A Fast Adoption Methodology of Continuous Auditing in SAP ERP Environment

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ICAECIA Taiwan Chapter
About Miss. Sherry Huang

- MBA, CIA, CCSA, CEAP, CFAP, ACDA
- Chair, ICAEA Taiwan Chapter
- Director, Professional Development, IIA Taiwan
- CEO, Jacksoft Commerce Automation, Ltd.
- Published 30+ articles and Lectures in 3 Universities.
- 20+ years experience in Auditing Consultancy for 500+ organizations.
JACKSOFT
RegTech Bots in Action

The fintech ecosystem in the Asia Pacific is witnessing significant growth in recent years. This wave of new technologies is also changing the behavior of financial regulators, specifically around money laundering evaluations by Asia/Pacific Group on Money Laundering (APG), which is having a profound impact on how financial transactions are conducted worldwide. As a leading RegTech and computer auditing company in the Asia Pacific, JACKSOFT specializes in innovative RegTech solutions leveraging AI. With partners scattered across Tokyo and Dubai, the Taiwan-based company has served more than 800 organizations and 1000+ licenses for the RegTech software. The company’s client base comprises big international public accounting firms and internationally renowned banks and financial institutions.

JACKSOFT’s array of RegTech products comprise JGRC-Governance, Risk and Compliance System series, and JBOT-Intelligent Robot for Compliance series including JBOT for anti-money laundering (AML) or JAML as well as a solution for combating the financing of terrorism (CFT). “Effective AML/CFT regimes are essential to protect the integrity of markets and the global financial framework. For this, clients need to comply with a set of procedures, laws, and regulations through their internal control system,” says Sherry Huang, CEO of the company. JAML aims to assist auditors to comply with these regulations and check millions of transactions and customer data, which is a knowledge sensitive and high-risk area.

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GTAG--Review Of IIA Guidance

• Continuous Auditing
  --the combination of technology-enabled ongoing risk and control assessments

• Continuous Monitoring
  --management process that monitors on an ongoing basis whether internal controls are operating effectively

• CAATs(Computed Assisted Audit Techniques)
  --automated audit techniques, such as generalized audit software, utility software, test data, application software tracking and mapping, and audit expert systems, that help internal auditors directly test controls built into computerized information systems and data contained in computer files.
Continuous Auditing/Monitoring Architecture

Audit Objectives

Risk

Control

CAATs

Continuous Risk Monitoring

Continuous Auditing

Key Performance Indicator

Key Risk Indicator

Continuous Auditing Dashboard

Automated Warning Notice

General Audit Software (GAS)

Audit Script Design

Data

Source: Accounting Monthly Magazine
SAP ERP Environment

Source: ERP Made Simple (with SAP)
Lesson Learn- Auditing in SAP Environment

Source: https://info.acl.com/

Source: https://www.jacksoft.com.tw/
How do people adopt technology?

Source: Technology Acceptance Model (TAM) (Davis, Bogozi and Warshaw, 1989)
Continuous Auditing Acceptance and Adoption

IT Investment and Firm Performance


* : p<0.05; **p<0.01
# A Fast Adoption Methodology for Continuous Auditing

<table>
<thead>
<tr>
<th>IT Infrastructure Components</th>
<th>Human- IT Resource Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Continuous Auditing Platform (ex. JTK)</td>
<td>➢ CAATs Training (ex. ICCP)</td>
</tr>
<tr>
<td>➢ Auditing Data Warehouse (ex. JADW)</td>
<td>➢ ERP Auditing Training (ex. CEAP)</td>
</tr>
<tr>
<td>➢ Audit Robot (ex. JBOT) and Audit Dashboard</td>
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</tbody>
</table>
IT infrastructure 1: Continuous Auditing Platform

JACL App Development

ACL Data Analytic

Management Platform

Audit Report Manager

Audit Report Auto Notify

Taiwan Patent No I380230
Continuous Auditing Platform

Audit Knowledge Management
Audit Result Analysis
IT infrastructure 2: Audit Data Warehouse

Enterprise Big Data Platform

1st Layer: Enterprise Data Warehouse Server

ETL (Extract Transform Load)

IT Department

JADW Platform

2nd Layer: Audit Data Warehouse (ADW)

By Control Process

Subsidiary 1

By Subsidiary

Subsidiary N

JTK Platform

3rd Layer: Audit Data Mart (ADM)

Data Analysis

Data Mining

Risk Assessment

Continuous Audit Reports

Internal Audit Dep.
IT infrastructure 3: Audit Robot and Dashboard

MORE THEN 1000 CLIENTS SAY “HOW AMAZING! JACKSOFT”
Human-IT Resource 1: ICCP Training

Information Technology
- CIAP (Certified Internet Audit Professional)
- CDAP (Certified Database Audit Professional)

Accounting
- CEAP (Certified ERP Audit Professional)
- CFAP (Certified e-Forensic Accounting Professional)

ICCP (International Certified CAATs Practitioner)
Fast Adoption Methodology

Phase 1: Fast Forward
- Step 1: Audit Objective Interview
- Step 2: Standard JBOT
- Step 3: Standard Audit Data Warehouse
- Step 4: Information & Communication

Phase 2: Capacity Building
- Step 1: Learning Data Warehouse
- Step 2: Learning ICCP
- Step 3: Project Based Learning (PBL)

Phase 3: Self-Development
- Step 1: Build your own JBOT
- Step 2: Dashboard Performance Analysis
- Step 3: Learning CEAP
Case Study 1: IT Technology

ERP Environment

Revenue: about 6.7 billions USD
Employee: 9,000 ~ 10,000
ERP Location: Tainan, Taiwan
PHASE 1: JBOT: Vendor Control for SAP ERP

PHASE 2: 15 Attend ICAEA Courses 13 ICCP

PHASE 3:

Successful Adoption after 3 Weeks

<table>
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<tr>
<th>SAP Table</th>
<th>Records</th>
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</thead>
<tbody>
<tr>
<td>LFA1</td>
<td>38,973</td>
</tr>
<tr>
<td>LFB1</td>
<td>62,600</td>
</tr>
<tr>
<td>BSAK</td>
<td>10,162</td>
</tr>
<tr>
<td>BSIK</td>
<td>181,388</td>
</tr>
<tr>
<td>BKPF</td>
<td>6,415,149</td>
</tr>
</tbody>
</table>

KPI:

Scripts
16

Scripts
39

144 Scripts After 1 Years

55 After 1 Years
Case Study 2: Manufacturing

ERP Environment

Revenue: about 10 billions USD
Employee: 11,000 ~ 12,000
ERP Location: Jiangsu, China
PHASE 1: JBOT: Vendor Control for SAP ERP

<table>
<thead>
<tr>
<th>JBOT SAP AP</th>
<th>JBOT SAP Vendor</th>
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<tr>
<td>Scripts</td>
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</tr>
<tr>
<td>16</td>
<td>39</td>
</tr>
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</table>

**SAP Table** | **Records**
---|---
LFA1 | 17,364
LFB1 | 49,847
BSAK | 39,596
BSIK | 14,700
BKPF | 517,531

PHASE 3: Successful Adoption after 3 Weeks

 Scripts 72

After 3 Months

PHASE 2: 10 Attend ICAEA Courses 6 ICCP

KPI:

**JAPP Monitoring Report**

Data Period: 2021/07/01 - 2021/08/27

- Module Counts: 2
- Process Counts: 6
- JAPP Counts: 23
- Script Counts: 79
Conclusion

• 2-4 weeks to adopt the Continuous Auditing Platform
• 30% Data warehouse/ 40% Scripts/ 30% Training
• 2 months to improve the CAATs Self-efficacy
• Scripts design and Risk Analysis become the daily work for auditors
Q & A

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RegTech and Computer Auditing Experts