Automating Accounts Receivable for a Remote Audit

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Agenda

1. Introduction
2. Automation as a Remote Audit Enabler
3. Methodology & Observations
4. Summary & Conclusions
Introduction
Procter & Gamble

Cincinnati, Ohio
Objective

- **Original goal:** Automate accounts receivable audit tests at P&G

- **Extended goal:** Use automation to enable remote audit

Manual A/R Audit Tests → Automated Procedures → Remote Audit
Current status

- Unsuccessful attempt at automating accounts receivable audit tasks
- “We learned a few ways of how not to do it”
Automation as a Remote Audit Enabler
The remote audit framework

- **Remote audit** uses information and communication technology and data analytics to assess controls, gather evidence, and interact with clients (Teeter et al, 2010)
Modular audit automation

- **Audit automation** facilitates risk-based evidence collection while increasing audit coverage (Alles et al., 2008)
  - Enables **full population** testing
  - Directs auditor attention to **exceptions**

- **Formalization/reengineering of audit procedures** into rules and analytics
  - **Testing transactions**
    - e.g. customer behavior, abnormal transactions
  - **Testing controls**
    - e.g. authorizations, segregation of duties
Modular audit automation

- Audit programs are typically divided into several modules or functions.
- Automation evaluation begins at functional level.

Diagram:

- Economic cycle (Revenue/collection cycle)
- Business function/audit area (Accounts receivable)
- Control objective (Credit limits)
- Control activity (Held orders)
- Control test (Auth, SoD)
Process reengineering

- Three approaches:

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<tr>
<th>Automate existing control tests</th>
<th>Automate control activities</th>
<th>Automate control objectives</th>
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<tr>
<td>Formalize audit tests, output exceptions</td>
<td>Create new tests in digital environment, alter some business processes (e.g. digital docs)</td>
<td>Evaluate audit risk, rethink control activities, alter business processes to enable new audit procedures</td>
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Minimal effort | Moderate effort | Moderate to high effort |
Methodology & Observations
Analysis of existing audit plan

- First approach: Automate existing A/R control tests
  - Evaluated existing audit procedures (40 audit tests)
  - Classified audit tests into four buckets (A, B, C, D)
  - Identified tests that required minimum reengineering effort (low-hanging fruit)
Framing the remote audit

- Second approach: Automate A/R control activities
  - Evaluated internally-developed remote audit plan
    (24 control activities)
  - Determined process/system design prerequisites of the remote audit/audit automation
  - Proposed new tests for querying and comparing ERP transactions
Distilling the primary audit objectives

- Third approach: Automate A/R control objectives
  - Separated (9) objectives into key components:
    - Collectability
    - Credit Limits
    - Miscellaneous A/R
    - Linkage between credit limits and aging (Profiles of high-risk customers)
  - Authorization
  - Work in process, tests to be determined
Conclusions
Work in process

- Worked with P&G internal auditors to evaluate and attempt automation
- Can there be a push-button audit?
- Outcomes and goals were unclear at times
- Testing and manual verification
- Simple vs. creative

Continue to address alternatives to enable automation of the audit process
Summary

- Gained insight into the audit processes
- Identified areas for business process reengineering
- Addressed some potential areas where a remote audit would be appropriate
Next research steps

- Exploring additional areas for partial automation
- More clearly identify goals and desired outcomes