acc\_number 111222333  
currency USD  
amount 100000  
value\_date 17/09/2019  
reason  
ben\_acc\_no 555666777  
ben\_name Ben  
bic ABNACAT10MM  
ben\_bank\_name The Royal Bank Of Scotland Plc Canada

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## Recommendations

# Upgraded CashOut Application

CA1 ▾

### Payment Order

#### Process

Payment Method

Ticket ID

54

Callback

Order of

Order Issued With

\*

Person Instructing

Norman

#### Account

Account Number

111222333

# 16

## Recommendations

# Upgraded CashOut Application

Beneficiary Account Number  
555666777

Beneficiary Name  
Ben

Beneficiary Address  
Big Street

13.250.216.206 says  
Payment order has been submitted.

OK

Beneficiary's Bank

BIC  
ABNACAT10MM

Beneficiary Bank Name  
The Royal Bank Of Scotland Plc Canada

Beneficiary Bank Address  
Small Street

Submit

[ Sticky Notes ]



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Recommendations



## Enterprise Protection Solution

# 18

## Managing Complexity

### Transition Management Workshops



Frequent Hands-On Workshops



Peer Assist System



Tie to KPI

# 19

**Reduction  
in  
manpower**

	<b>Reduction</b>
<b>Client Advisor Assistants</b>	<b>20%</b>
<b>PerkPay</b>	<b>100%</b>
<b>Documents</b>	<b>100%</b>

# 20

**More Value -  
Added Roles**

**Client Advisors**

**Client Advisor Assistants**

**PerkPay**

**Payments**

**Cash Management**

**Documents**

**Information Security**

**Application Development**

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## Overall Statistics of To-Be Process

### Process Statistics per Payment Instruction



Time Taken

41.50 minutes **53% faster**



Cost Incurred

\$10 **66% cheaper**



Total Executable per  
Day per Staff

11 **120% more**

# 22

Overall  
Statistics of  
To-Be  
Process

## Qualitative Benefits Experienced by Stakeholders



Convenience



Mundane Work

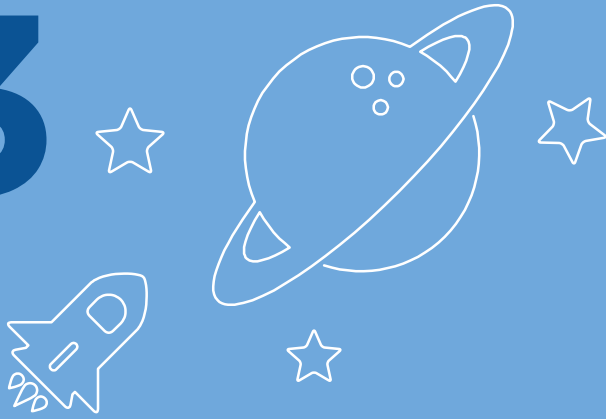


Customer  
Satisfaction



Personal Touch

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Technology

# 24

## Technology Used

### Web Application



### Server



### Data Management



### Messaging



### Container Application



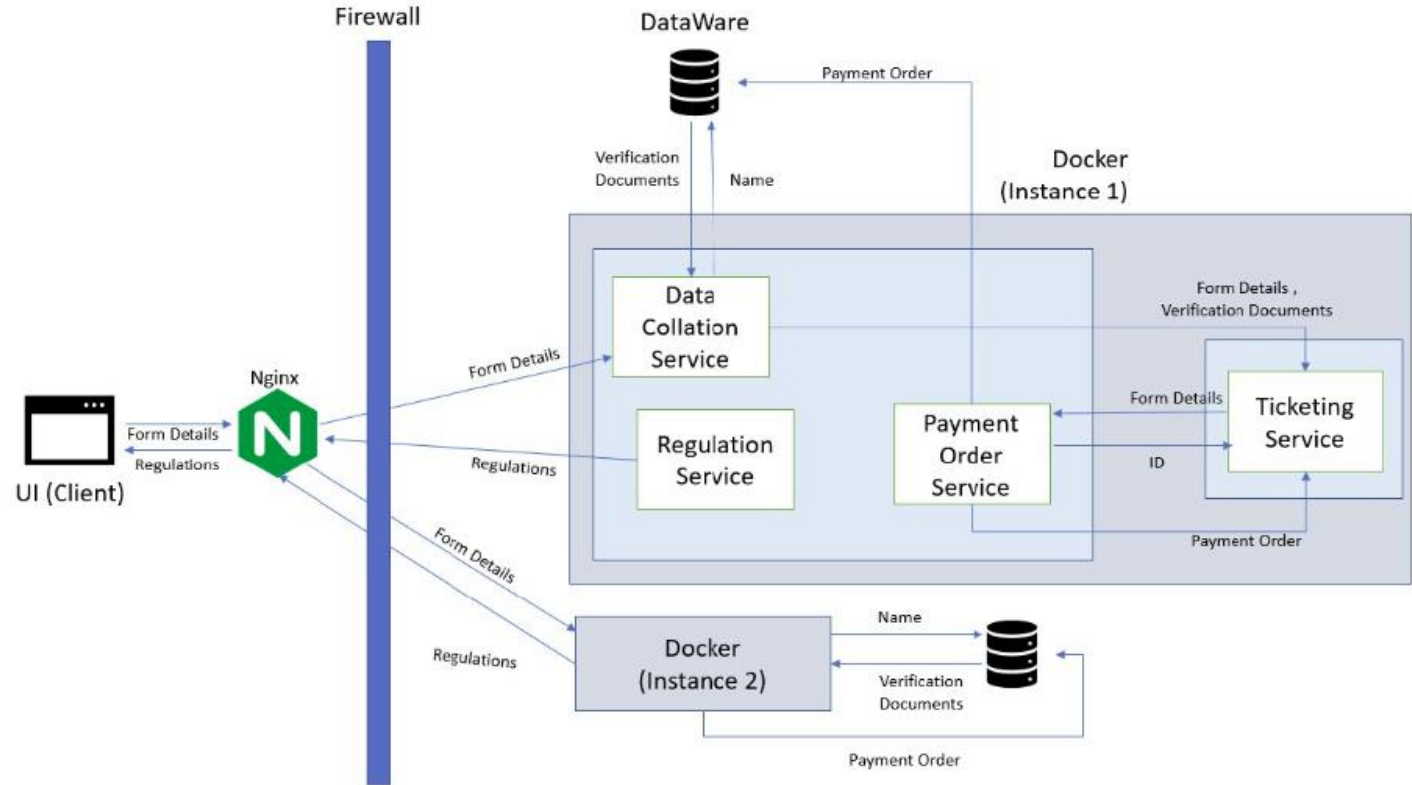
### Security





# 25

## High Level Architecture



# 26

## Services & Their Functions



Data  
Collation



Payment  
Order



Regulation



Ticketing

# 27

## Key Strengths

### Scalable, Resilient and Easily Maintained



Service Oriented Architecture



Load Balanced



Containerized Applications

# 28

## Key Strengths

### Security



2 Factor Authentication



Authentication Tokens



256-bit encryption algorithm



Data Loss Prevention - Symantec

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# Finances

# 30

## Choosing the Right Solution

	Option 1: Perk Bank Internal Solution	Option 2: Excellence Contracting Agency Solution	Option 3: Prestigious Systems and Services Leasing
Return on Investment (ROI)	121.89%	190.42%	231.08%
Implementation Risk	Low	Medium	High

# 31

# \$1,911,941.51

Net Profit Value

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# 1.84 years

Discounted Payback Period

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# 100%

Success!

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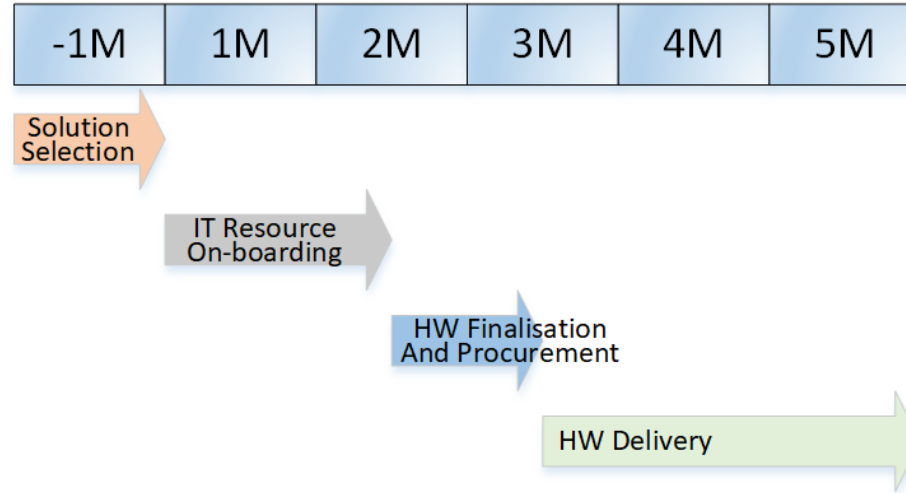
# Execution Plan



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## Timeline

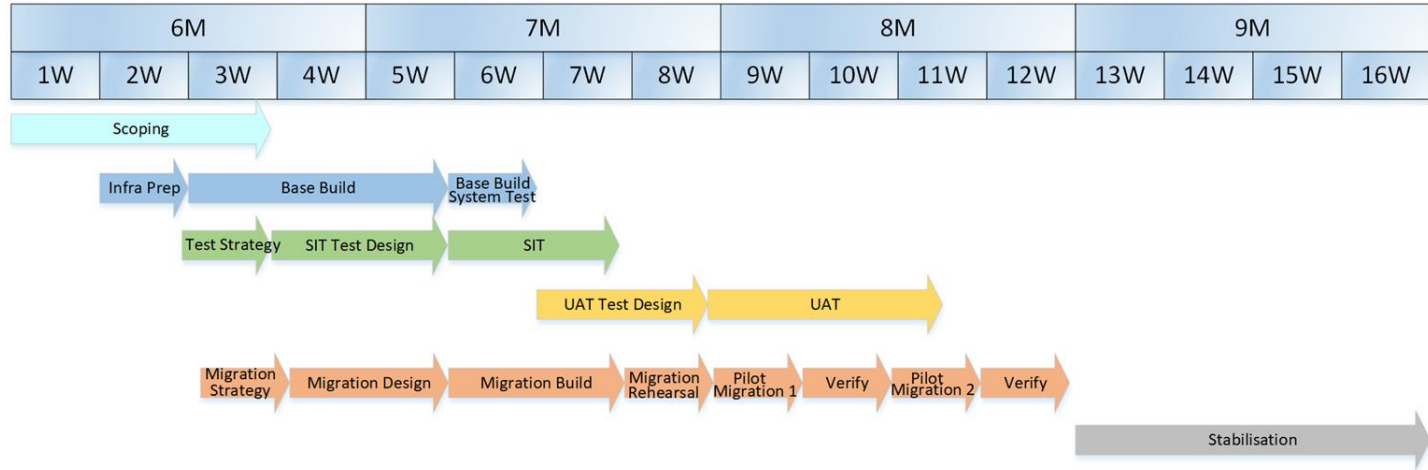
### Phase 1 - Project Preparation



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## Timeline

## Phase 2 - Project Delivery



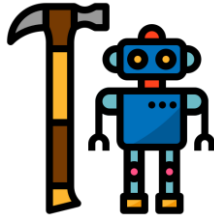
A decorative header featuring a grid of light blue icons on a white background. The icons include a document, a tag, a puzzle piece, a magnifying glass, a smartphone, a document with lines, a target, a gear, a pie chart, an envelope, a speech bubble, a lightbulb, a clock, a checkmark, and a thumbs up. The number 35 is prominently displayed in a large, bold, dark blue font on the left side of the header.

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# Moving On

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What is  
Next?



**Further Automation**



**Enhancing the Process**

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# Conclusion

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## Conclusion



**Secured**



**Customer  
Experience**



**Cost Saving**

A close-up photograph of a hand holding a blue pen, writing on a piece of paper. The hand is wearing a grey, textured sweater. The background is blurred, showing more of the paper and the pen.

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# THANKS!

**Any questions?**

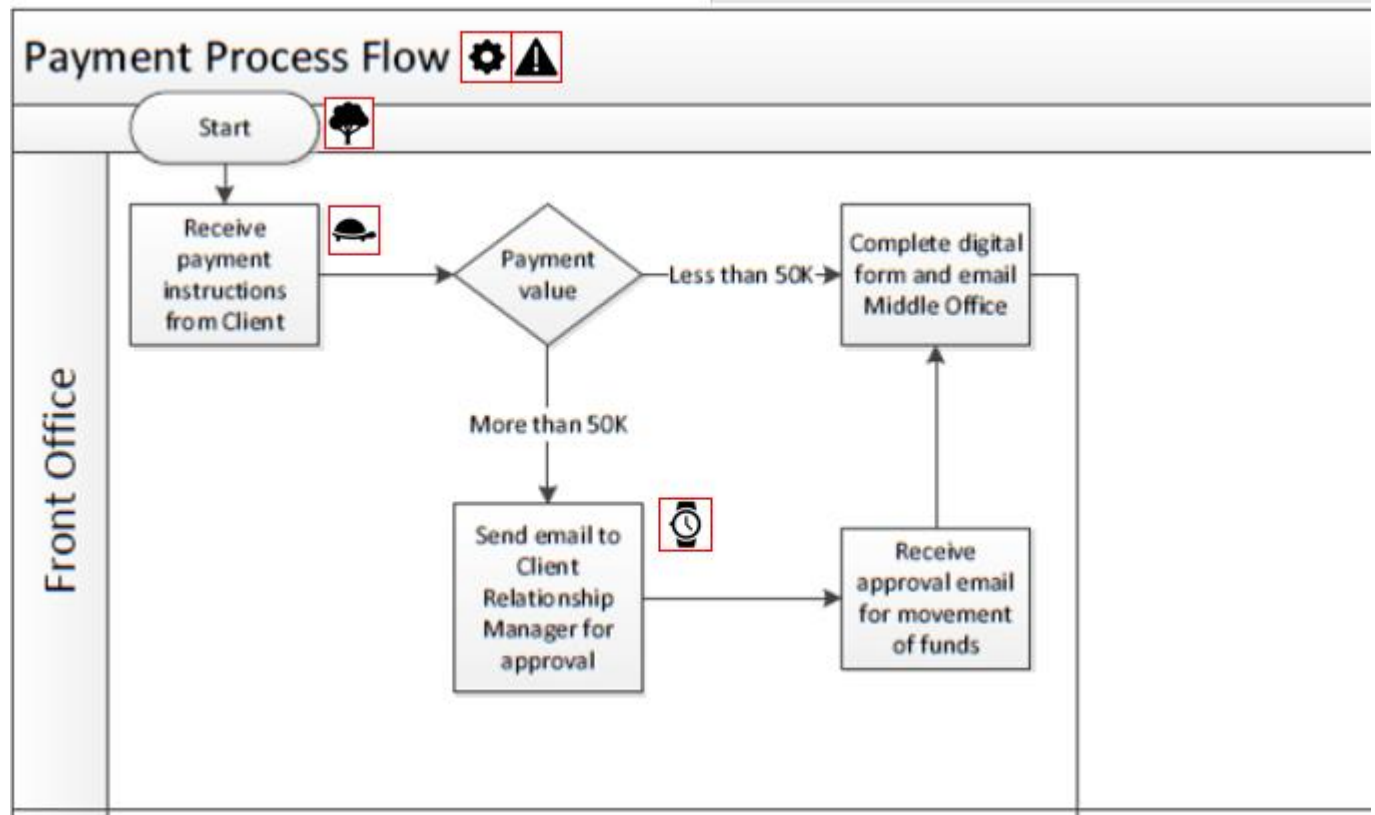
40

# Appendices



# 41

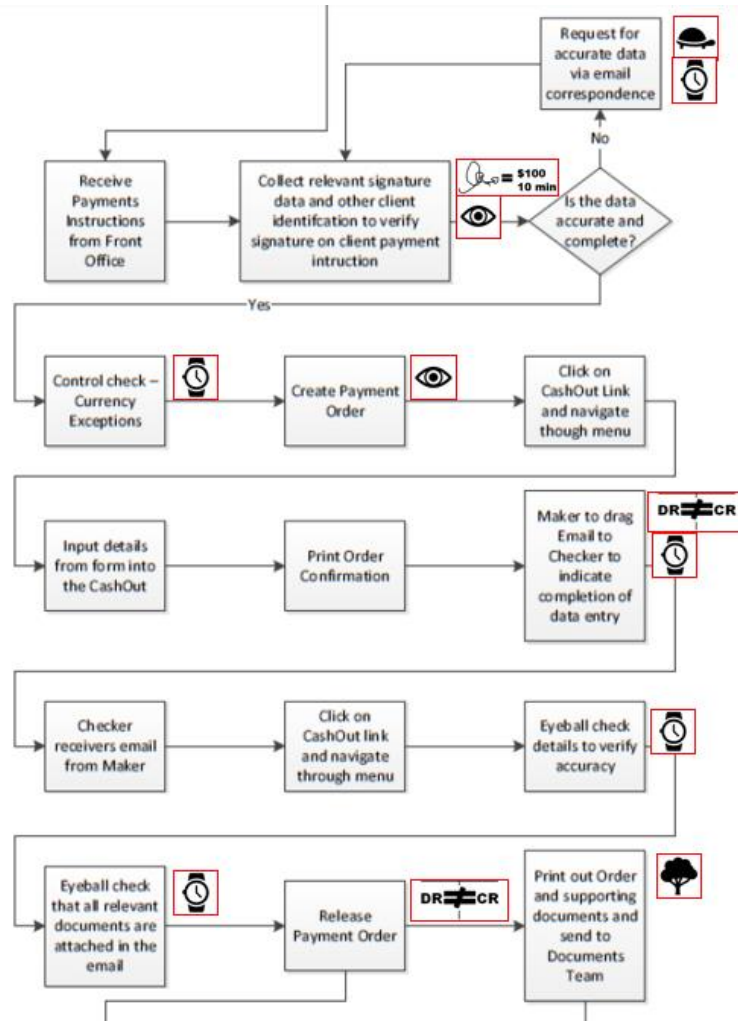
## Problematic Activities in Workflow



# 42

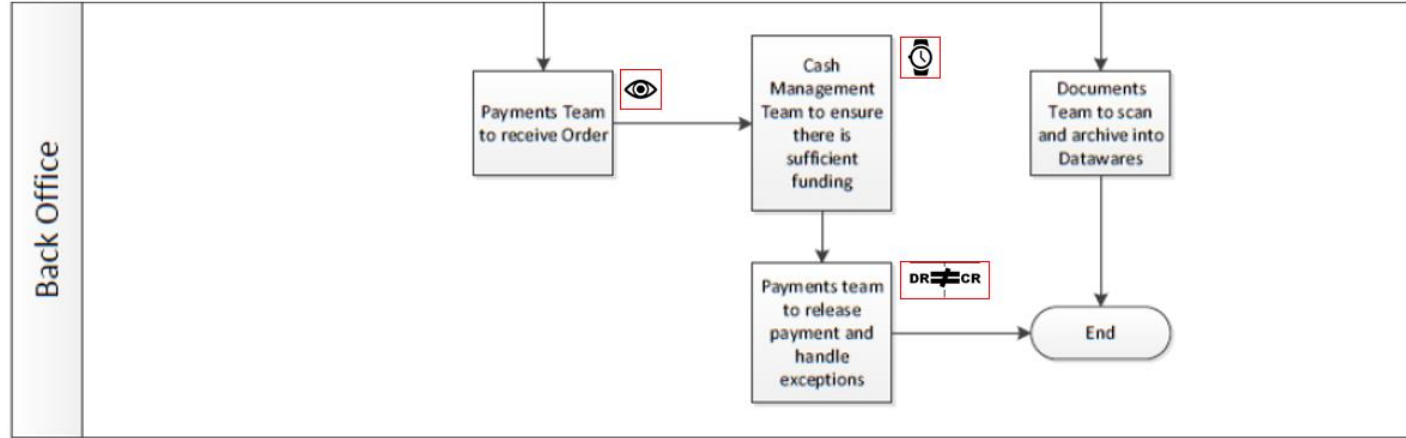
## Problematic Activities in Workflow

### Middle Office

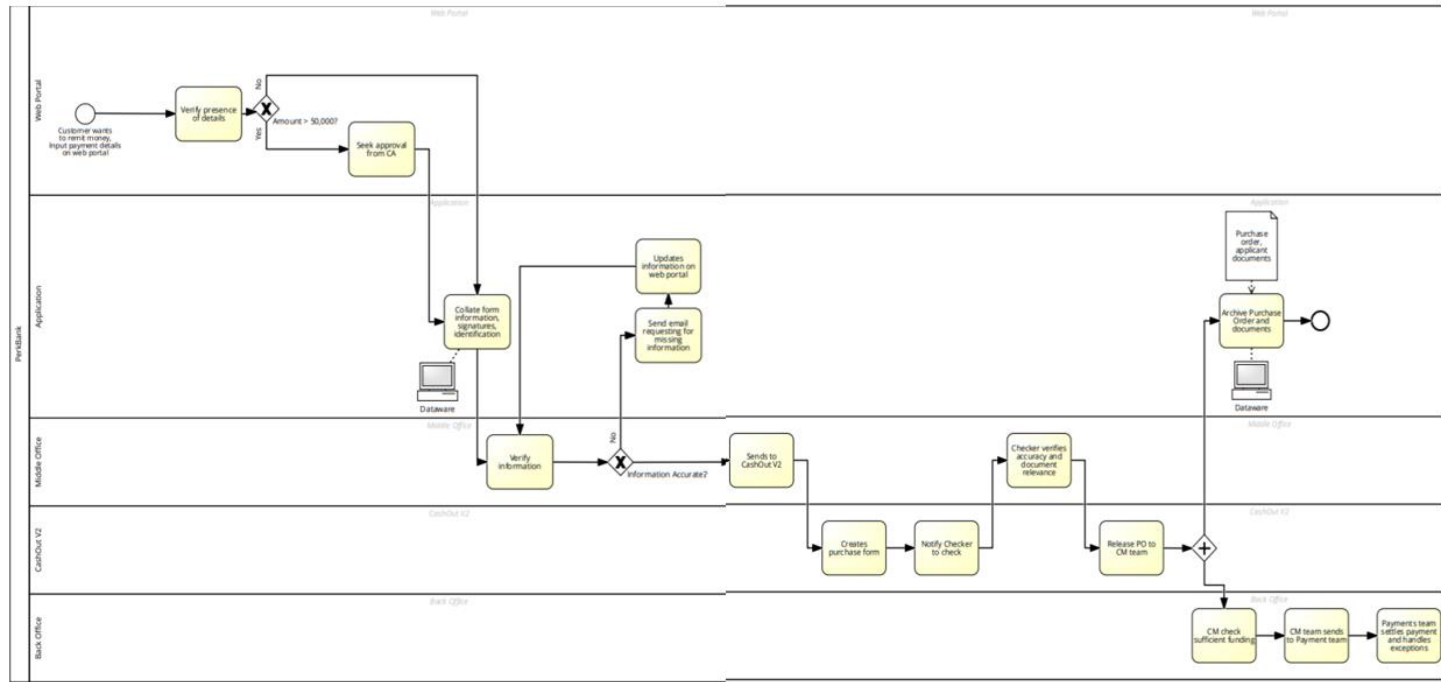


# 43

## Problematic Activities in Workflow




## TO DO



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## Managing Complexity

### Transition Management Workshops


<u>Change</u> 	<u>Change Owner</u>	<u>Details</u>
Educate Front, Middle and Back office in using the new digital tools	<b>Front: Monica Young</b> (Advisors, Relationship Managers) <b>Middle: Joey Lee</b> <b>Back: Chandler Wavro</b> (payments, Cash management, Documents)	Three 1 Day workshops, 1 week apart, will be held to teach staff.  Hands-on support will be given from change makers and change owners to guide team on familiarizing with new functions.  Peer assist system will be set up to make department accountable for helping each other. Performance KPI will be tied to this.

All workshops will include going through the end user & video guide. It will also include scenarios for hands-on practice.

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## Managing Complexity


### Transition Management Workshops

<u>Change</u> 	<u>Change Owner</u>	<u>Details</u>
Educate SMEs on naming conventions to be used in Dataware	John Hoh (Documents)	<p>Owner to work with change management to standardize naming conventions of files in Dataware.</p> <p>Three 1 day workshops, a week apart, will be conducted to teach staff of new naming convention.</p> <p>Documents team will be split into 4, with each change maker supervising 1 team. Daily review will be conducted to ensure accuracy of renaming.</p> <p>Additional workshops will be enforced every 2 days (where necessary) to further align team's understanding.</p>

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## Managing Complexity


### Transition Management Workshops

<u>Change</u> 	<u>Change Owner</u>	<u>Details</u>
Currency exceptions handling on web form to be updated by Perkpay	Ross Chan (PerkPay)	<p>Three 1 day workshops, a week apart, will be conducted to teach staff to add new / update exceptions into system.</p> <p>Documents team will be split into 4, with each change maker supervising 1 team. Daily review will be conducted to ensure accuracy of renaming.</p> <p>Peer assist system will be implemented.</p>

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## Managing Complexity

### Transition Management Workshops

<u>Change</u> 	<u>Change Owner</u>	<u>Details</u>
Educate Information Security team on documenting fraudulent transactions (phishing etc)	<b>Rachel Clarke</b> (Detection) <b>Chandler Wavro</b> (Payments, Cash Management)	Three 1 day workshops, a week apart, will be conducted to teach workflow to teams.  Change makers will create intentional fraudulent transactions to monitor team performance on monthly basis for 1 year, bi-annually after.



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## Manpower Cost Calculation

		Option 1: Perk Bank Internal Solution	Option 2: Excellence Contracting Agency Solution	Option 3: Prestigious Systems and Services Leasing
Change Maker Team	Working Days	25	25	-
	Employees Needed	4	4	-
Programmers	Min Days to Complete Per Employee	87	75.3	87
	Actual Days Taken (Working Days)	87	75	80
	Employees Needed	23	17	5
	Actual Days Taken Collectively (Non-Working Days)	-	5	-
	One Time Additional Cost	\$10,000	\$10,000	-
Manpower Cost		\$670,300	\$1,115,625	\$168,000

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## Profit & Loss Statement

Option 2 : Excellence contracting agency solution						
Profit and Loss Statement						
(USD)						
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Revenue</b>						
Cost Savings (Solution)	-	\$1,020,000	\$1,020,000	\$1,020,000	\$1,020,000	\$1,020,000
Cost Savings (Business Process)*	-	\$18,000	\$18,000	\$18,000	\$18,000	\$18,000
<b>Total Revenue</b>	-	\$1,038,000	\$1,038,000	\$1,038,000	\$1,038,000	\$1,038,000
<b>Expenses</b>						
Manpower Cost	\$1,115,625	-	-	-	-	-
Capital Expenditure (with Depreciation)	\$10,000	\$52,500	\$52,500	\$52,500	\$52,500	-
<b>Operational Cost</b>	<b>\$59,109</b>	<b>\$307,864</b>	<b>\$307,864</b>	<b>\$307,864</b>	<b>\$307,864</b>	<b>\$307,864</b>
Manpower Cost	-	\$288,000	\$288,000	\$288,000	\$288,000	\$288,000
<b>Software Subscription Cost</b>	<b>\$59,109</b>	<b>\$19,864</b>	<b>\$19,864</b>	<b>\$19,864</b>	<b>\$19,864</b>	<b>\$19,864</b>
Symantec Protection Suite Enterprise Edition	-	\$19,850	\$19,850	\$19,850	\$19,850	\$19,850
Twilio Programmable SMS Service	-	\$14	\$14	\$14	\$14	\$14
Oracle Database Enterprise Edition	\$59,109					
<b>Total Expenses</b>	<b>\$1,184,734</b>	<b>\$360,364</b>	<b>\$360,364</b>	<b>\$360,364</b>	<b>\$360,364</b>	<b>\$307,864</b>
<b>Net Income</b>	<b>-\$1,184,734</b>	<b>\$677,636</b>	<b>\$677,636</b>	<b>\$677,636</b>	<b>\$677,636</b>	<b>\$730,136</b>
<b>Return On Investment (ROI)</b>	<b>190.42%</b>					

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## Cost Saving Calculation

<b>Report:</b>	Cost Calculation (Process)			
<b>Date:</b>	29.06.2019			
<b>Time:</b>	10:21:14			
<b>Name:</b>	Perk Bank Remittance Process			
<b>Frequency (per year):</b>	1800			
			Without Cost Center	Total
Task	Input factor	Costs per execution	Costs	Costs
Verify presence of details	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Seek approval from CA	0.50	\$ 0.00	\$ 0.00	\$ 0.00
Collate form information, signatures, identification	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Verify information	2.00	\$ 1.67	\$ 5,999.99	\$ 5,999.99
Send email requesting for missing information	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Updates information on web portal	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Sends to remIT	1.00	\$ 0.33	\$ 600.00	\$ 600.00
Creates purchase form	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Notify Checker to check	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Checker verifies accuracy and document relevance	1.00	\$ 1.67	\$ 2,999.99	\$ 2,999.99
Release PO to CM team	1.00	\$ 0.00	\$ 0.00	\$ 0.00
Archive Purchase Order and documents	1.00	\$ 0.00	\$ 0.00	\$ 0.00
CM check sufficient funding	1.00	\$ 1.00	\$ 1,799.99	\$ 1,799.99
CM team sends to Payment team	1.00	\$ 0.33	\$ 600.00	\$ 600.00
Payments team settles payment and handles exceptions	1.00	\$ 3.33	\$ 5,999.98	\$ 5,999.98
<b>Sums</b>		<b>\$ 10.00</b>	<b>\$ 17,999.94</b>	<b>\$ 17,999.94</b>

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## Net Present Value & Payback Period

Initial Investment

\$ 1184734.00

Discount Rate

3.580%

Cash Flow

Year 1: \$ 677636

Year 2: \$ 677636

Year 3: \$ 677636

Year 4: \$ 677636

Year 5: \$ 730136

+ Add Year

Calculate

**\$1,911,941.51**

Net Present Value

Discounted Payback Period: **1.840 years**

Cash Flow Return Rate: **49.94% per year**

	Cash Flow	Net Cash Flow	Discounted Cash Flow	Net Discounted Cash Flow
Year 0	\$-1,184,734.00	\$-1,184,734.00	\$-1,184,734.00	\$-1,184,734.00
Year 1	\$677,636.00	\$-507,098.00	\$654,215.10	\$-530,518.90
Year 2	\$677,636.00	\$170,538.00	\$631,603.69	\$101,084.79
Year 3	\$677,636.00	\$848,174.00	\$609,773.79	\$710,858.57
Year 4	\$677,636.00	\$1,525,810.00	\$588,698.38	\$1,299,556.96
Year 5	\$730,136.00	\$2,255,946.00	\$612,384.56	\$1,911,941.51