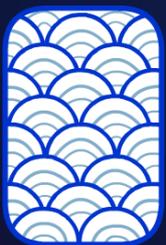


# Wealth Management System Limited

## Case Study – Process Innovation by WMSL

17 October 2018



Bangkok CMMI Conference 2018



- Company Profile
- WMSL Process Improvement Journey
- Challenges
- Innovation Process
- Bonanza Process Optimization Features





**COMPANY  
PROFILE**

## FOUNDER

Experienced Professional  
from **Global & Leading  
Local Banks**



## MISSION

The **Best R&D and  
Software House** for Asset  
Management, Treasury and Risk  
Management in  
Asia Pacific



## TEAM

**173 Professional Staff**  
13 Senior Consultants, 17 Business  
Analyst, 128 IT Specialists, and  
15 Marketing & Customer Support



# Founders & Senior Consultants



**Ms. Amy Yip**

Voted as one of the **World's Top 50 Female Financiers** by Euro Money in 1997 / Former ExecDir (Reserves Management) of Hong Kong Money Authority / **North Asia Investment Head Citibank** PBG Hong Kong / CEO of DBS Bank Hong Kong / Managing Partner of RAYS Capital Partners



**Panya Chanyarungroj**

Former **Head of Global Markets & Treasurer HSBC** / EVP for Treasury in Siam Commercial Bank / Worked in the Regional Currency Unit & Treasurer at **Citibank Singapore & Thailand**



**Somkiat Chinthammit**

Former **Investment Advisory Head Treasurer** of Citibank Private Bank BKK, Investment Committee of **Citibank HK**



**Yotin Chenvanich**

Former **Country Treasurer** of Citibank Bangkok with 28 Years Experience in **Citibank**



**Montri Seniseth**

Former Division Manager of Kasikorn Bank (KBank) Scholarship at UCLA & KBank LA, **Outstanding Research Award** from Thailand Research Fund (TRF)



**Chaiwat Matevelungsun**

**Setup first** Thai Credit Rating Company (with S&P/USA) / **Former IMF/World Bank Guest Speaker / Credit Derivatives Dealer/EVP** of BankThai



**Dr. Kamol Boondesakulchok**

Former Head/Founder of Risk Mgmt Dept. Bank of Ayudhya, Executive **Chairman of AJF : Ayudhya (JP Morgan) Fund Management** Head of Fixed Income **Citibank**



**Jirapol Pobukadee**

Former Risk Modeling Specialist in CIMB ThaiBank / In-charge of iRisk Software Development for **ThaiBMA** / Researcher at Wharton Econometric Forecast Associates in Philadelphia



**Pongsatorn Sukhum**

SEI Authorized Lead Assessor / SEI Authorized instructor in the Software CMM / Certified Rational Instructor in Object-Oriented Analysis & Design / Royal Thai Army **Award for Best R&D Project in 2006**



**Ariyane Krittayaphongphur**

Former **VP-Head of HSBC Premier Banking** / VP-Relationship Manager of Deutsche Bank Private Wealth Mgmt / **Head of CitiGold** Citibank Bangkok / VP-Senior Compliance Officer of **Citibank** Executive



**Sirot Ongcharit**

Former FX/SWAP Dealer of Citibank Thailand, Treasurer of BBC Bank, Equity **Derivatives** Dealer of **Citibank London**



**Soontorn Pojthanamas**

Former **Dir of Association at AIMC** / EVP of Thai Rating and Information Services Company / Chief of Capital Market Supervision & Development Division of **SEC** / Financial Institution Supervision & Development Dept in **Bank of Thailand (BOT)**



**Adisak Teeramasvanich**

Former **Head of Balance Sheet Management of HSBC** Thailand / Head of FX and Interest Rate Derivatives Trading **Citibank** Thailand



**1st EVER Software** to win the Most Prestige Award for IT  
(FRIT Prize Award) from HRH Princess of Thailand



**1st EVER Thai Company** to have been appraised at  
CMMI-DEV Level 5 / CMMI-SVC Level 3



One of the **1st EVER Company** to be inducted into  
Software Park's Thailand *Hall of Fame 2008*



**1st EVER Software Company** to win  
*SMEs National Award* for the Software Business Category



**1st EVER Software Company** hailed by The NATION Newspaper  
as *SOFTWARE FIRM of the YEAR* in 2012



**1st EVER Software** to win *Thailand ICT Award* for the  
Financial Application Category for *2 years in a row*

**1st EVER Software Company** regarded as  
*Thai SMEs Role Model*

**1st EVER Software** that gained *Highest Market Share*  
over foreign Investment Software Package

One of the **1st EVER Software Company** to be listed on  
IDC (USA) as *LOCAL SOFTWARE HERO*





**USD 120 Billion AUM**

***Highest Market Share***

*With*

***Leading Global & Domestic***

***Financial & Asset Management  
Organizations by***

**Bonanza**

# **Wealth Management System Limited**

has been appraised using the CMMI Institute SCAMPI A  
V1.3 method and has been rated at

**CMMI for Development version 1.3  
Maturity Level 5**

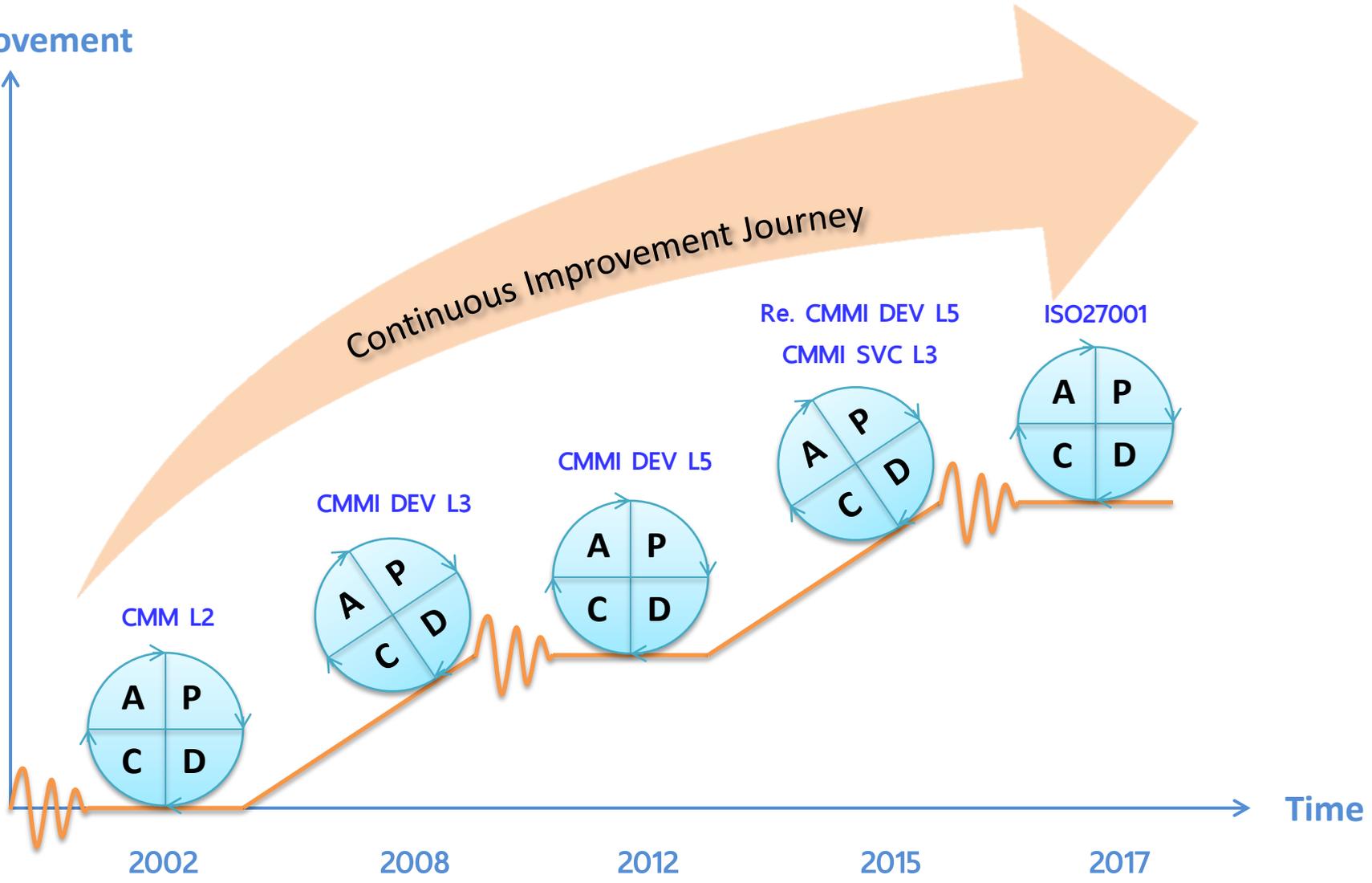
**CMMI for Services version 1.3  
Maturity Level 3**

Stephen J H Fletcher  
Lead Appraiser No. 0100017-00  
February 1<sup>st</sup> 2013  
Appraisal ID 23878

# *WMSL Process Improvement Journey*

# WMSL Process Improvement Journey

Improvement



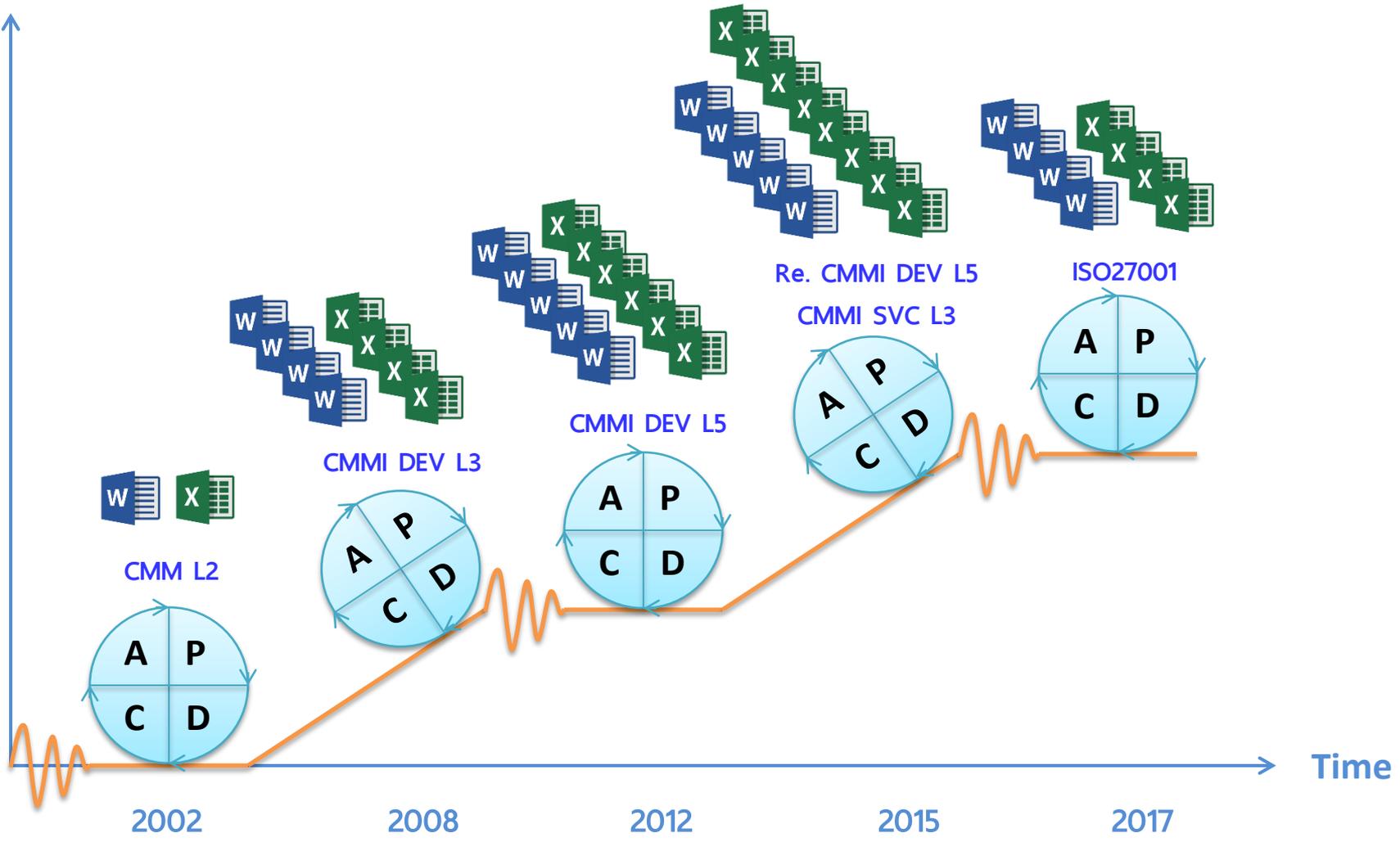
Maintain

≈ 200 files



# Challenges

Improvement



# Challenges

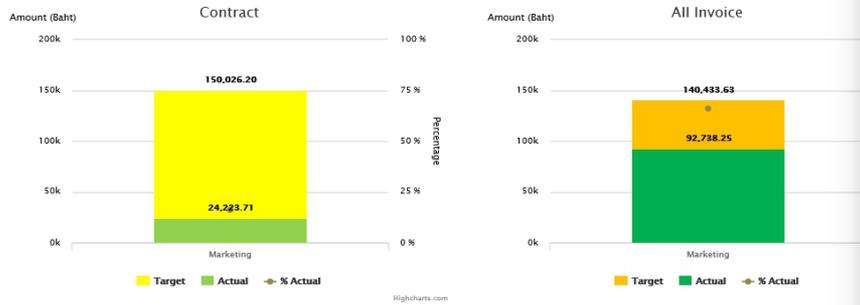


## Financial Target of Year 2018

As of Date: 21-Aug-2018  
Unit: Baht

Dashboard Report

### Summary Financial Dashboard



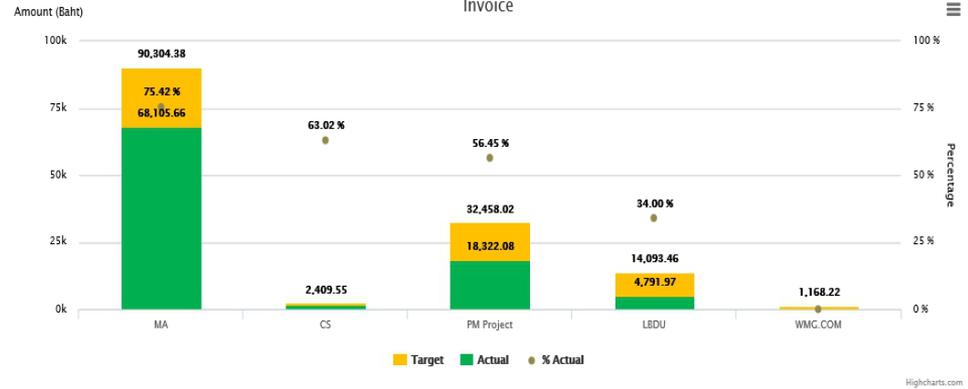
Category	Target	Actual	% Actual
Contract	150,026.20	24,223.71	16.15%
All Invoice	140,433.63	92,738.25	66.09%

### Monthly Contract



	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07
Target	0.00	0.00	0.00	35,645.58	35,645.58	35,645.58	104,582.28	104,582.28
Actual	642.52	14,480.72	15,987.73	16,898.95	17,833.53	18,499.42	18,499.42	24,223.71

## Invoice



	MA	CS	PM Project	LBDU	WMG.COM
Target	90,304.38	2,409.55	32,458.02	14,093.46	1,168.22
Actual	68,105.66	1,518.54	18,322.08	4,791.97	0.00
% Actual	75.42	63.02	56.45	34.00	0.00

### Monthly Invoice



	2017-11	2017-12	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	2018-12
Target	0.00	0.00	31,384.78	45,054.92	49,700.88	55,244.79	66,786.00	73,283.69	90,016.19	100,534.10	111,306.33	119,891.20	128,888.78	140,433.63
Actual	2,786.12	14,622.69	27,744.98	49,938.76	56,205.42	62,848.39	77,936.62	83,754.25	88,740.07	92,738.25	92,738.25	0.00	0.00	0.00

# Challenges

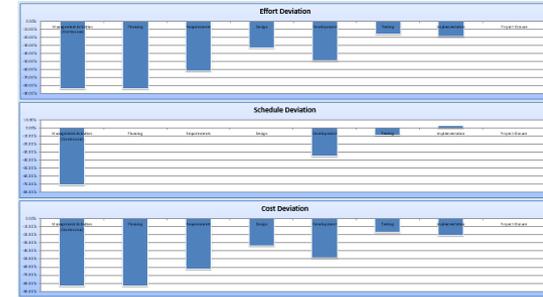




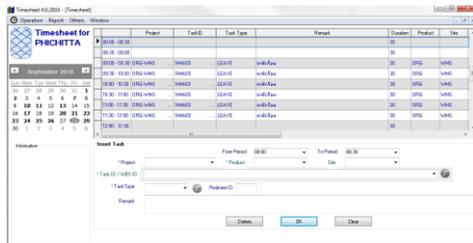
**Recruitment Online**




**Project Cost / Effort / ...**




**Timesheet & Leave Online**



Project	TaskID	Task Type	Remark	Duration	Product	Site
PHICHETTA	3010-00-00	LEAVE	vacation	30	ONG	WMS
PHICHETTA	3010-00-00	LEAVE	vacation	30	ONG	WMS
PHICHETTA	3010-00-00	LEAVE	vacation	30	ONG	WMS




**Asset Inventory**

Product	No. Project	Flag	Inspection Control	Source Code Control	Database Server	Build Package
Asset Inventory	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Asset Liability Management	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Business Admin	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Business BSA OFFICER	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Business Committee	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Business Corporate Finance	1	1	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)
Business Investment (IB)	10	40	88	SQL Subversion (SQL)	SQL Subversion (SQL)	SQL Subversion (SQL)

**Integrate Other System**

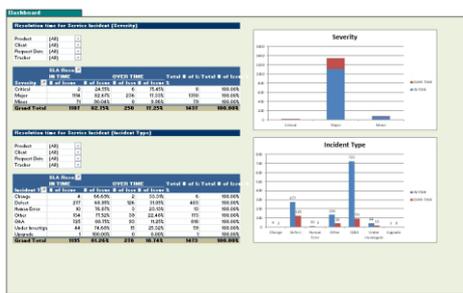
- ✓ Recruitment
- ✓ Project
- ✓ Asset Inventory
- ✓ Redmine
- ✓ Financial
- ✓ Timesheet
- ✓ Leave
- ✓ Etc.



**REDMINE**



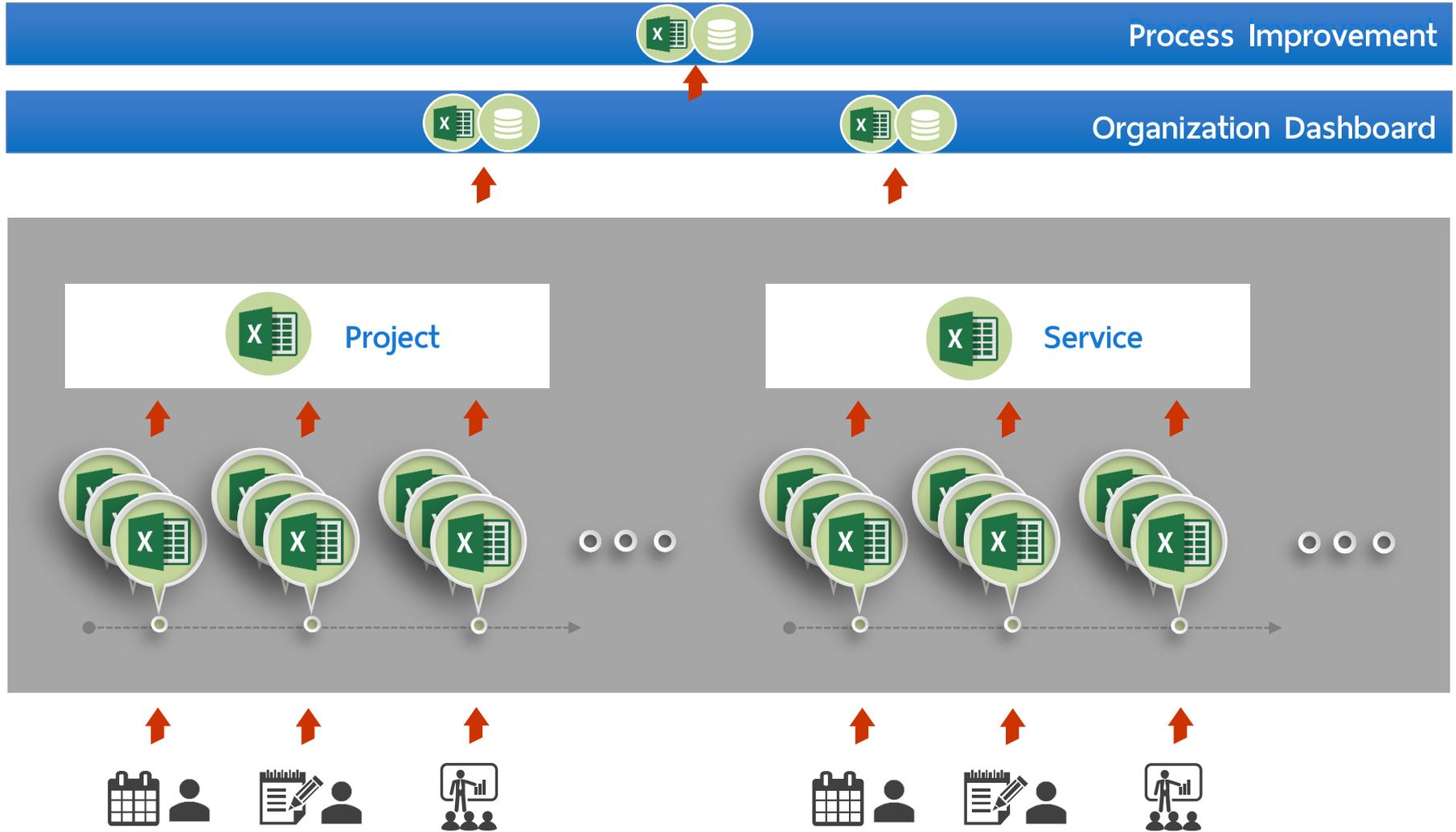
**Service Management**



# Challenges



# Innovation Process



# Innovation Process



## Measurement and Analysis

Project Dashboard

Service Dashboard

Organization Dashboard



Integrity ↑

Realtime ↑

## Bonanza Process Optimization



*Bonanza Process Optimization (BPO)*  
*Features*

## Project Information

Create New Data

\* Project Type :

\* Register Code :

\* Register Date :  

\* PM :

\* Product :

\* Site :

Phase No :

Project Name :

Project Description :

Project Team(s) :

Name	Role	Assigner
<input type="text" value="กรุณาเลือกข้อมูล"/>	<input type="text" value="กรุณาเลือกข้อมูล"/>	<input type="text" value="DD-MM-YY"/>

Remark :

Edit Data

**Project Info**

Register Code : WDC-WMS(2.1)	Register Date : 01-Sep-2018	Project Type : Marketing
Product : Wealth Data Center	Site : Wealth Management System Limited	
Project Name :	Phase : 2.1	Project Manager : Napasorn Smittakan
Project Description :		

**Lifecycle and Status** | **Cost Structure**

Project Lifecycle :

Warranty Period

Remark :

Link Other Sources

**Redmine**

★ Project

Please select product and project to relate redmine system.

Development Product:  Project:

UAT Product:  Project:

**Support**

Please select product and project to relate redmine system.

Support Product:  Project:  Client:

Lifecycle and Status Cost Structure

On Project

Project Code	Target Amount (1)	Actual Amount	Selected
Compliance	886.52	0.00	<input type="checkbox"/>
<b>Total</b>	886.52	0.00	รวม

**Target Date :**

**Target Amount (1) :**  รวม

**Profit (2) :**  รวม

**Hardware Cost (3) :**  รวม

**Other Expenses (4) :**

**Budget Resource Allocation (5) :**

(1) - ((2) + (3) + (4))

**Actual Date :**

**Actual Amount :**  รวม

**% Profit :**  %  
(2) x 100 / (1)

**% MA :**  %

Create Contract

## Contract

**\* Contract Name :**

**\* Contract No :**  **\* Contract Date :**

**Parent Contract :**

**Payment Type :**

**Remark :**

+ Add

* Collection Period	Invoice No	Payment Date From - To	* Target Invoice Date	Actual Invoice Date	Te
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text" value="DD-MMM-YY"/>	<input style="width: 100%;" type="text" value="DD-MMM-YY"/>	
Total					

## TimeSheet

▼ Select your project

\* Project :

\* Task :

\* Task Type :

Redmine Id :

Show all not filter

Period : 01 Jan 2018 - 31 Dec 2018  
Today : 12 Oct 2018

« October 2018 »

Mo	Tu	We	Th	Fr	Sa	Su
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

## Approve TimeSheet

▼ Select your project

Week No From :

Week No To :

\* Project :

\* Task :

\* TimeSheet Status :

## My Leave

▼ Search or Filter(s)

แสดง 10 แถว

#	Leave Type	Start Date	End Date	Number of Leave(Day - Hour:Minute)	Description	Status	Approver
1	Annual Leave	14-Sep-2018	14-Sep-2018	0 Day(s) - 3 Hour(s) : 0 Minute(s)	ลาพักร้อน	Approved	Pichet Wongvibulsin
2	Sick Leave	30-Aug-2018	30-Aug-2018	1 Day(s) - 0 Hour(s) : 0 Minute(s)	ลาป่วยเพราะไข้สว่ะอักเสบ	Approved	Pichet Wongvibulsin
3	Sick Leave	23-Aug-2018	23-Aug-2018	0 Day(s) - 5 Hour(s) : 0 Minute(s)	ลาป่วยท้องเสีย	Approved	Pichet Wongvibulsin
4	Sick Leave	07-Aug-2018	07-Aug-2018	0 Day(s) - 3 Hour(s) : 0 Minute(s)	ไปพบแพทย์ตามนัด	Approved	Pichet Wongvibulsin
5	Annual Leave	06-Aug-2018	06-Aug-2018	0 Day(s) - 5 Hour(s) : 0 Minute(s)	ลาพักร้อน	Approved	Pichet Wongvibulsin

แสดง 0 ถึง 0 จาก 0 แถว

# Feature: Skill Matrix

Create New Data

Job Title : Senior Officer

Name : Monruejee Daothong

\* Year :  \* No :

Remark :

Other

**CMMI Knowledge**

Advanced Level

Intermediate Level

Basic Level

None

Remark :

**Customer Relation Management Knowledge**

Advanced Level

Intermediate Level

Basic Level

None

Remark :

Please enter required fields ( . )

Job Title : Technology Management : Officer / Application Developer

Skill(s) :  Skill Categories  Skill

**Selected Item(s)**

### Skill Matrix

แสดง 10 รายการ

#	Job	Status	Updated Date
11	Technology Management : Officer / Application Developer	Active	05-Jun-2017 00:00:00
12	Technology Management : Senior Officer / Senior Application Developer	Active	05-Jun-2017 00:00:00
13	Technology Management : Assistant Manager / Application Specialist	Active	05-Jun-2017 00:00:00
14	Technology Management : Manager	Active	05-Jun-2017 00:00:00
15	Technology Management : Senior Manager	Active	05-Jun-2017 00:00:00
16	Technology Management : Assistant Vice President	Active	21-Jul-2017 17:10:02
17	Technology Management : First Assistant Vice President / Product Manager	Active	05-Jun-2017 00:00:00
18	Technology Management : Vice President	Active	21-Jul-2017 17:11:41
19	Technology Management : Senior Vice President	Active	21-Jul-2017 17:11:27
20	Technology Management : Executive Vice President	Active	21-Jul-2017 17:10:16

แสดง 11 ถึง 20 จาก 153 รายการ

หน้า 1 2 3 4 5 ... 16 หน้า

# Feature: Asset Inventory

- Software
- Hardware
- Server

**Edit Data**

\* Vendor: SE x v      \* Code: 61RAM013      Internal Code:

\* Site: Wealth Managem... x v      \* Project: ORG-WMS x v

\* Spec: RAM ECC-DIMM  
8GB 1600

Capacity:       \* Unit of Capacity: - x v      \* Contact Person: se

Telephone:       Email:       \* Contract No: se

\* Hardware Type: RAM x v      No of Item:       Price:  0

VAT:  0      Purchase Date: 17-Aug-2018      Warranty: - x v

Per Unit    Require MA    Automation Generate MA    Internal Used

**User Acquire** +Add \*\* สามารถเลือกระหว่าง User หรือ Site อย่างใดอย่าง 1 อย่าง\*\*

#	* User	* Site	* Start Date	* Owner	* No. of Items	* Embedded
1	กรุณาเลือก					

## Asset Inventory Hardware

Search or Filter(s)

แสดง 10 แถว

#	Project	Site	Code	Internal Code	Purchase Date
681	ORG-WMS	Wealth Management System Limited	61RAM013		17-Aug-2018
682	ORG-WMS	Wealth Management System Limited	61WIF001	BOI046103001	22-Mar-2018
683	ORG-WMS	Wealth Management System Limited	61WIF002	BOI046103002	29-Mar-2018
684	ORG-WMS	Wealth Management System Limited	MO59-27	2559	
685	ORG-WMS	Wealth Management System Limited	MO59-37	MO59-37	
686	ORG-WMS	Wealth Management System Limited	NB58-08	BOI_58 035806002	
687	ORG-WMS	Wealth Management System Limited	NB58-17	NB58-17	

แสดง 681 ถึง 687 จาก 687 แถว

ก่อนหน้า 1 ... 65 66 67 68 69 สืบไป

# Feature: Project Dashboard

Creates New Data

Project: WDC-WMS(2.1) Plan Date: 01-Sep-2018

Metric	Project			Organization (01-Jan-2016)			Hint
	Target	LSL	USL	Target	LSL	USL	
Requirement Stability Index	15 %	0 %	30 %	15.00%	0.00%	30.00%	🔍
Effort Deviation	0 %	-20 %	20 %	0.00%	-20.00%	20.00%	🔍
Schedule Deviation	0 %	-10 %	10 %	0.00%	-10.00%	10.00%	🔍
Schedule Performance Index (SPI)	1	0.5	1.5	1	0.5	1.5	🔍
Cost Performance Index (CPI)	1	0.5	1.5	1	0.5	1.5	🔍
Cost Deviation	0 %	-20 %	20 %	0.00%	-20.00%	20.00%	🔍
Size Deviation							

### Import SDP

Import Software Development Plan (SDP)

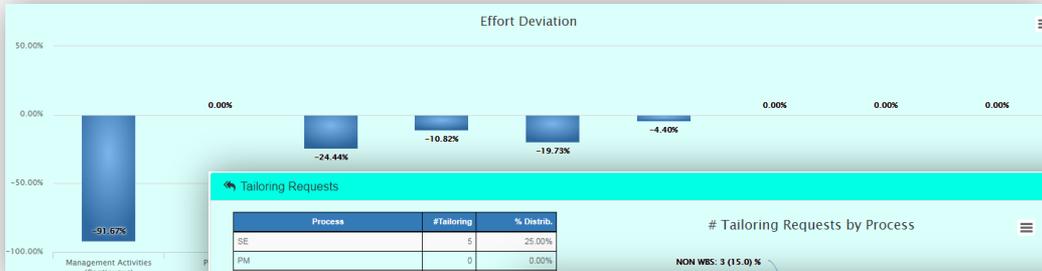
Import SDP: [Import]

### Import Other (DFR, PPQARVS, TSR, CRL)

Import Other (DFR, PPQARVS, TSR, CRL)

File Name	Import File	Measurement Report
DFR	[Import]	Sep-2018
PPQARVS	[Import]	Sep-2018
TSR	[Import]	Sep-2018
CRL	[Import]	Sep-2018

[Import] [Clear]



### Tailoring Requests

Process	#Tailoring	% Distrib.
SE	5	25.00%
PM	0	0.00%
CM	0	0.00%
PPQA	0	0.00%
PR	9	45.00%
PI	0	0.00%
MA	0	0.00%
DAR	0	0.00%
CAR	0	0.00%
NOT IDENTIFY	3	15.00%
NON WBS	3	15.00%
<b>Total</b>	<b>20.00</b>	

### # Tailoring Requests by Process

NON WBS: 3 (15.0%)

### Requirement Stability

# of Requirements in orig. baseline	5	# Change requests	12
# Requirement changes	12	# Major change requests	9
Requirement Stability Index	240.00%	% Major changes	75.00%

### Peer Review

# Reviews	0
Review effort (excl. rework)	0.00 man-day(s)
Rework effort	0.00 man-day(s)
# Weighted defects found	0.00
Review size	0.00 size unit
Review effectiveness	0.00 defect(s) / man-day
Review efficiency	0.00 size unit / man-day
Review effort percentage	0.00% from project effort
Rework effort per defect	0.00 man-day(s) / defect
Review & rework effort per defect	0.00 man-day(s) / defect

### Phase Containment Effectiveness (PCE)

Phase Introduced	Phase Found (if Weighted Defects)					Total defects introduced in each phase	Total defects introduced and found in own phase	% Defect distribution
	Planning	Requirements	Design	Development	Testing			
Planning	0	0	0	0	0	0	0	0.0%
Requirements	0	0	0	0	4	4	4	1.86%
Design	0	0	0	0	6	6	6	2.79%
Development	0	0	0	0	187	187	187	81.63%
Testing	0	0	0	0	0	0	0	0.0%
<b>Total defects found in each phase</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>197</b>	<b>197</b>	<b>197</b>	<b>87.21%</b>
<b>PCE</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

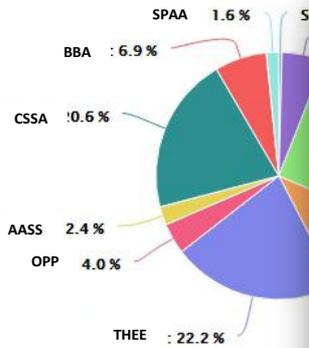
### Phase Containment Effectiveness (PCE)



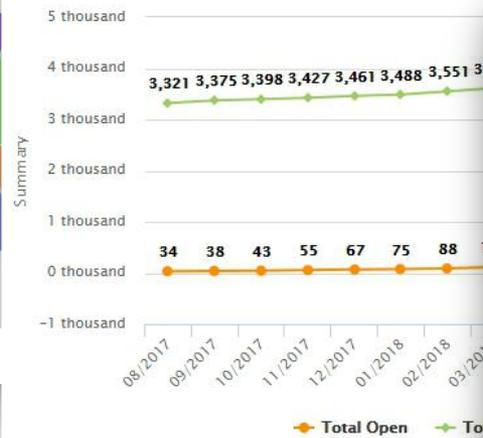
Phase	Total defects found in each phase	Total defects introduced in each phase	PCE
Planning	0	0	0.00
Requirements	4	4	0.00
Design	6	6	0.00
Development	187	187	0.00
Testing	0	0	0.00

# Feature: Service Dashboard

Issue Distribution (By Product)



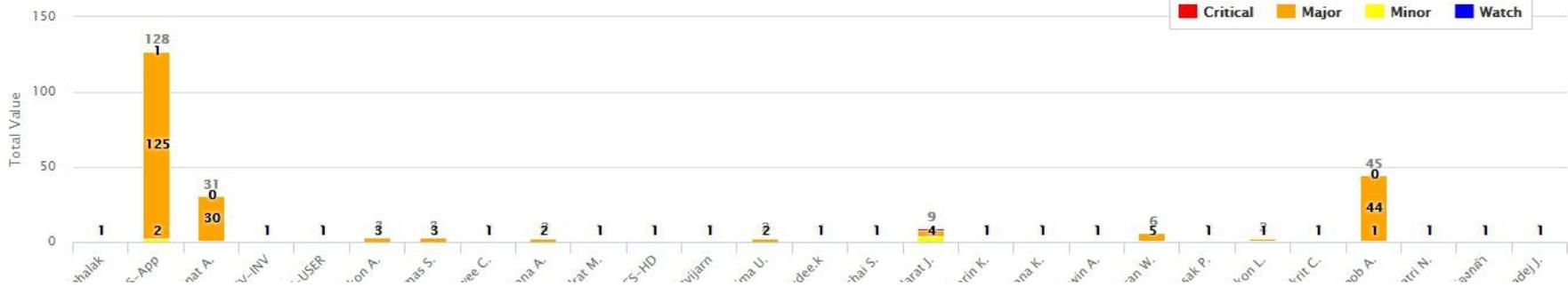
Accumulate amount of Open/Close Issues per month



Amount of Open/Close Issue per month



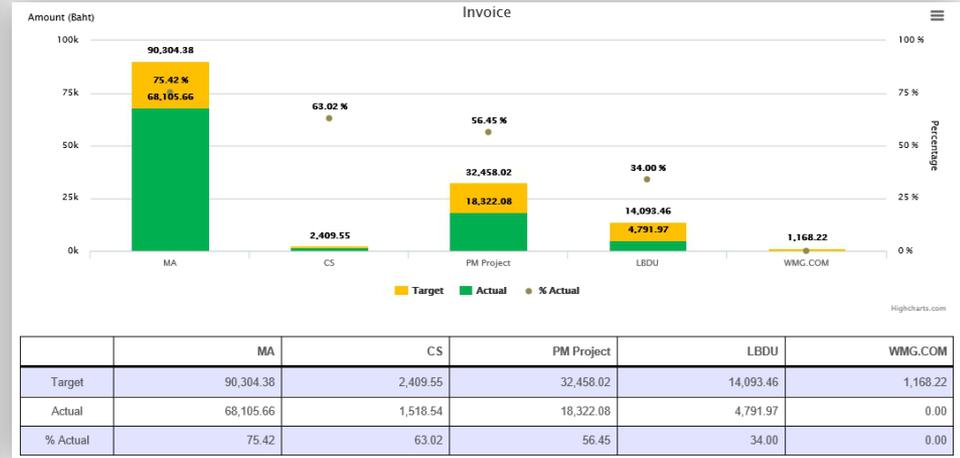
Amount of Holding issue (By User)



## Financial Target of Year 2018

As of Date: 21-Aug-2018

Unit: Baht





Bonanza Process Optimization (BPO)



Bonanza Insight



## Resource

- Employee
- Skill Matrix
- Asset Inventory
- Timesheet
- Leave
- Resource / Effort Allocation
- Organization Training

## Project Management

- Project Planning
- Project Monitoring & Tracking
- Risk & Issue
- Requirement Management / Traceability

## Service

- Service planning
- Issue tracking (Redmine)
- Service report

## Development

- Source code Analysis

## Quality

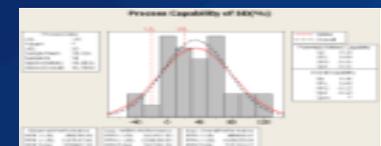
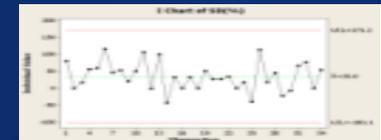
- Peer review
- Test
- Internal Audit

## Financial & Accounting

- Financial Planning
- Billing
- Expense
- Accounting



## Data Analysis



$$Y = aX_1 + bX_2 + cX_3 + \dots$$



## Organization Tracking

- Project / Service Dashboard
- Organization Dashboard
- Financial Dashboard
- Resource / Effort Monitoring
- Organization Skill Monitoring



*Thank You*

**WMSL**  
*Professional Best*