

A family of four (father, mother, and two children) are running along a beach at sunset, holding hands. The scene is silhouetted against the bright, low sun, creating a warm, golden glow. The father is on the left, followed by a young girl, then a young boy, and the mother is on the right. They are all running towards the right side of the frame. The background shows the ocean waves and a cloudy sky.

# Insurance Digital Platform Trend & Application Of InsurTech

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By : Blue Stone Solution

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# 1. InsurTech Trend in Korea



# 1. InsurTech Trend in Korea

2 keywords defining Korea's 4th Industrial Revolution (4IR):

- **HYPERCONNECTIVITY**
- **SUPERINTELLIGENCE**

**Hyperconnectivity** and **Superintelligence** are becoming new growth engines for Digital Transformation, creating synergy based on ecosystem of core values of collaboration and sharing.

## Hyperconnectivity



**Blockchain**



**IOT**

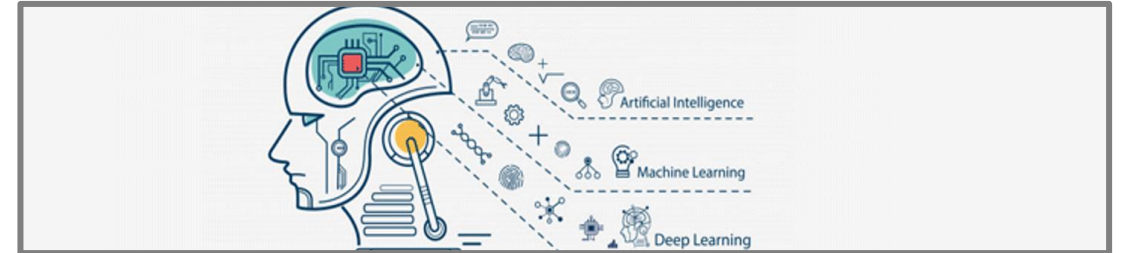


**Cloud**



**Open Platform**

## Superintelligence



**AI**



**Bigdata**

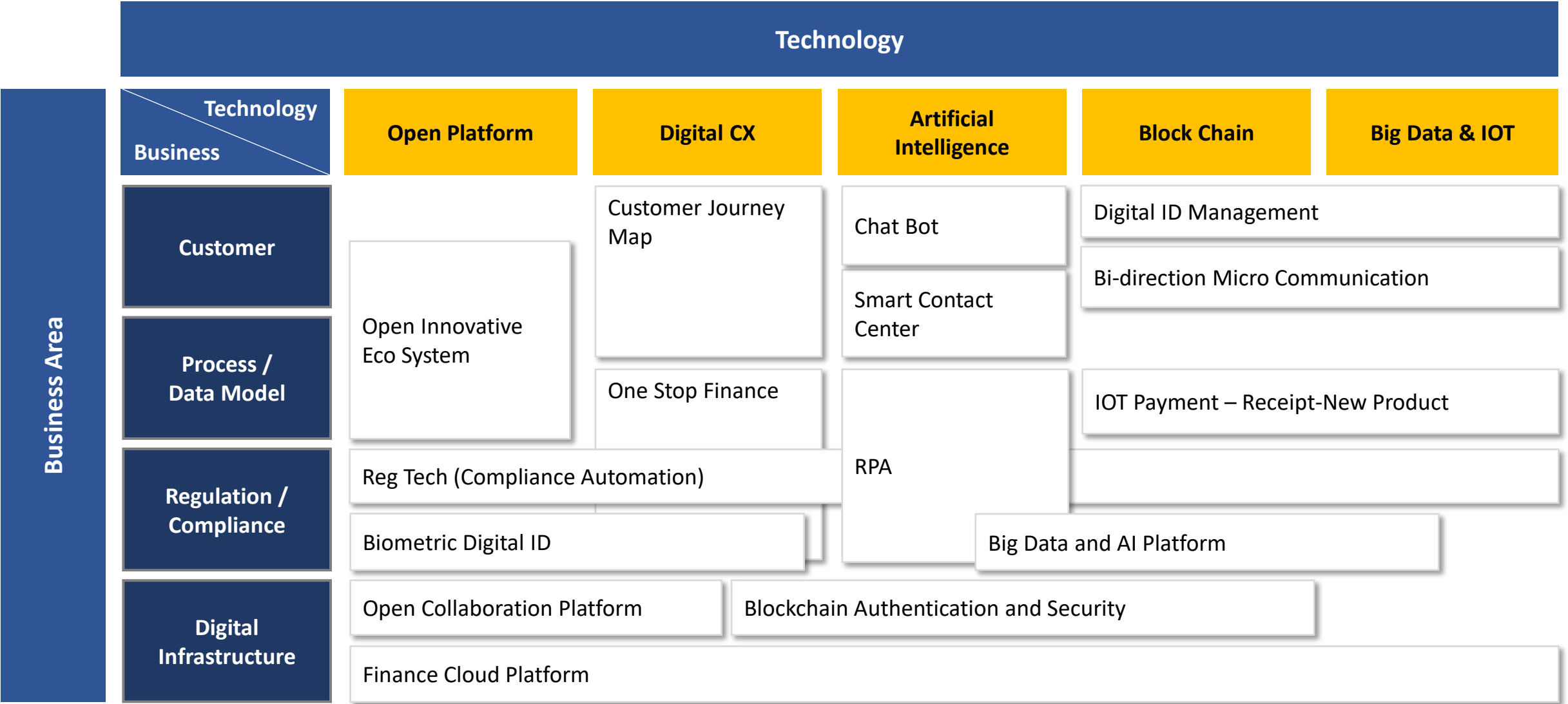


**RPA**

Source : Finance IT Trend Report (Samsung SDS)

1. InsureTech Trend in Korea

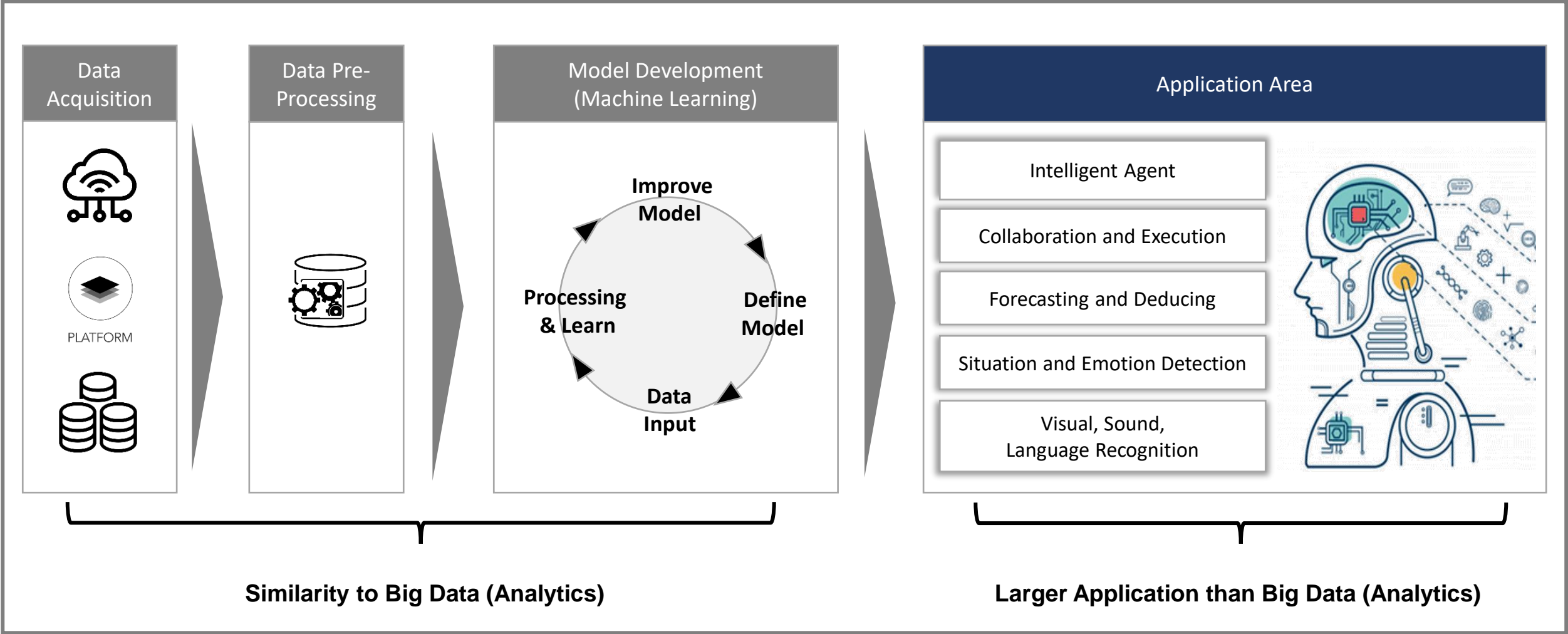
Mapping of Business and Technology



## 2. Case Study of AI & Big Data

### Approach

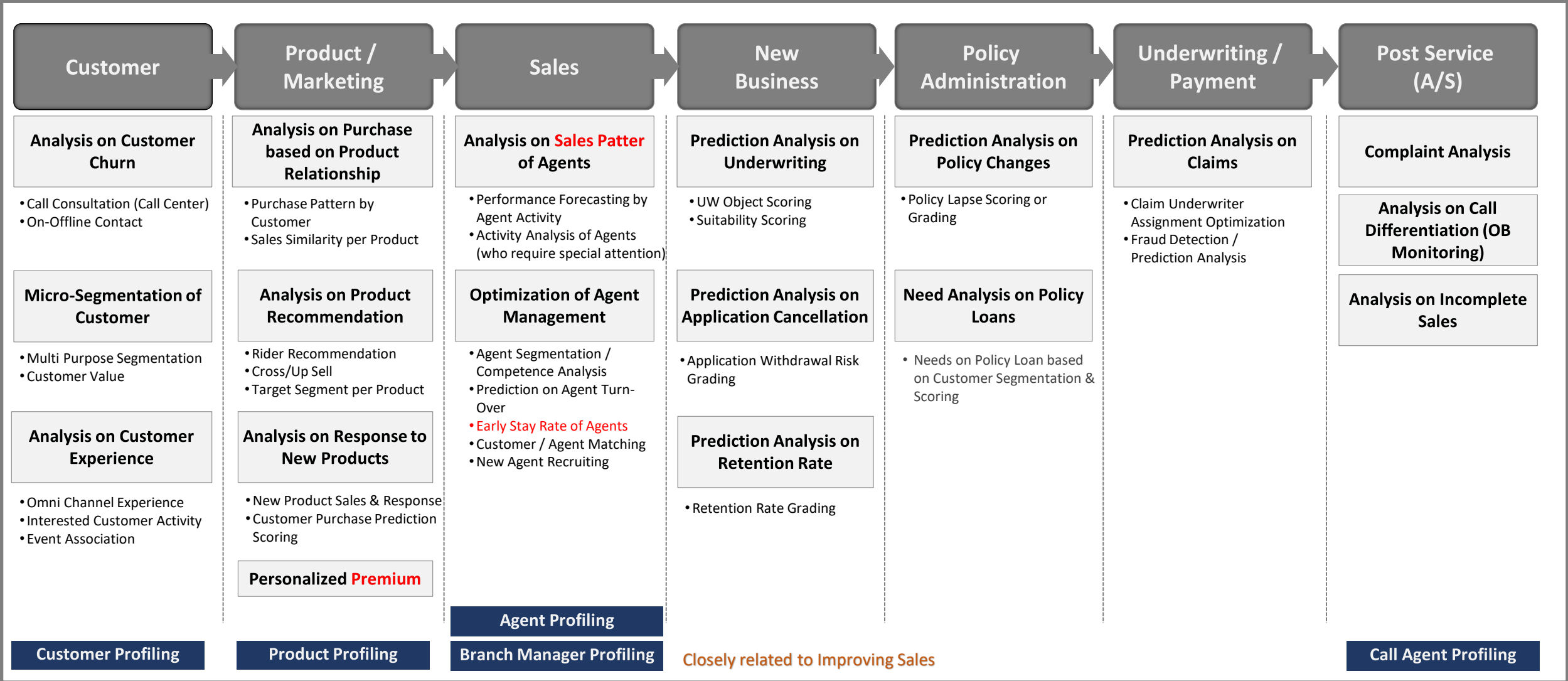
With explosive increase of current computing capacity and data volume, Artificial Intelligence (AI) and Big Data are significantly contributing to the Insurance industry. AI and Big Data are expected to continue its growth in Self-Learning technology, to improve prediction and refinement of Analytics Model.



## 2. Case Study of AI & Big Data

# Business Mapping

Value Chain of Insurance Business is based on co-relationship between different business areas and their relevant tasks. Under AI & Big Data, each business areas and tasks share similarity and can be converged for overall business analysis.



# 2. Case Study of AI & Big Data

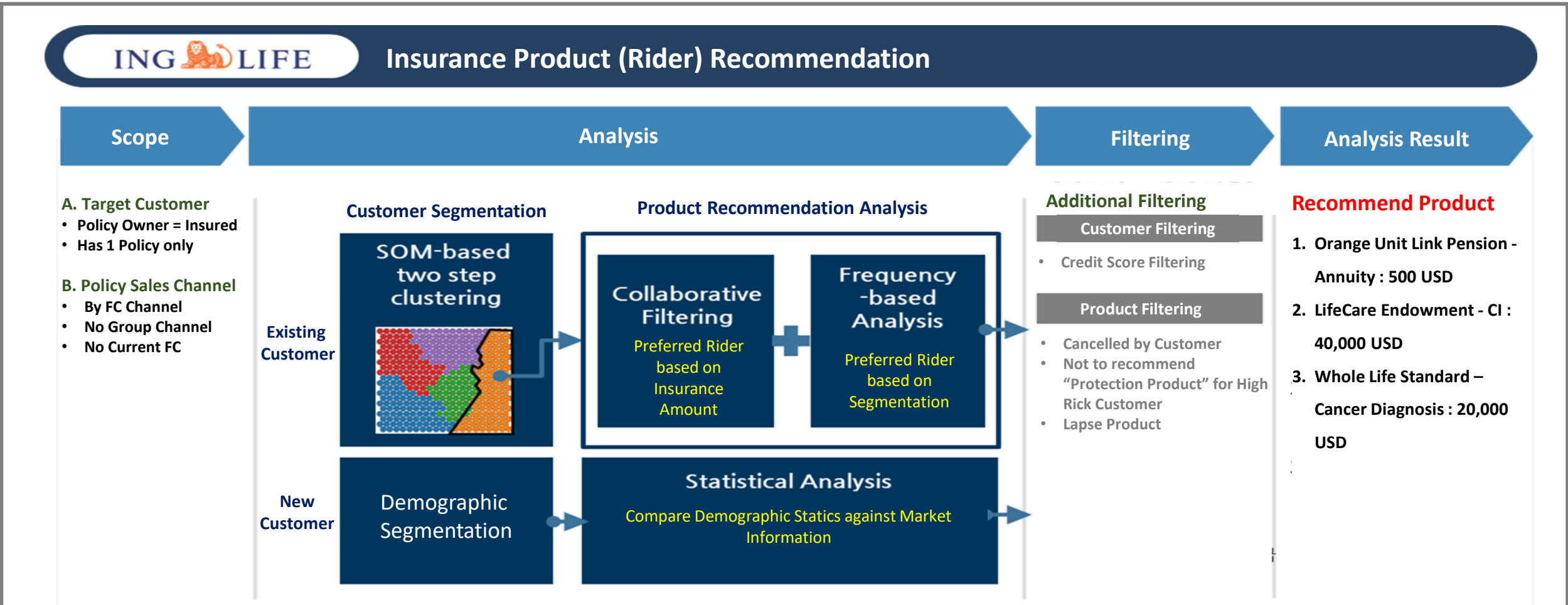
## Case #1. ING LIFE INSURANCE, Korea

### Product (Rider) Recommendation Model

Based on analysis of sales history per customer, Riders preferred by similar customers are extracted from Customer Segmentation Group by clustering and performing preference calculation.

#### ING Life Insurance

- 6th Largest Life Insurer in Korea
- Established: 1987
- Income Premium: 235 Million USD
- Total Assets: 25,597 Million USD



## Case #2. KYOBO LIFE INSURANCE, Korea

### Policy Loan Needs Scoring & Segmentation by Customer Characteristics

Developed two analytical models (Policy Loan Needs Scoring & Segmentation by Customer Characteristics) which are built based on analysis of internal and external data. The models are used to identify target customers and recommend Riders.

#### Kyobo Life Insurance

- 3rd Largest Life Insurer in Korea
- Established: 1958
- Income Premium: 9,875 Million USD
- Total Assets: 82,371 Million USD



### Policy Loan Needs Prediction and Personalized Marketing

#### [Internal Structured Data]



- Policy Loan Infor +
- Customer, Policy Payment Info, etc.



#### [Internal Non Structured]



- Web Log/ App Log
- STT/ITT Data



#### [External Data]



- Loan Credit Limit
- Daily Stock Index
- Foreign Exchange Rate

#### GBM

(Gradient Boosting Machines)

- More **improved Machine Learning than existing Decision Tree**
- Effective analysis on association between many of variables



Individual Policy Loan Needs Scoring

#### SOM



#### K-means

(Self Organizing Map)



- No Human decision
- By Machine Learning, it finds hidden patterns in Data

Segmentation By Characteristic

#### “ WHO (Target Customer) ”

- Select target customer by Scoring result

➔ **Cost/Effort Optimzation**



#### “ HOW (Sales & Marketing) ”

- 10 Segment, having different marketing approach

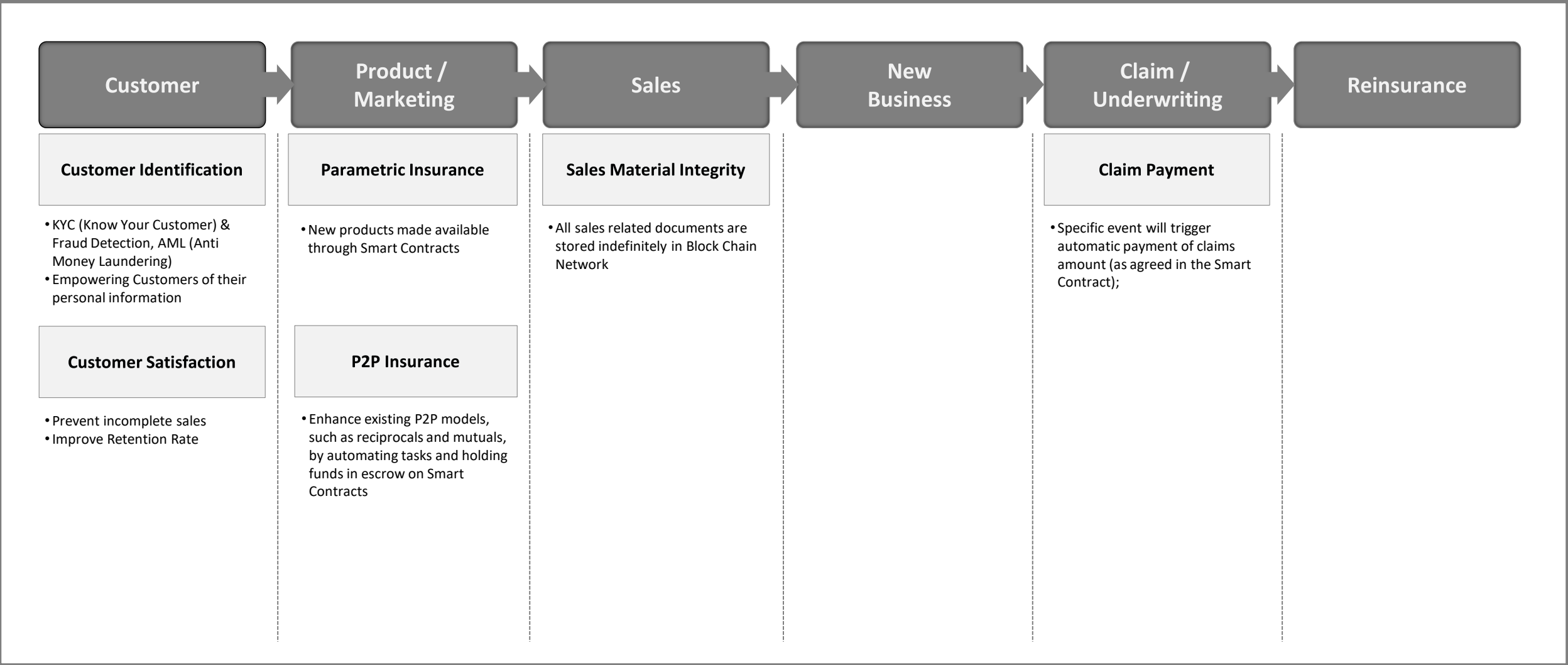
➔ **Increase interest**



### 3. Case Study of Block Chain

## Business Mapping

Value Chain of Insurance Business is based on co-relationship between different business areas and their relevant tasks. Under AI & Big Data, each business areas and tasks share similarity and can be converged for overall business analysis.





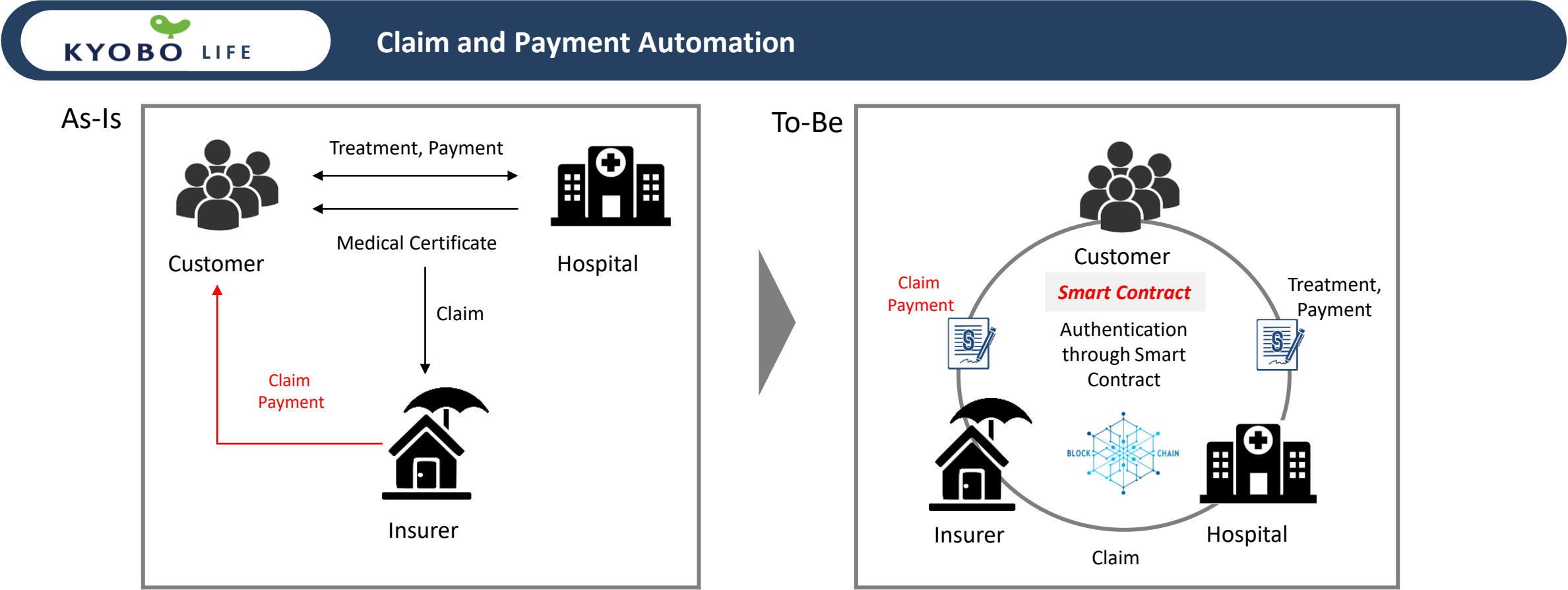
## Case #2. KYOBO LIFE INSURANCE, Korea

### Authentication through Smart Contract

Through Smart Contract, Claims Process and Payment is made simple through integrity and transparency provided by Block Chain Authentication.

#### Kyobo Life Insurance

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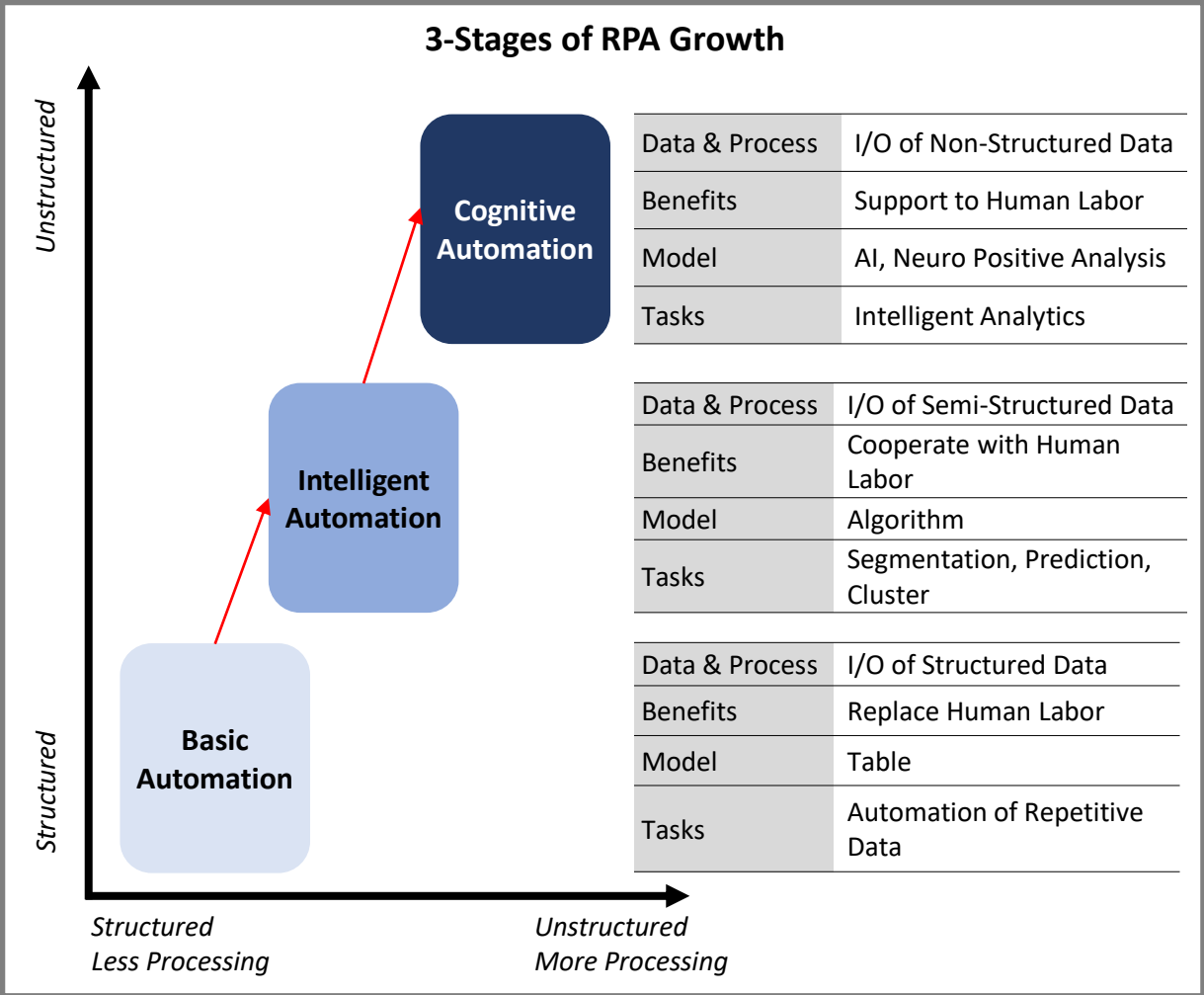


# 4. Case Study of Robotic Process Automation (RPA)

## Business Mapping

Robotic Process Automation (RPA) is the conversion of standardized and rule-based tasks that humans on a computerized system. RPA in Insurance Industry easily connects core insurance processes with the newer capabilities you need to reduce response times, decrease operations costs, and ultimately focus your employees on higher value work

| RPA Applicable Spectrum |                         |                             |                        |
|-------------------------|-------------------------|-----------------------------|------------------------|
| Field                   | Finance, Accounting     | Product Development         | Production, Purchase   |
|                         | Human Resource          | Sales, Marketing            | Logistics, etc.        |
| HR Services             | Onboard Process         | Benefits                    | Data Entry             |
|                         | Tardiness               | Legal Reporting             | Training               |
|                         | HR Admin                | Salary                      | Recruitment            |
| IT                      | System Installation     | File Management             | Batch                  |
|                         | FTP Down/Upload, Backup | Email Management            | Server Monitoring      |
|                         |                         | Folder Synchronization      | Application Monitoring |
| Supply Chain            | Inventory               | Quotation                   | Refund                 |
|                         | Supply/Demand           | Task Orders                 |                        |
|                         | Contract Management     | Logistics                   |                        |
| Finance                 | Book Management         | Invoicing, AR               | Fixed Assets           |
|                         | AP, Payment             | Travel Expense              |                        |
|                         |                         | Profit/Expense Distribution |                        |
| Others                  | Problem Solving         | Workflow Mgmt               | Document Editing       |
|                         | Document Mgmt           | CRM                         |                        |
|                         | Schedule Mgmt           | Testing                     |                        |





# 4. Case Study of Robotic Process Automation (RPA)

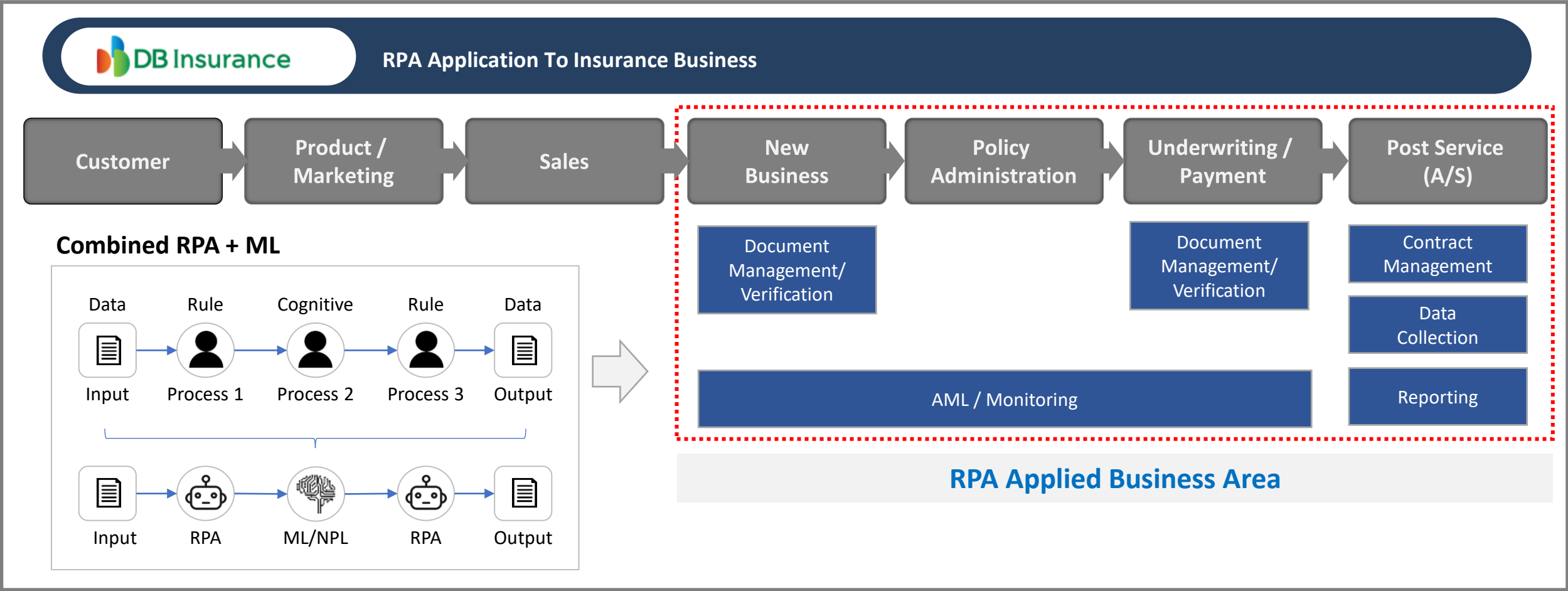
## Case #1. DB LIFE INSURANCE, Korea

### Robotic Process Automation on Key Business Areas

Total of 28 business tasks are performed through RPA; saving approximately 29,000 hour/year across the enterprise operations.

#### DB Insurance

- 3rd Largest Non-Life Insurer in Korea
- Established: 1963
- Income Premium: 10,104 Million USD
- Total Assets: 32,285 Million USD



# 5. Summary of InsurTech in Korea\_Challenges & Consideration

As we have already introduced, **Superintelligence** and **Hyperconnectivity** are two major streams of technology, and in **Superintelligence**, the AI (Machine Learning), Chatbot and RPA have already been used in many places, and it is now preparing for the next step. Block Chain, Mobile, and IOT represented by **Hyperconnectivity**, the utilization of mobile device is already quite matured, but the application of Block Chain and IOT is still in the early stages; although many Insurers are starting its pilot to see its practice and effectiveness.

## Hyperconnectivity



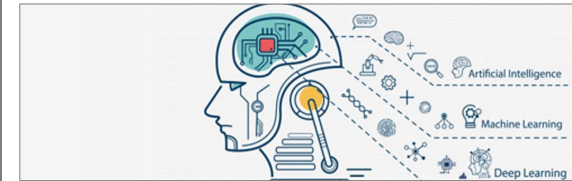
## Blockchain

- **P2P Insurance**  
*Suitable for Block Chain Platform solution provider*
- **Parametric Insurance**  
*P2P-based products are most reasonable*
- **Payment Automation**  
*Block Chain-based payment (requires networked link)*

## IOT

## “Leading Innovations in Insurance Business”

## Superintelligence

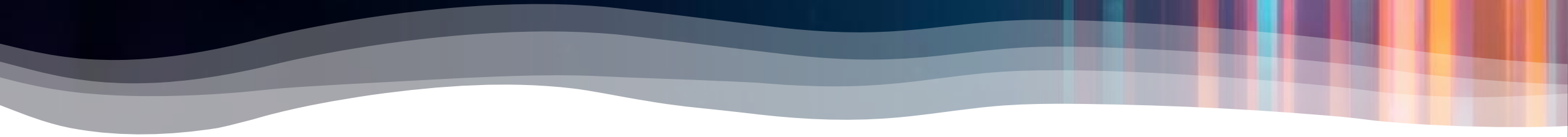


## AI & Bigdata

- **AI can be used for Image/Data Recognition**  
*High precision OCR required; more effective when documentation format is standardized (between hospitals, pharmacies, etc.)*
- **Prediction Model**  
*Need Data and More Cases*

## RPA

- **Process Automaton by Systems and Solutions**
- **RPA and OCR to automate many documentation**



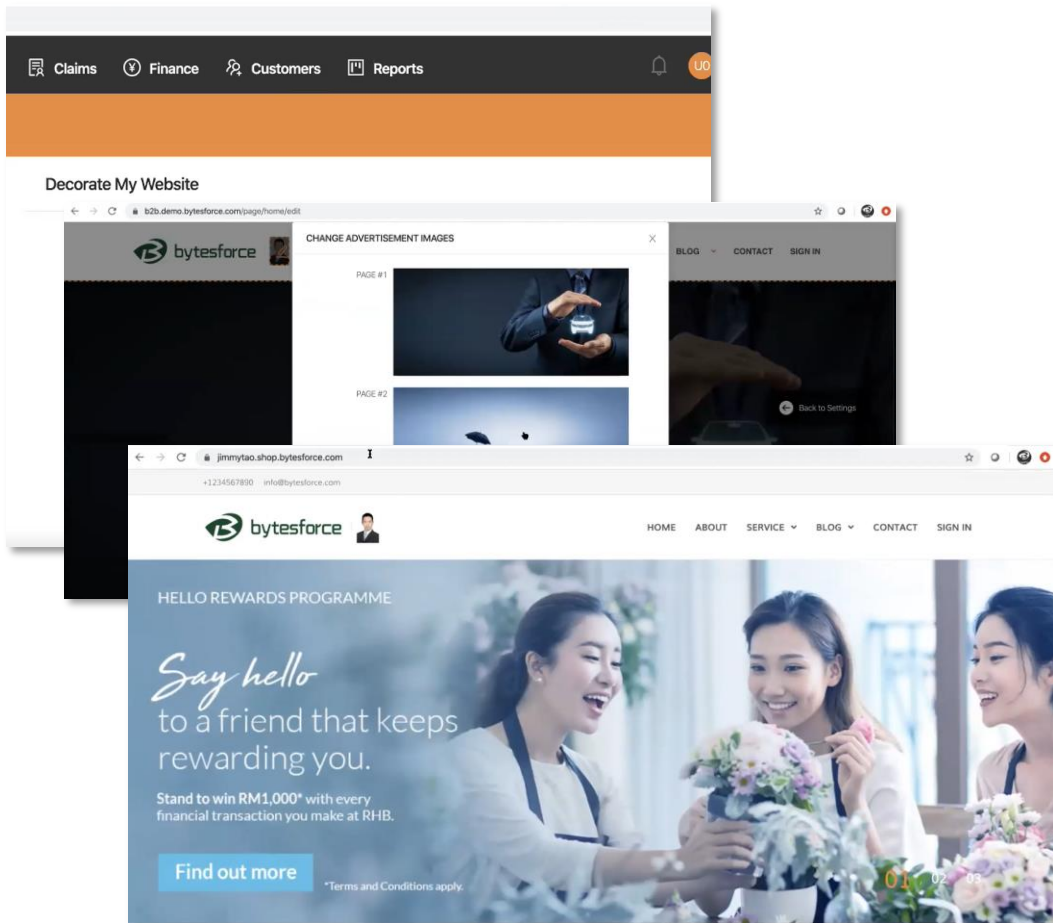
## **2. Practice and Application**

# Blue Stone's Offerings

## Case Studies : Agent Personal Website

### [Sales Portal]

Agents are able to create their own personalized sales website, to promote products and enhance sales opportunities. These websites are payment-linked, allowing complete B2C sales experience.



### How Agent Minsite Works

1



Website DIY

#### Individual Agent's Personal Website

1

- Empower agent sales
- Enhance agent branding
- Important distribution channel of new / micro products

2



Promote Own Website

#### Co-branded Websites with Affinity Partners

2

- Facilitate partner negotiation
- Leverage affinity partner's brands
- Increase sales

3



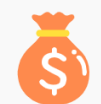
Customer Shopping

#### Co-branded Websites with Corporate Customer

3

- Promoted as 'employee care' website of corporates
- Employees direct purchase from co-branded websites

4

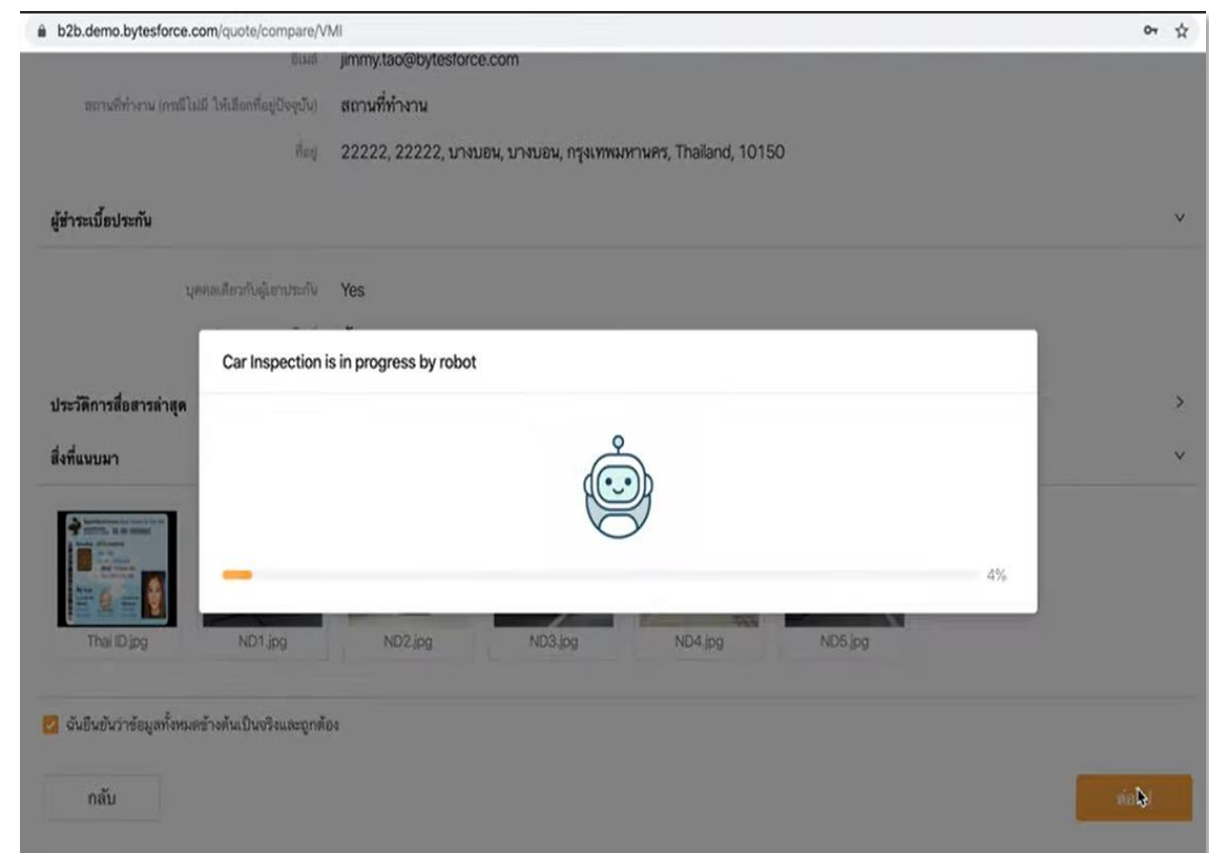
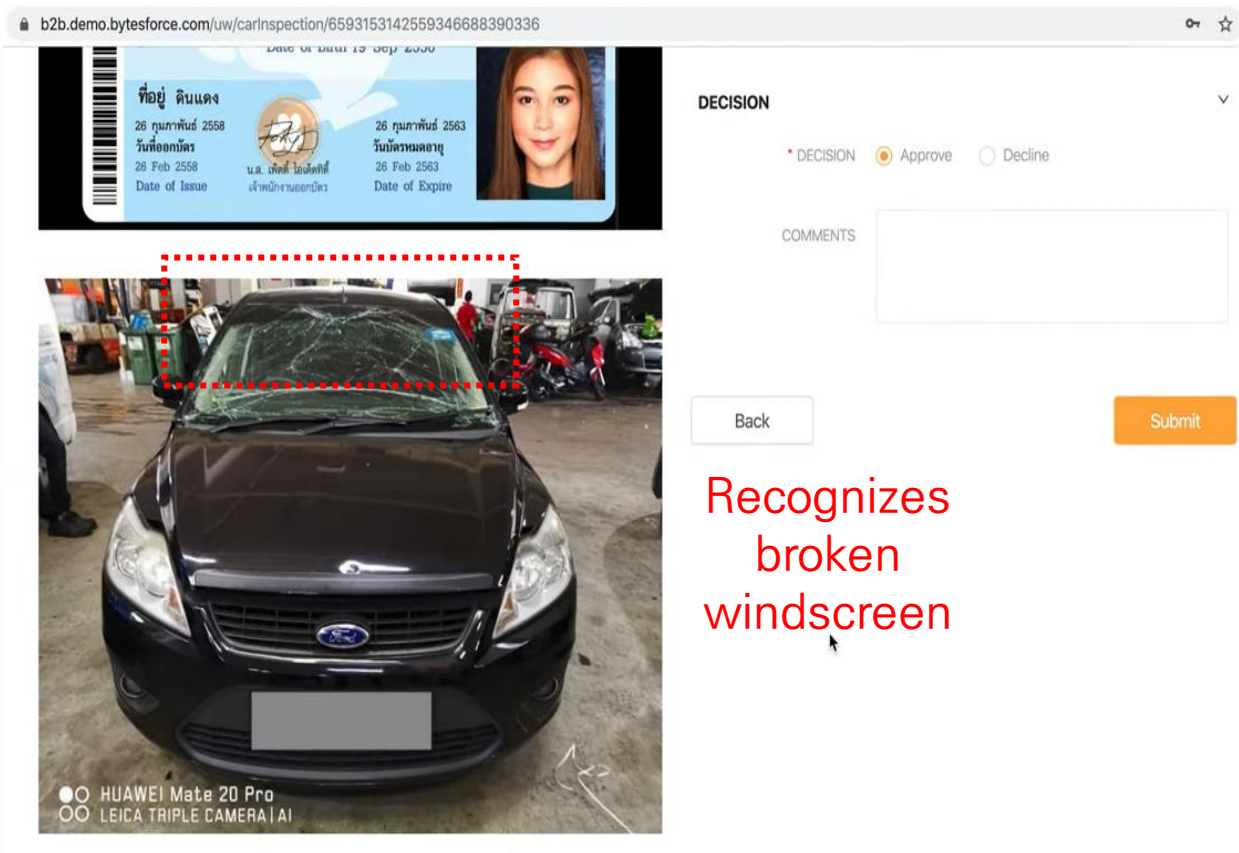


Earn Commission




By utilizing OCR, Vehicle Damage Recognition and spare parts database technologies, motor claims can be completely automated. Click link below to view the quick demo:

<https://www.youtube.com/watch?v=8lo0fflZRrc>



To avoid fraud in New Business, insurers in Thailand conduct car inspection. This example is to show how to use the AI technology to do automatic car inspection.



Will take a while to work this out... Feel free to leave me alone if you don't wish to wait

100%

VIN decoding is completed

0%

OCR invoice screening in progress

100%

Comparison completed (overpriced)


100%

Windscreen image screening completed (no cracks detected)


Comparison and evaluation by AI

b2b.aiaa.demo.bytesforce.com/claims/review/6593132535994126336954781

CLAIM REVIEW



No Crack 99.75%No manual remark



CLAIM INFO

CLAIM MT/99848488222-001

VEHICLE NO. SHY3372K

VIN WDBHA28E5VF557288

MAKE/MODEL/YEAR TOYOTA, CAMRY, 2017

AI ALERTS

No Benchmark Matched

No Cracks Detected

OCR / Invoice Not Matched

REPAIR COST

QUOTED S\$ 678.90

OCR RESULT S\$ 532.70

BENCHMARK S\$ 600.00

APPROVED S\$

The sequence of screenshots illustrates the following steps in the chatbot interaction:

- Initial Greeting:** The chatbot, Anne, introduces herself and asks, "To start with, on which date did you receive damage of your baggage?"
- Document Collection:** Anne requests supporting documents. The user provides:
  - A flight ticket for LH 907 to Frankfurt, Terminal 2, Gate D10, departing at 9:10 AM.
  - A Singapore Identity Card for TAO HAIRONG, born 03-06-1977.
  - Two photographs of the damaged luggage.
- Damage Recognition:** Anne confirms the items: "We have recognised following items: packaged goods, bag".
- Final Request:** Anne asks the user to "Please indicate the amount to claim?" and "Please sign here". The user provides a handwritten signature.



# Blue Stone's Offerings

## Case Studies : Know Your Customer

As part of our biometrics lineups, we are implementing eKYC in other markets.

- Liveness check
- Facial Comparison
- Manual intervention and auditing
- eKYC Reports



Optical Character Recognition



Liveness Detection



Facial Comparison 1:1



Facial Retrieval 1:N

Step 1

Take photo of your ID or passport

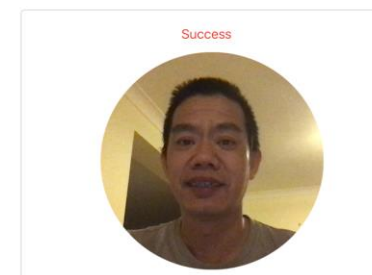


ID Card

Passport

Step 2

Face recognition. Please follow the guidance



Back

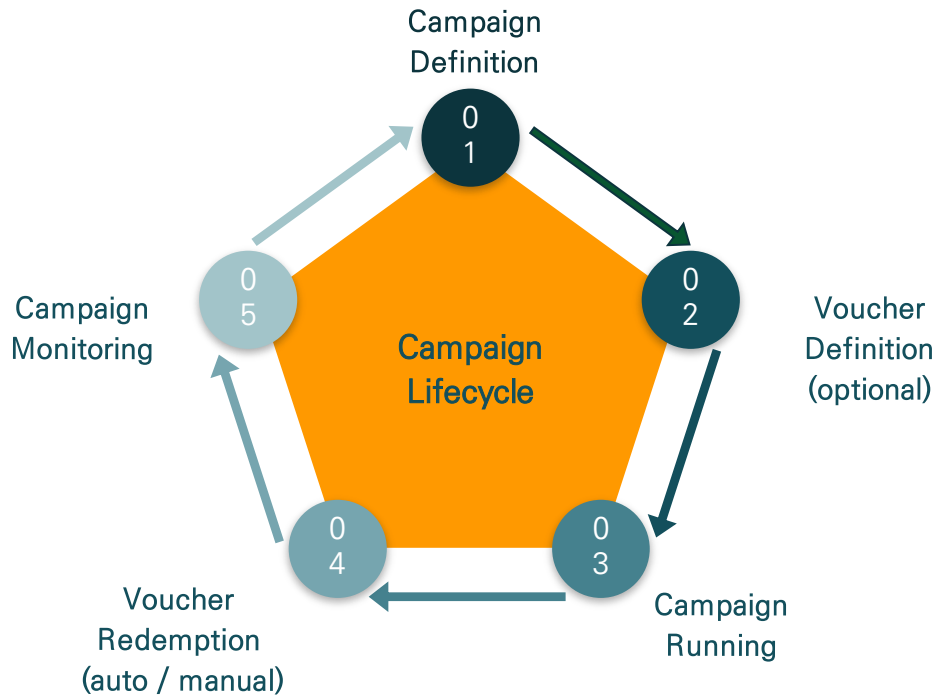
Send link to customer

Skip

Next



Campaign Management has been advanced to allow easy configuration of campaigns, to support agents in selling policies by utilizing e-Vouchers.



e-Vouchers  
(Given to customers when customer buy policy, by rule)

agent

Profile

Login Account

My Authorities

My Website

My Vouchers

My Vouchers

| VALID | USED      | EXPIRED             |                  |            |      |
|-------|-----------|---------------------|------------------|------------|------|
|       | R00000014 | 5% Discount Voucher | Premium Discount | 12/05/2021 | View |

### CAMPAIGN RULES & RESULT

When criteria meet:

Type of business

contains

New Business

Plans

contains

Private Car - Comprehensive

Private Car - Third Party, Fire & Theft

Private Car - Third Party Only

Then do:

Apply discount to policy

Cancel

Save



Thank You Very Much