



Achmea Underwriting Workflow Automation

The Team



Kristen Phan

Master's student in
Business Information
Technology at University
of Twente;
Former consultant at
Ernst & Young U.S.
[LinkedIn](#)



Wouter Hottenhuis

Master's student in
Industrial Engineering &
Management at
University of Twente;
Specialisation Financial
Engineering.
[LinkedIn](#)



Jasper Trentelman

Master's student in
Business Administration
at University of Twente;
Specialisation Digital
Business & Supply Chain
Management
[LinkedIn](#)



Pim Eerden

Master's student in
Industrial Engineering &
Management at
University of Twente;
Specialisation Financial
Engineering.
[LinkedIn](#)



Jeroen Smits

Master's student in
Business administration
at University of Twente
Specialisation Digital
Business;
[LinkedIn](#)



Agenda

- 1. Executive Summary
- 2. Project Overview
 - Corporate Strategy
 - Business Drivers + IT Strategic Goals
 - Economic Impact
- 1. Proposed vs. Actual Implementation
 - Project Roadmap
 - Stakeholder Analysis
 - Risk Analysis
 - Key Performance Indicators (KPIs)
 - Agile Development
 - User Acceptance
 - Release Plan
- 1. Key takeaways
 - UT Team's Perspective
 - Achmea Team's Perspective
- 2. Conclusion



Executive Summary

1. SITUATION (2018):

Un-uniform Underwriting Workflow

260

sub-workflows

300+

underwriters



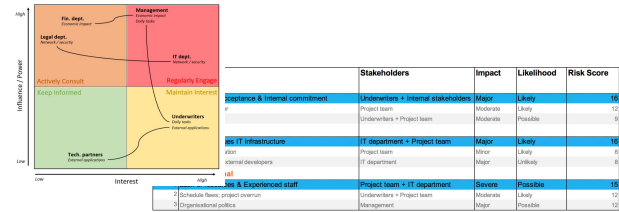
Zilveren
Kruis

Centraal
Beheer

Interpolis.

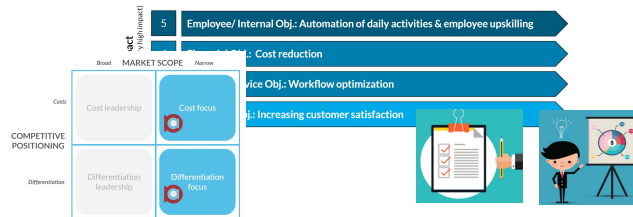
2. COMPLICATION:

Stakeholder Mgmt., Risk Analysis



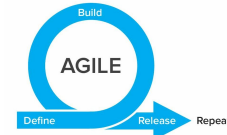
3. QUESTION:

Business Drivers + IT Goals, User Acceptance



4. ANSWER:

Pega, Agile, Release Plan, KPIs

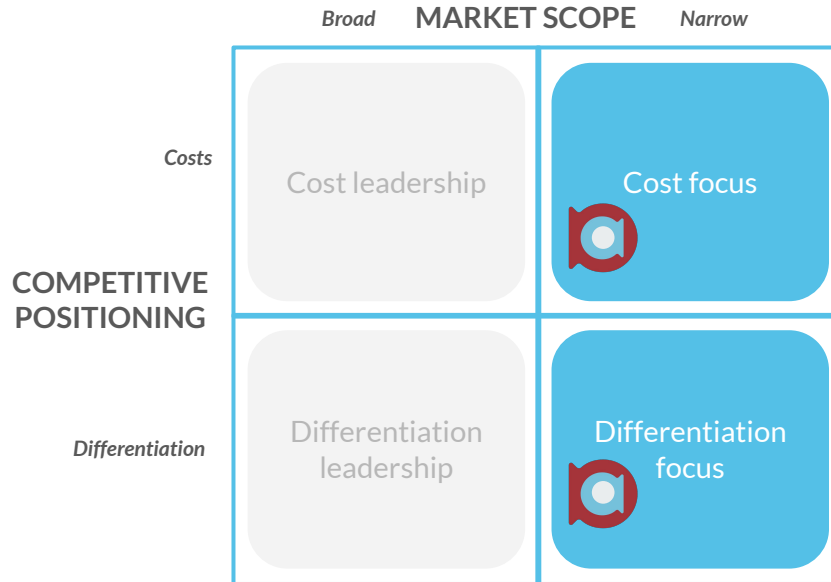


133%

5-year ROI



Corporate Strategy



“We will invest in markets only where we can realize economies of scale”




Corporate Strategy

Exhibit 3: Benefits of BPM in Underwriting

Benefit	Impact	BPM Helps Insurers...
Decreased operating expense	Bottom line	<ul style="list-style-type: none">■ Achieve rule-driven decision-making and straight-through processing■ Support consistency and better performance metrics (business activity monitoring)■ Enhance business user experiences leading to better productivity and job satisfaction■ Improve compliance to regulations
Decreased IT expense	Bottom line	<ul style="list-style-type: none">■ Build configurable underwriting systems to lower maintenance and support costs
Increased premium income	Top line	<ul style="list-style-type: none">■ Enhance ability to issue policies, leading to enhanced customer and agent experiences

Support Achmea's
“cost focus” and
“differentiation focus”

Key Business Drivers



Level of Impact (1=very low impact; 5 = very high impact)	5	Employee/ Internal objective: Automation of daily activities & employee upskilling
	4	Financial objective: Productivity gains & lower loss burden (better risk analysis)
	3	Product/ service objective.: Workflow optimization
	1	Customer objective: Increasing customer satisfaction



IT Strategic Objectives

Level of Impact (1=very low impact; 5 = very high impact)	5	Application objective: Build a new workflow application
	5	Security strategy: Better safeguard client data
	4	Service strategy: Better perform risk analysis for policy pricing purposes
	3	Information/ data strategy: Build a centralised database
	3	Infrastructure strategy: Integrate with Achmea's infrastructure
	1	Sourcing Strategy: Select one of Achmea's approved vendors



Economic Impact

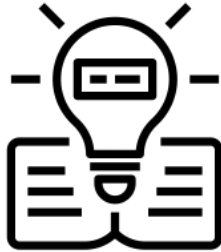
→ Gains on all organizational levels

and: $5 \text{ year ROI} = \frac{\text{Gains} - \text{Costs}}{\text{Costs}} \approx 133\% \text{ (from 2021 - 2025)}$



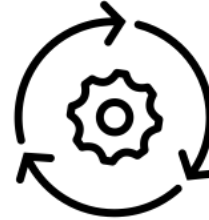
Implementation phase 1					Implementation phase 2	
	'18-'20	'21	'22	'23	'24	'25
milj. €						
2					Better risk assessment	Better risk assessment
1,5						
1						
0,5		Productivity gains	Productivity gains	Productivity gains	Productivity gains	Productivity gains
-0,5			Development costs	Training costs		
-1	unknown costs	Development costs	Training costs			
-1,5						

Proposed vs. Actual Implementation



Proposed Implementation

By UT team based on the understanding of the project (interview #1) & literature review



Actual Implementation

By Achmea team (interview #2)

Proposed Project Roadmap

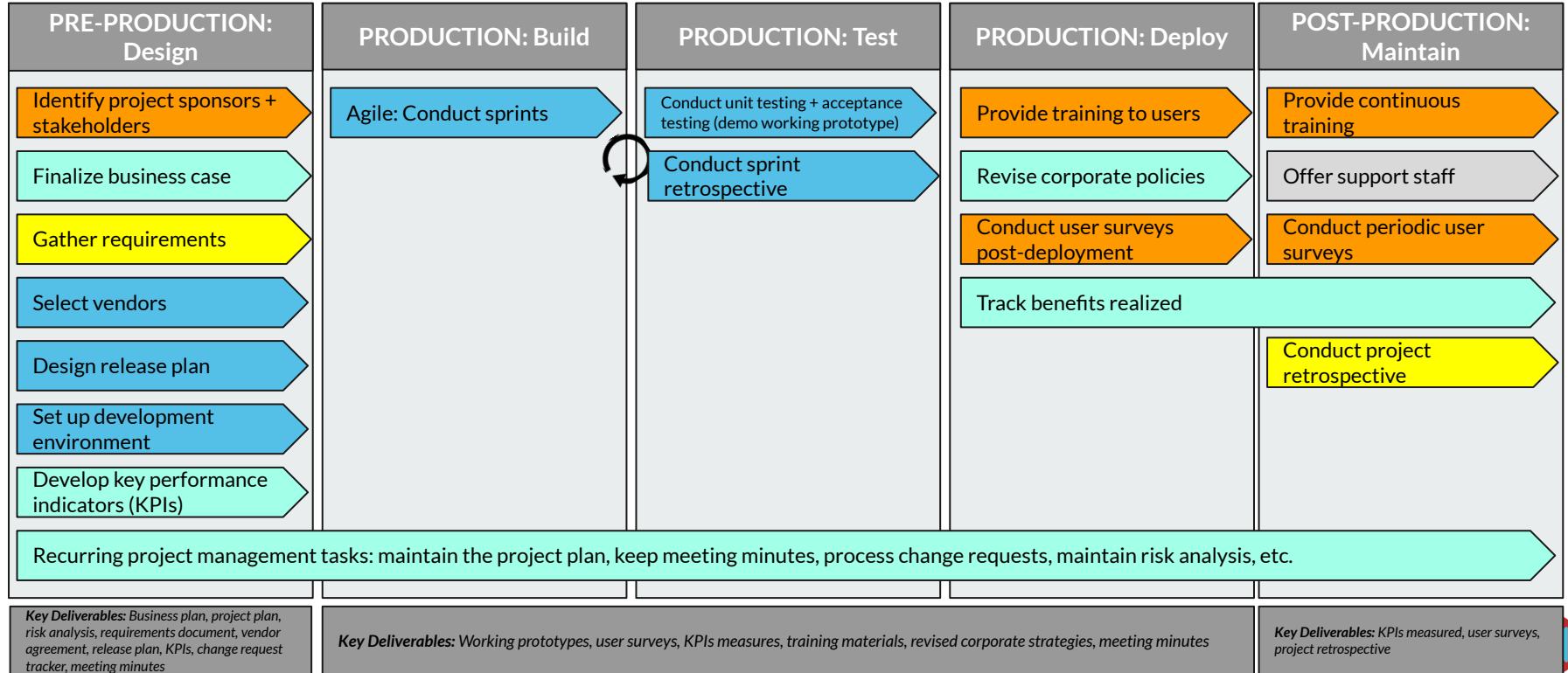
Implementation challenges:

human

technical

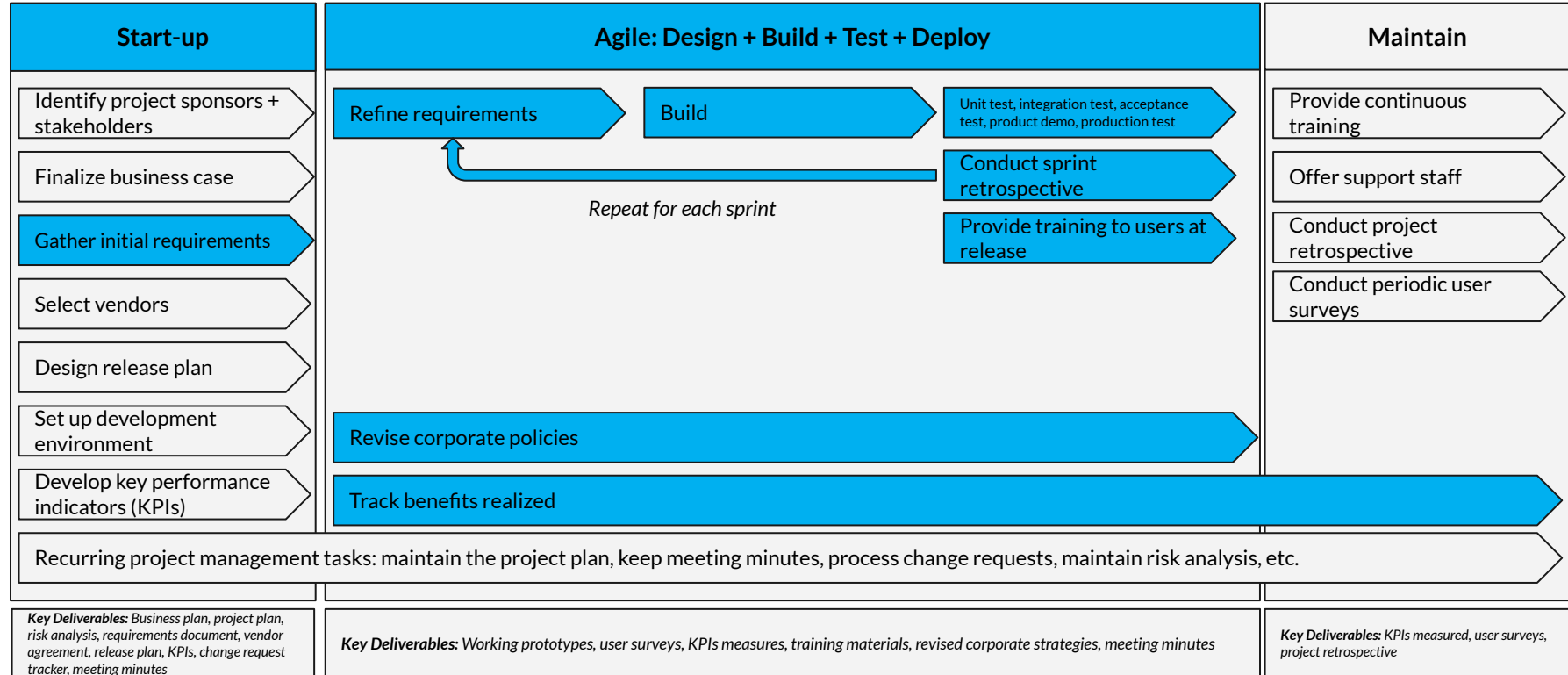
organizational

mixed



Actual Project Roadmap

Items that differ between the proposed
& actual project roadmap



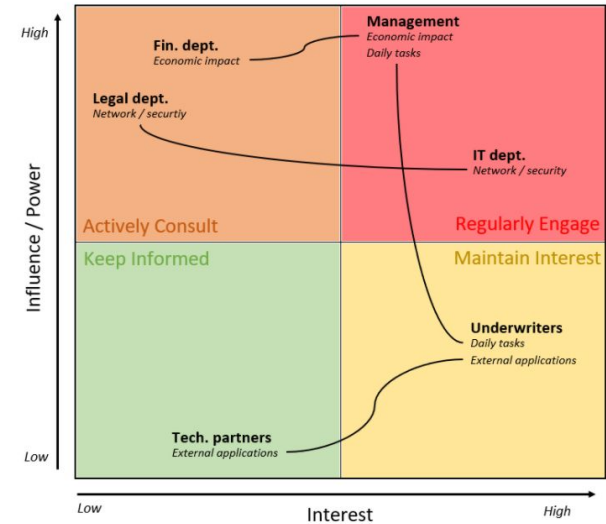
Stakeholder Analysis

Similarities




- Stakeholders identified + interest/ influence level
- Main takeaways:
 1. Involving underwriters early
 2. Aligning IT and legal
 3. Paying attention to technological partners

Differences

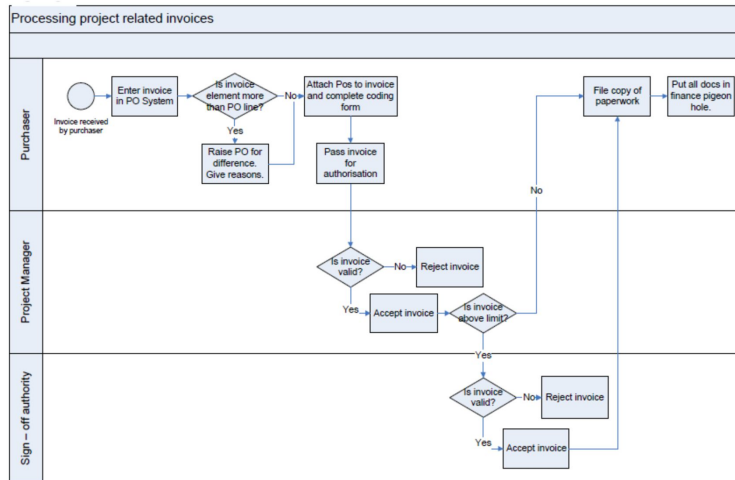
- Select several key underwriters as pilot test users



Risk Analysis

#	Risk	Stakeholders	Impact	Likelihood	Risk Score
	Human				
1	Lack of user acceptance & Internal commitment	Underwriters + Internal stakeholders	Major	Likely	16
2	Employee turnover	Project team	Moderate	Likely	12
3	Lack of training	Underwriters + Project team	Moderate	Possible	9
	Technical				
1	Integration issues IT infrastructure	IT department + Project team	Major	Likely	16
2	Requirements inflation	Project team	Minor	Likely	8
3	Dependency on external developers	IT department	Major	Unlikely	8
	Organisational				
1	Lack of resources & Experienced staff	Project team + IT department	Severe	Possible	15
2	Schedule flaws; project overrun	Underwriters + Project team	Moderate	Likely	12
3	Organisational politics	Management	Major	Possible	12

Requirements Gathering



What Are Requirements?

Detailed description of client needs

Business vs. Software vs. Functional requirements



Why Gather Requirements?

Baseline of the development

Avoid rework at later development stages

Achmea team spent **1** year on mapping out the base workflow



How Gather Requirements?

Conduct workshops with key users

As-is vs. To-be process flow

Requirements validation

Key Performance Indicators (KPIs)



Growth

Costs

Key Performance Indicators (KPIs)

Growth KPIs	High	Medium	Low	Zero
New sources of revenue			X	
Additional sales or customers		X		
Increased customer loyalty		X		
Competitive advantages	X			

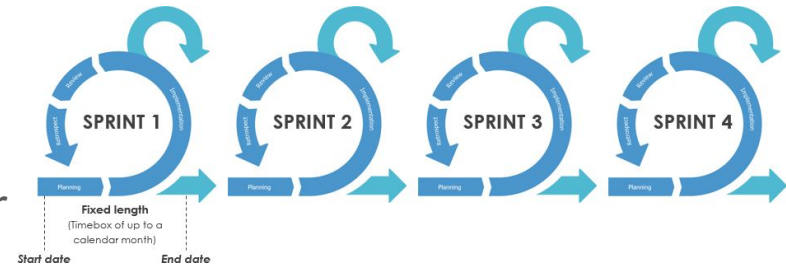
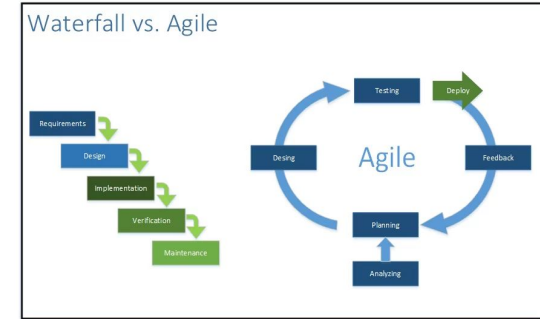


Key Performance Indicators (KPIs)

Cost KPIs	High	Medium	Low	Zero
Reduced operating costs	X			
Loss burden	X			
Margin of error		X		

Agile Development

- Agile enables flexible development with continuous feedback from underwriter pilot test users
- Achmea developed the application in user stories in sprints with extensive testing procedures:
 - Unit testing,
 - Integration testing,
 - Acceptance testing,
 - Product demo,
 - Production testing (on weekends or weekday evenings)

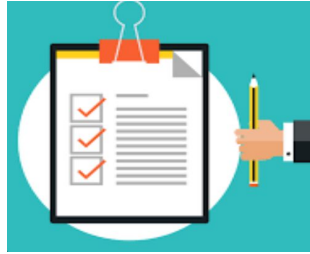


User Acceptance



Product Demo

Receive feedback



Survey

Before, during and
after
implementation



Town Hall Meeting

Introduce the new
workflow system
to the
underwriters



Training

Train
underwriters in
the new
workflow system

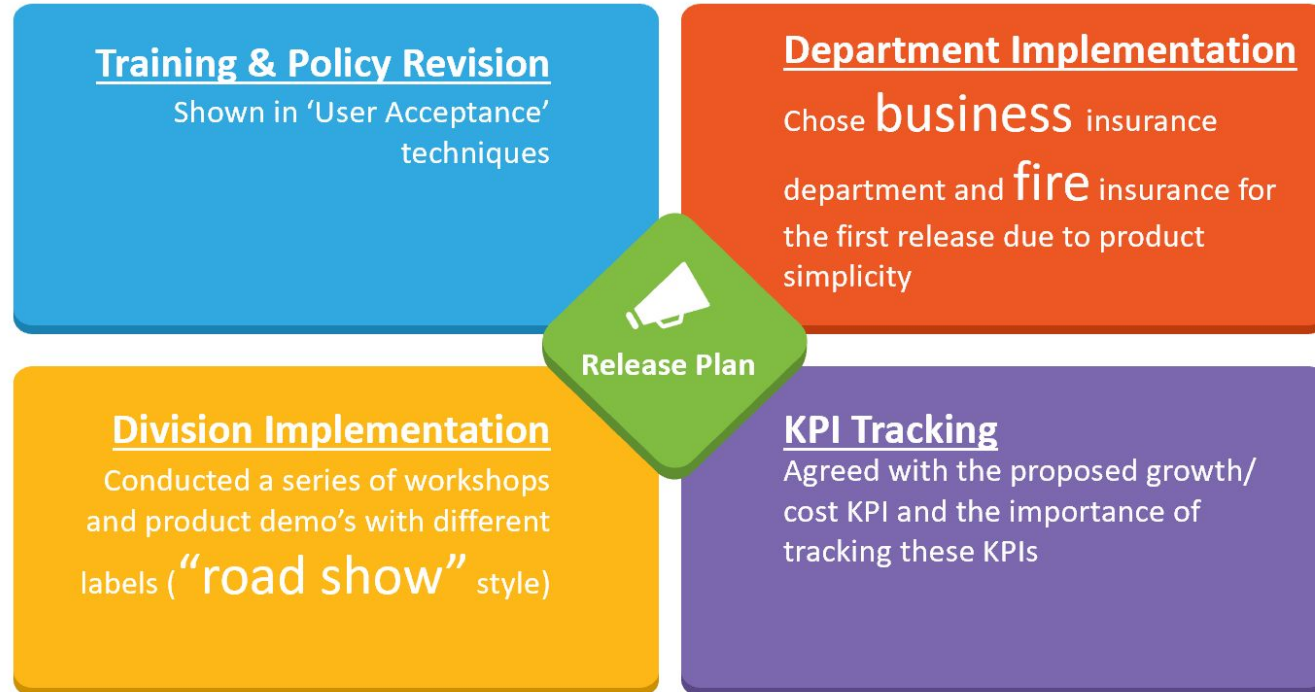
new



E-learning

Educate, inform
underwriters

Release Plan



Key Takeaways: UT Team's Perspective



1. An IT implementation project goes well beyond the introduction of the technology itself. Rather, it heavily relies on human factors such as stakeholder management, risk analysis, and user acceptance for success
2. While it's important to research theoretical models and use them as a foundation for the implementation process, the team must operationalize these theoretical models to suit the specific circumstances of the project. An example is how the UTAUT model was translated to key user acceptance techniques in this project
3. An IT project can benefit from a clear vision and project roadmap to ensure all moving parts are taken into account and the team is staying on track



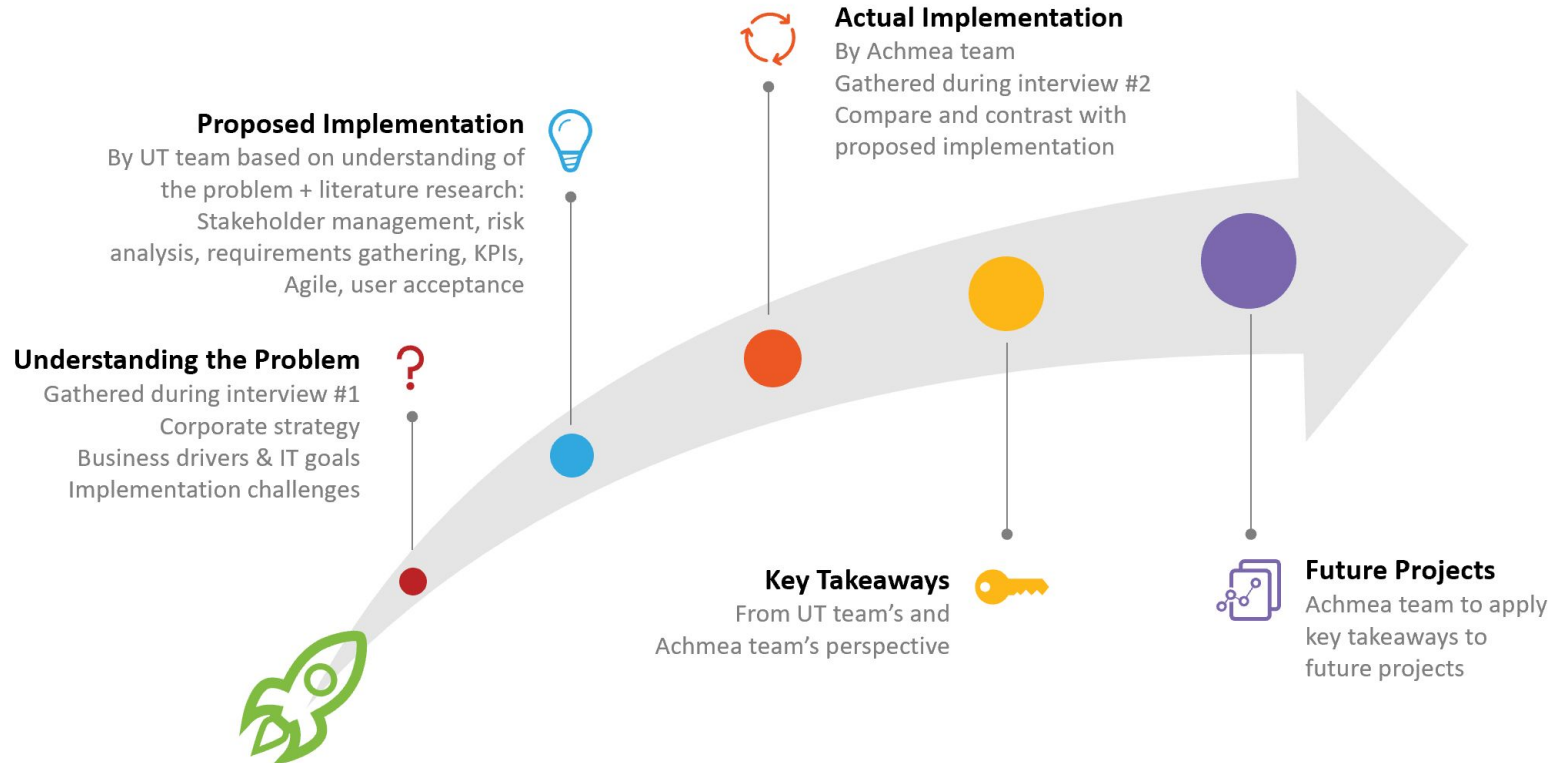
Key Takeaways: Achmea Team's Perspective




1. Time and effort invested in stakeholder analysis and requirements gathering pay off. As Achmea team shared, the project was off to a slow start when the team spent almost a year identifying key stakeholders and building a base workflow based on their input. But once this initial phase of work was finished, the development team is now more positioned to build the workflow that is useful and usable for the underwriters
2. A comprehensive risk analysis is essential in ensuring project success. For more impactful risks, actions need to be taken early. For example, Achmea team was proactive in identifying and resolving integration issues which in turn reduce integration issues in later development stages
3. Following the Agile methodology gives the team the flexibility to continuously collect feedback from the underwriters and refine the requirements as the project progresses. Additionally, Achmea's current testing procedures play a key role in ensuring the quality of the application and should be used in future projects



Conclusion





Thank you.

