Demystifying Risk Management in ERPs

Andy Snook,

President, Fastpath

FASTPATH

Agenda

- Working together: audit + IT + business process owners
- Approaches to security and segregation of duties analysis
- Understanding systems and system access
- Automation & continuous monitoring

About Me

- President and founder of Fastpath, Inc.
- Certified in Risk and Information Systems Control
- 15 years experience in financial management systems
- 8 years experience in systems auditing

Fastpath Facts

- Founded 2004
- Headquarters in Des Moines, IA
- Microsoft Gold Competency ISV & ERP
- Staff includes CPAs and CIAs

Can we prove it?

- 800+ customers
- 30+ countries
- 6 continents
- IIA Industry Leader

Working Together Audit, IT and BPOs

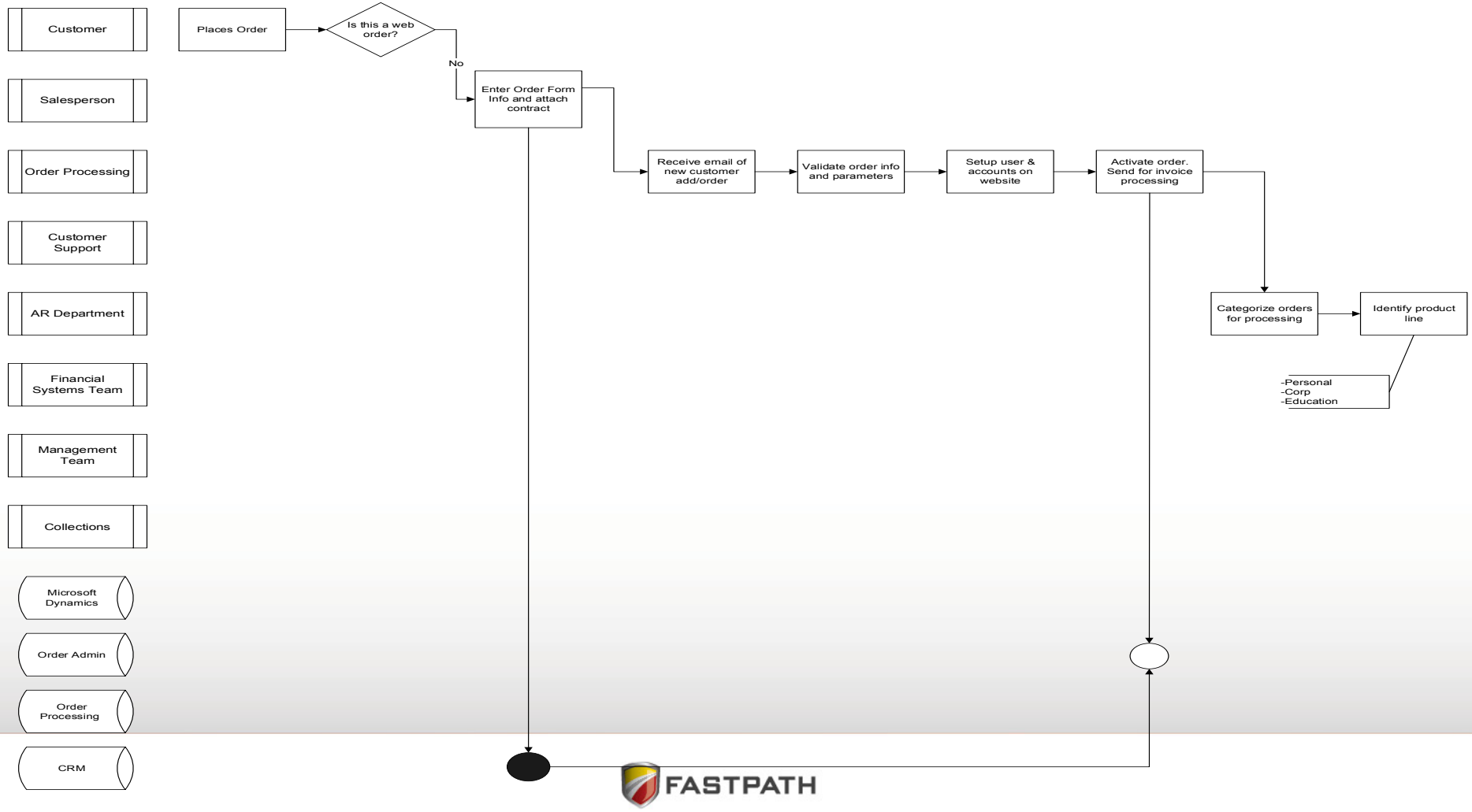
Working Together Audit, IT and BPOs

- ERPs sit in the middle of IT and BPOs
- BPOs unsure of the underlying security
- IT unsure of the business process requirements/ risks
- Few people have holistic view of process
  - Processing requirements
  - Financial
  - Roles
  - Systems, data, integrations
  - Risks

Working Together Audit, IT and BPOs

- Identify the processes that are in scope
- Use business process maps to unite the teams
- Involve audit, IT and BPOs in mapping
- Include roles, systems and risks in map
- Provides basis for documentation, training, auditing

Map the process



What does security and controls (S&C) mean?

“Security refers to the features around user application permissions whilst Controls refers to the process controls within and external to the application.

The goal is an environment that uses a blend of Security & Control measures to mitigate risks that are operational or financial in nature”.

Why is S&C Important?

- It will mitigate fraud and malicious activity
- Management decisions are based on accurate information
- Achieves process efficiencies (transforming manual into automated controls)
- Increases management confidence
- Compliance requirements (internal and external auditors)

What we see at our clients

- Access security is low priority for the project team
- Process controls are not part of the consideration
- Security design is the domain of IT/Sys Admin and business is not aware
- No on-going monitoring of process controls
- No consideration of segregation of duties
- Dilution of ‘go-live’ security design
- Inability to report on current security setup
- Expensive customisations in place of S&C features

Translate process and risk to ERP systems

- Base application security on business process maps
- Identify high risk business processes
- Determine functionality required for high risk processes
- Define risks, reviews, reviewers and periodicity
- Provide evidence that reviews are being done

FASTPATH

An Excel spreadsheet of 1,000,000 rows
= **Forty** 3 ring binders of 500 pages each!

An excel sheet of 5,000 rows
= **One** 3 ring binder of 100 pages

Application Security – Who has access?

- Take a risk based approach
- Analyze by function not by user or risk
- Average system has over 5000 access points
- Average system has 30-40 high risk access points
- 500 vs. 1,000,000
- Reviews performed by BPOs not IT

Application Security – Who has access?

Customers
Vendors
Item/Inventory
Pricing
HR
Payroll
Process disbursements (check run)
Release/Approve purchase order
Goods receipt
Enter vendor invoices
Post journal entries
Open/Close GL accounts
Ship customer orders
Accounts Receivable transactions (post cash, credits)
Credit & Collection (credit limits, hold, release)
Customer order entry
Process/Modify customer invoices
Process credit memos
Write-off customer accounts
Record labor hours
Payroll payment (check run)
Prepare payroll (calculation/approval)
Open/Close Fiscal Periods
Maintain Users/User Security Privileges
System/ Module Configuration - Settings

System access – Administrative Access

- What functions are required for admin
- Maintenance, code release, upgrades, security
- System admin role – how does it work?
  - Programmatic
  - Alternative – assign necessary (all?) roles to user
- Use named users with admin role
- Consultants use
- Periodic reviews

Application vs. Database Security

- How are they integrated
- How are changes made at the database level?
  - Named users vs. Service account
- Periodic reviews
  - Reconcile app and db users
  - Administrative users
  - Custom integrations/outside access

Segregation of Duties

- Preventative vs. productivity
- Build a rule set of potential conflicts
- Identify Conflicts
- Mitigations
- 3 key questions
  - What are your rules?
  - Where are your risks?
  - What are you doing about it?

Audit trails – What did they do with that access?

- Take a risk based approach
  - Focus on key areas – Vendors, configuration, cash receipts, etc.
  - Focus on key fields – Payment terms, addresses, pricing, etc.
- Who changed it?
- When was it changed?
- Was it changed the right way?

Questions?

Andy Snook
snook@gofastpath.com
Twitter: @snookgofast