



The New Leader
in Access Orchestration
and Application Security

Assess your JDE security

Know where your risks are and understand how to reach best practice

Agenda

- What can Happen?
- Identify Weaknesses in your ERP Security
- Auditing your ERP
- Remediation
- Build a Business Case
- The Bigger Picture



Greg Sosna

ERP Architect Security Solutions
greg.sosna@pathlock.com



The market leading application security and controls automation platform.

Trusted by **the** world's leading enterprises, governments, **and** auditors

Our Customers



Our Partners



Broadest Application Support

Unmatched support for critical business applications
User monitored for our customers

Native and Cloud-Based Solutions

A hybrid toolset capability for a hybrid world
business activities monitored for our customers

500+

Worldwide employees for fulfillment and support
employees around the world

1,300+

Customers, worldwide with a 96% renewal rate
typical ROI achieved by customers through automation, automation, reduced costs, and minimized risk exposure exposure

QSoftware is now part of Pathlock

Security for the Enterprise ERP

Building the Market Leader

2005

Grey Heller (now AppSIan)

Peoplesoft Experts
 Leader in Data Security & UX
 SAP/EBS Data Security –
 Masking & ABAC

2000

Q Software

Market Leading GRC tools for
 Oracle/JDE
 On-Prem & Cloud
 Services & Methodologies
 Security Assessment Process

2005

SAST Solutions

Application Security
 SAP Focus
 Cyber & GRC Security
 Scan Code for Issues

2005

Security Weaver

GRC tools
 SAP Focus
 Integrated into SAP

Aug 2021

Dec 2021

Mar 2022

2023

Xpandion

Highly Innovative GRC tools for
 SAP
 On-Prem & Cloud
 Very Quick Implementations
 Market Leading Workflow

2007

Oct 2021

Pathlock

GRC Leaders for 15 Years
 Cross Platform SOD & ULM
 SAP Specialism – full GRC Toolset
 SAP Relationship

2006

Mar 2022

CSI Tools

Innovative GRC
 SAP Focus
 Based in Belgium

1997

Apr 2022

Pathlock

Worldwide Leader in ERP Access and Data
 Security
 Oracle EBS, JD Edwards, SAP, MS, Netsuite, SN
 Cross Platform (141 Applications)
 User Lifecycle Management
 Security, Audit & SOD
 Efficiency in Internal Controls
 Worldwide Channel

Access Governance



Role design and Re-design



Compliant Provisioning



Separation of Duties and Risk Analysis



User Access Certifications and Review



Privileged and Temporary Access Management



Control Enforcement



Transaction Monitoring



Data Masking



Control Enforcement and Transaction Blocking

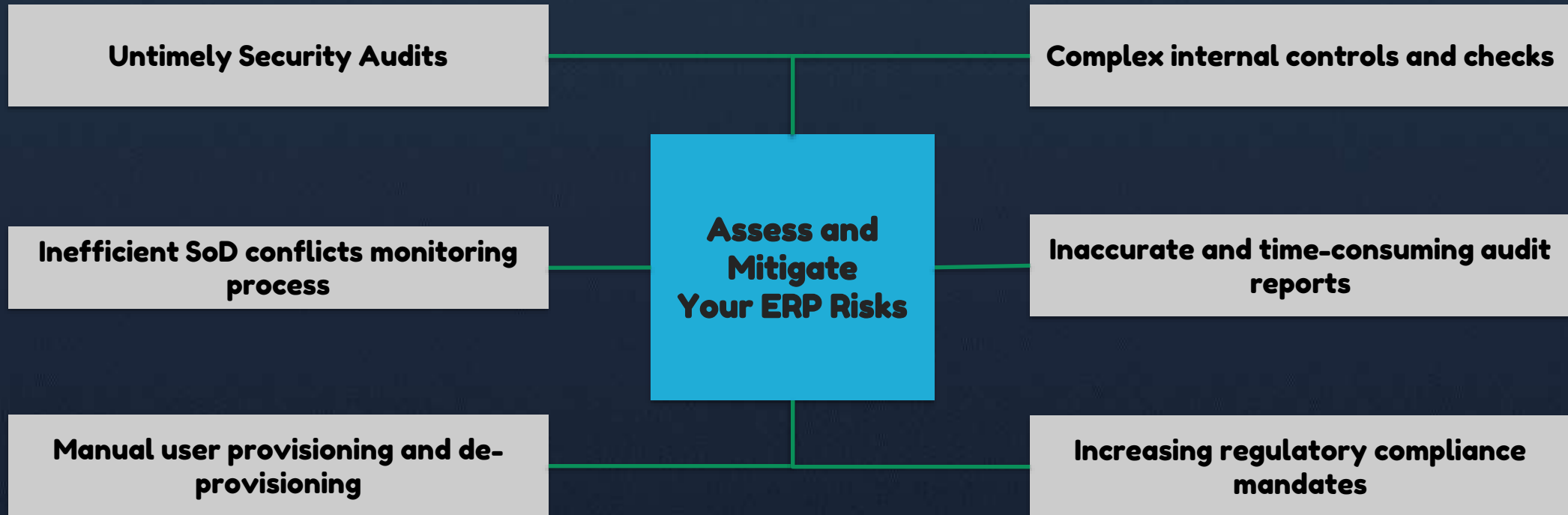


Dynamic Authorization



SSO and MFA Enforcement

Managing Risks - Crucial for a Sustainable ERP



PwC Fraud Survey 2020

47%

Experienced fraud
in last 2 years



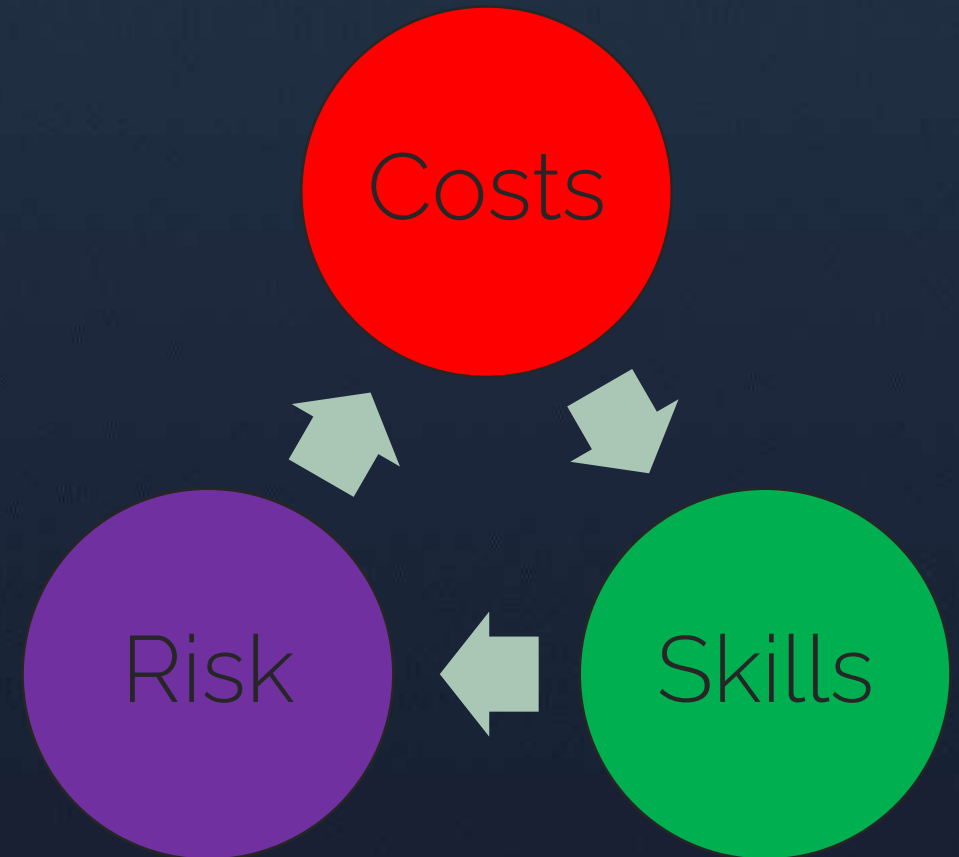
Committed
by insiders

INTERNAL CONTROL WEAKNESSES
WERE RESPONSIBLE FOR NEARLY
HALF OF FRAUDS



The Efficiency Conundrum

- Sustainable Internal Controls
- Time savings in Security Management
- Efficiency in Audit



Issues to Worry an ERP Director

- What are my Risks
- Are Major Frauds Possible on my ERP
- Satisfying Internal/External Audit
- Internal Controls
- How do I Plan Remediation
(a path to best practice)



WHY CHOOSE A SECURITY ASSESSMENT?

Security Re-Design

Known violations, issues with existing security design and structure.

"Help me understand my current state and make recommendations for a new security model"

45%

33%

Remediation

Security design healthy, high volume of violations related to segregation of duties issues.

"Help me make sense of the data and recommend a path towards compliancy"

22%

Controls Review

Known violations, high possibility of false positives.

"Educate me, review my rules and help me design compliant processes"

SECURITY ASSESSMENT PROCESS

7 STEPS



1

INSTALLATION
OF
Q SOFTWARE



EXECUTION
OF AUDIT



ASSESSMENT BY
Q SOFTWARE
CERTIFIED
CONSULTANT

4



PRESENTATION
OF RESULTS

5



RECEIVE
EVIDENCE
PACKAGE



REVIEW EVIDENCE &
REMEDATION PLAN

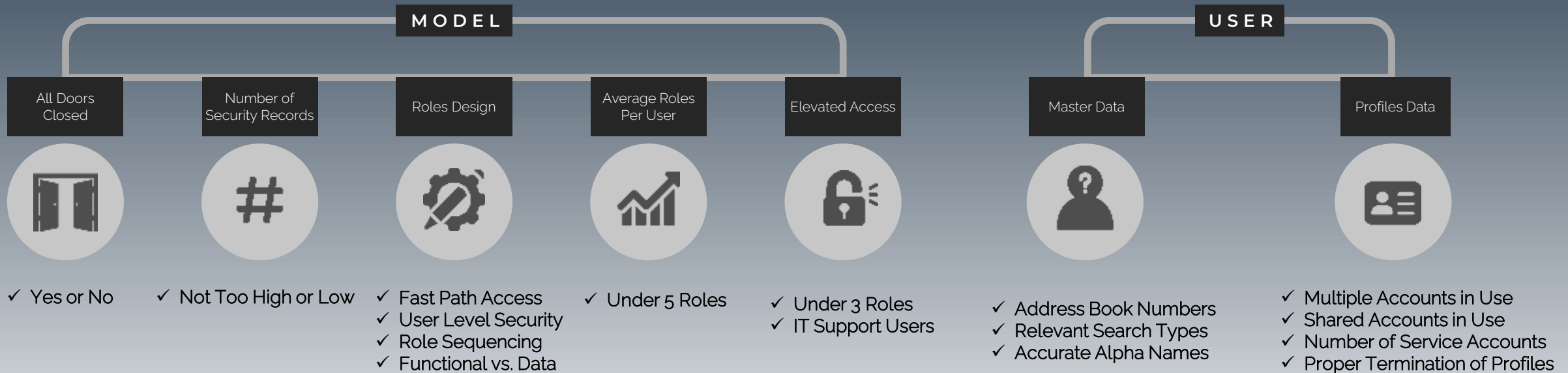
7



Q&A / SUPPORT

SECURITY DESIGN

MODEL & STRUCTURE RATING



POOR

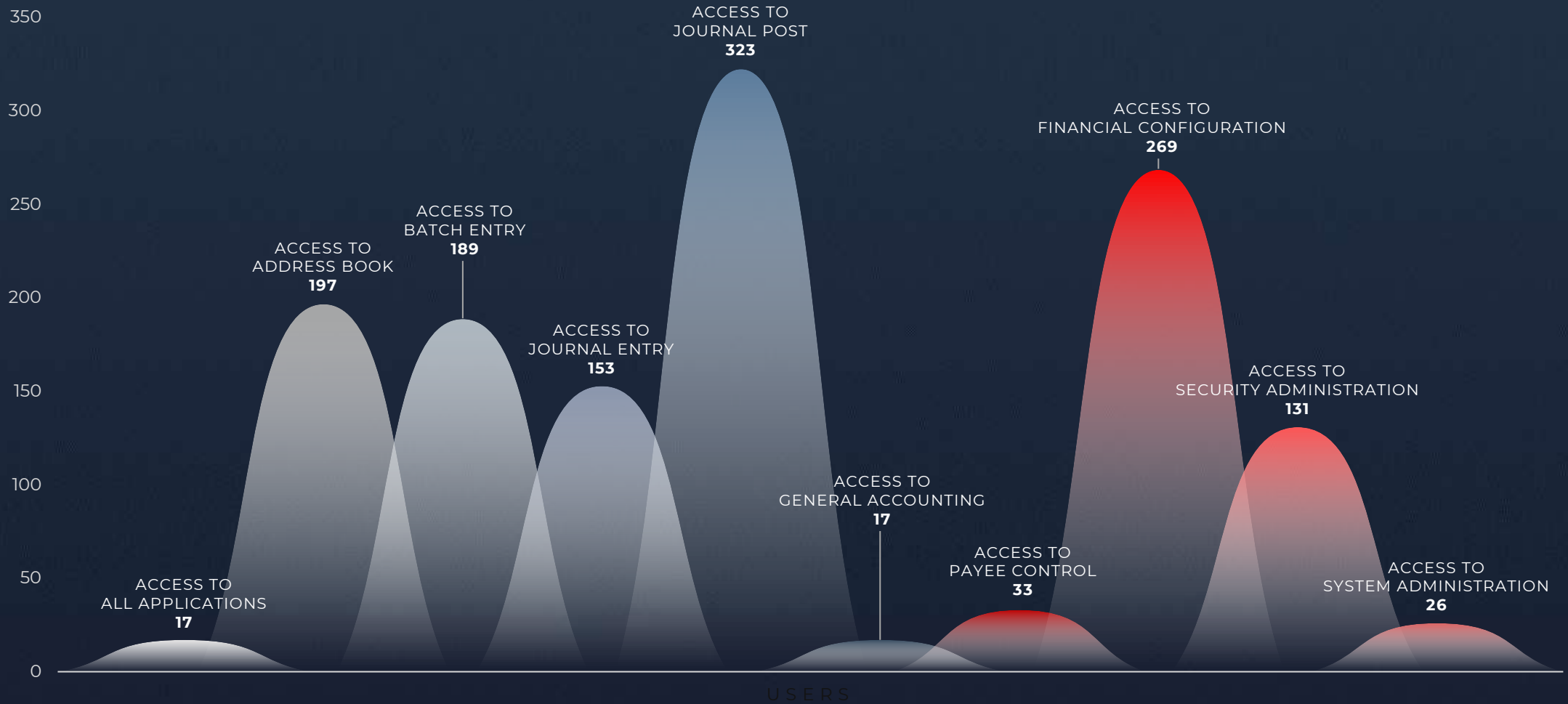
FAIR

GOOD



CRITICAL ACCESS

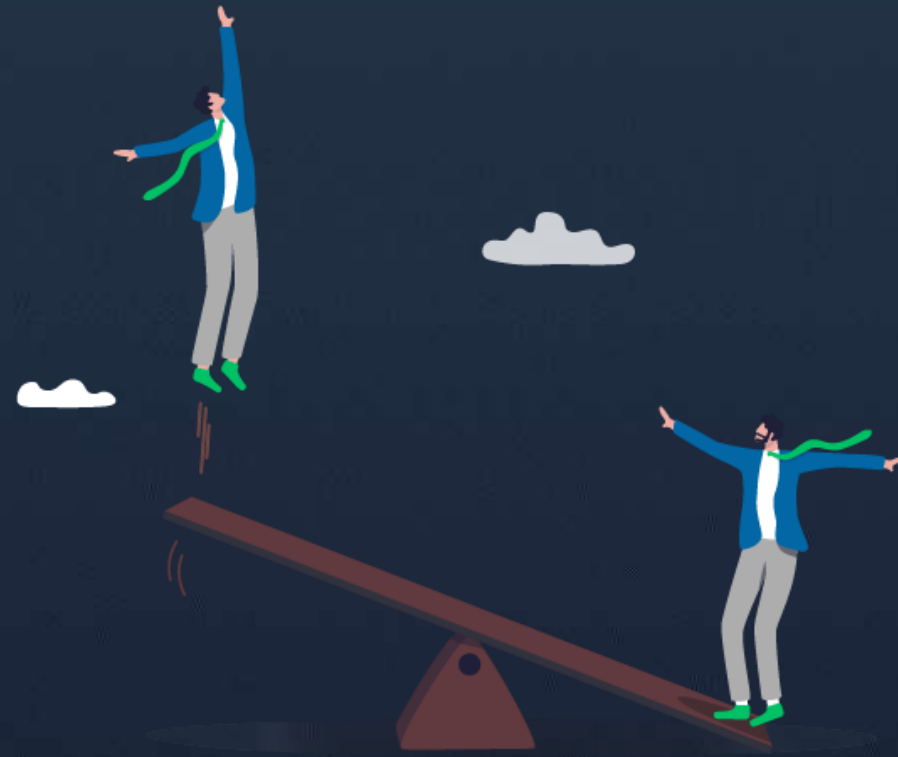
VIOLATION SUMMARY



SEGREGATION OF DUTIES

VIOLATIONS SUMMARY

Rule ID	Rule Description	Risk Severity	No. of Users in Violation	Business Users in Violation	IT Users In Violation
001	Maintain Vendor Master & Enter Voucher	Medium	75	51	24
002	Maintain Vendor Master & Payee Control	Medium	30	15	15
003	Maintain Vendor Master & Create Manual Payment	Medium	75	51	24
004	Maintain Vendor Master & Create Automatic Payment	Medium	75	51	24
005	Enter Voucher & Create Manual Payment	Medium	86	62	24
006	Enter Voucher & Create Automatic Payment	Medium	86	62	24
007	Maintain Bank Accounts & Create Payments	Medium	53	32	21
008	Create Payments & Positive Pay	Medium	84	62	22
009	Maintain Vendor Master & Prepare Bank Reconciliations	Medium	60	36	24
010	Enter Vouchers & Prepare Bank Reconciliations	Medium	67	43	24
011	Create Payments & Prepare Bank Reconciliations	Medium	67	43	24
012	Maintain Bank Accounts & Prepare Bank Reconciliations	Medium	37	16	21
013	Enter Journal & Post	High	86	62	24
014	Enter Journal & Close Period	High	70	46	24
015	Post & Close Period	High	76	52	24
016	Enter Journal & Maintain General Ledger	High	70	46	24
017	Maintain Customer Master & Process AR Receipts	Medium	128	104	24
018	Process AR Receipts & Prepare Bank Reconciliations	Medium	69	45	24
019	Process AR Receipts & Enter Journal	Medium	71	47	24
020	Process AR Receipts & Post	Medium	117	93	24
021	Process AR Receipts & Process Deductions	Medium	98	74	24
022	Maintain Payment Terms & Invoice AR	Medium	48	27	21
023	Maintain Payment Terms & Maintain Customer Master	Medium	51	30	21



Demo

File Home Insert Draw Page Layout Formulas Data Review View Automate Help

Default: Formula Bar Split Hide Unhide

Sheet View Workbook Views Show Zoom Window

Keep Exit New Options Gridlines Headings

View Side by Side Synchronous Scrolling Reset Window Position Switch Windows Macros

D13 fx DV920

	A	B	C	D	E	F	G	H	I	J
13	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	7	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P041016	Duty to Duty
14	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	8	Application Security	Single: Run = Y,	P041016	Duty to Duty
15	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	9	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P041017	Duty to Duty
16	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	10	Application Security	Single: Run = Y,	P041017	Duty to Duty
17	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	11	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P0411	Duty to Duty
18	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	12	Application Security	Single: Run = Y,	P0411	Duty to Duty
19	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	13	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P04118	Duty to Duty
20	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	14	Application Security	Single: Run = Y,	P04118	Duty to Duty
21	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	15	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P0411SV	Duty to Duty
22	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	16	Application Security	Single: Run = Y,	P0411SV	Duty to Duty
23	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	17	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P0411Z1	Duty to Duty
24	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	18	Application Security	Single: Run = Y,	P0411Z1	Duty to Duty
25	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	19	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P042002	Duty to Duty
26	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	20	Application Security	Single: Run = Y,	P042002	Duty to Duty
27	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	21	Action Security	Single: Add = Y, Delete = Y, Change = Y, Copy = Y,	P4314	Duty to Duty
28	001	Maintain Vendor Master & Enter Voucher	BHAVNESH	DV920	BHAVNESH	22	Application Security	Single: Run = Y,	P4314	Duty to Duty

The Business Case

Believable
Understandable
Supportable

RISK ANALYSIS

What happens if it goes wrong
Risk of INACTIVITY!



COSTS/SAVINGS

Efficiency, automation
Soft savings – cost of fraud



IMPLEMENTATION

Plans & resources
Dependencies



COMMUNICATION

Buy-in
Resources commitment



MEASURES

Success Criteria
Targets



Identify Stakeholders – what is their Involvement?

Stakeholder	Description	RACI
End Users	▪	I
Business Support <ul style="list-style-type: none">▪ ERP Finance▪ ERP Supply Chain Management	▪	C
Security Administrators	▪	A
System Administrators	▪	C
ERP Change Management	▪	R
Internal Audit	▪	I

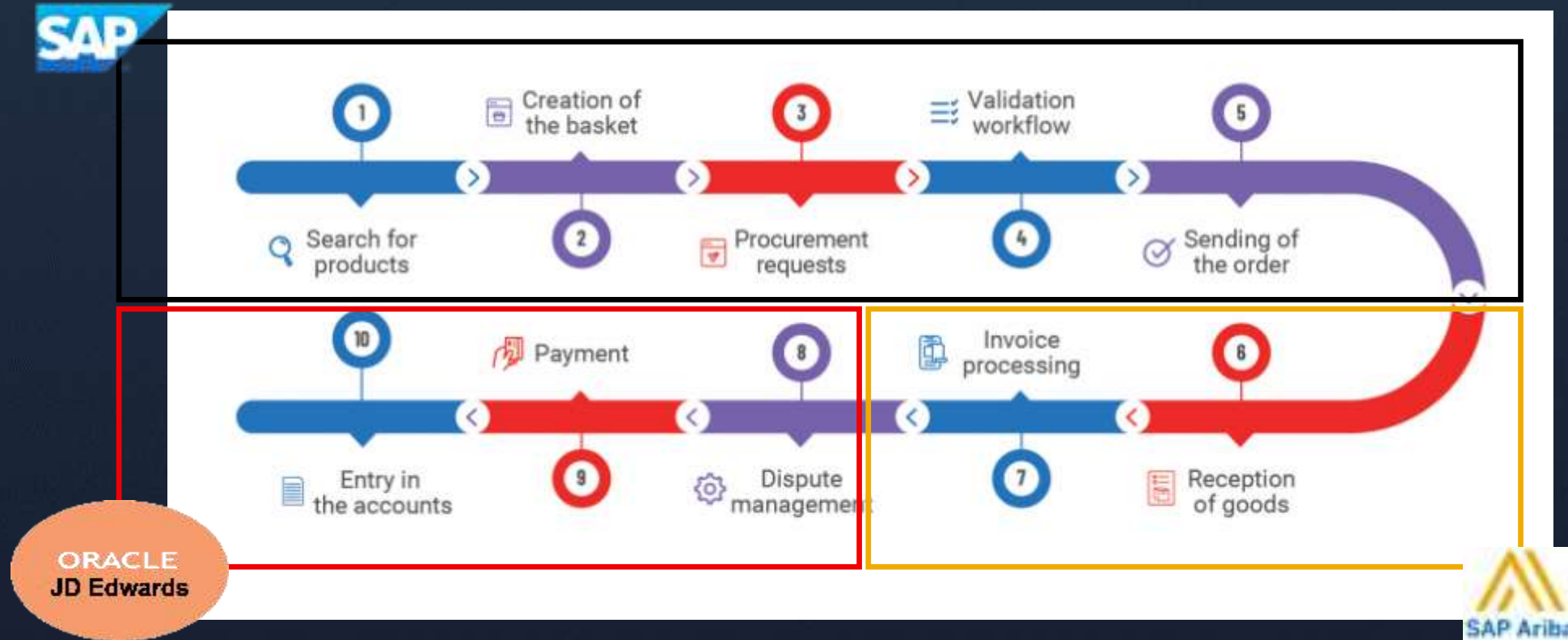
RACI - responsible, accountable, consulted, informed

8 Best Practice Tips for ERP Security

1. Evaluate the Risks (experience is key)
2. Audit Live Security
3. Know your Business Processes
4. Plan your Roles – Least Privilege
5. Understand your Controls
6. Build a Risk Matrix (yours not someone else's)
7. Empower the Business
8. Automate – Sustainable Controls



Cross-Application Business Processes have unlocked best-of-breed solutions, but are introducing new access risks



PATHLOCK – The Cost Effective GRC Solution

Tailored in day to meet the needs of Your Business

EFFICIENT PROVISIONING

Workflow to automate joiners, enable SOD checks & approvals. Make sure your users are happy and auditors have their audit trails

CONTROL SOD, PREVENT FRAUD

Build your own risk matrix, ensure you are compliant with legislation, and can satisfy the auditors.



MANAGE RBAC PROACTIVELY

Move away from complex mitigation to a security model that is stable and supportable. Reduce costs and increase security

SIMPLIFY ACCESS REVIEWS & OTHER CONTROLS

Huge efficiency gains from utilizing the very flexible workflow

Q&A

greg.sosna@pathlock.com

Thank You

If you have any questions

greg.sosna@pathlock.com