

ELEVATING AUDIT THROUGH RISK-BASED AUDITING WITH CONTINUOUS MONITORING

Anton Bouver – Director | RSM South Africa

Jonathan Crisp – Director | BarnOwl



Elevating audit through objective / risk-based auditing

- The Institute of Internal Auditors (IIA) framework defines internal auditing as: ‘An independent, objective assurance and consulting activity designed to add value and improve an organisation’s operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes’
- It is a common fallacy that the Internal Audit function exists to pick holes in management’s operations. This is not at all the case! Internal Audit must involve the organisation more in the audit process and produce recommendations that contribute to the organisation’s objectives. At the same time, the internal audit activity has to be careful not to lose its independence and objectivity because of moving closer to the operations
- Internal Audit transitions from the business of providing subjective opinions on “control effectiveness” on a small fraction of risk universe to ensuring senior management and board are aware of the current residual risk status linked to key strategic value creation objectives and potential value erosion objectives
- Enables an organisation to optimise level of risk being taken to best achieve the organisation’s objectives whilst still operating within the risk appetite of the organisation

Elevating audit through objective / risk-based auditing

Norman Marks on Governance, Risk Management and Audit:

In May 2020 the IIA published a new [Practice Guide: Developing a Risk-based Internal Audit Plan](#). Practice Guides (PG) are recommended guidance but not mandatory. Here are some of the shining lights in the PG (with my highlights):

- In today's business environment, effective internal auditing requires thorough planning coupled with **nimble** responsiveness to quickly changing risks.
- To add value and improve an organisation's effectiveness, internal audit priorities should align with the organisation's objectives and should **address the risks with the greatest potential to affect the organization's ability to achieve those objectives**.
- Comprehensive risk-based planning enables the internal audit activity to properly align and focus its limited resources to **produce insightful, proactive, and future-focused assurance and advice on the organization's most pressing issues**.
- While the annual risk assessment is the minimum requirement articulated in the Standards, today's rapidly changing risk landscape demands that internal auditors **assess risks frequently, even continuously. Risk-based internal audit plans should be dynamic and nimble. To achieve those qualities, some CAEs update their internal audit plan quarterly (or a similar periodic schedule), and others consider their plans to be "rolling,"** subject to minor changes at any time.
- **Which types of internal audit engagements will provide senior management and the board with adequate assurance and advice that significant risks have been mitigated effectively?**
- need to **continuously assess risks, re-evaluate risk priorities, and adjust the plan** to accommodate the new priorities.

Providing assurance after auditing auditable entities is not the same as providing assurance on the more significant enterprise risks. Audit risks to the enterprise, not risks to an auditable entity.

Elevating audit through objective / risk-based auditing

Norman Marks on Governance, Risk Management and Audit continued:

The PG includes one paragraph on page 12 that is important, although not well understood and not explored further by the PG:

...internal auditors should consider that “risks represent the barriers to successfully achieving ... objectives as well as the opportunities that may help achieve those objectives.” Indeed, “risks may relate to preventing bad things from happening (risk mitigation) or failing to ensure good things happen (that is, exploiting or pursuing opportunities).”

In other words, it is necessary for management **not only to only take risks when justified, but also to seize opportunities judiciously.**

Elevating audit through objective / risk-based auditing

Norman Marks on Governance, Risk Management and Audit continued:

The PG crashes and burns by talking about an *audit universe* (a list of auditable entities). It then turns everything to ashes by recommending what we used to call cyclical auditing!

The audit frequency is based upon the level of residual risk determined in the risk assessment. For example, auditable units ranked high-risk may be audited at least annually (or once every 12 to 18 months), those rated with a moderate level of risk scheduled may be reviewed every 19 to 24 months, and those rated low-risk might be audited only once every 25 to 36 months (or not at all)

This approach has been obsolete for at least 20 years. The idea that you can predict what you should audit in future years is beyond credibility (and contradicted by the first pages of the PG). Over my long career as a CAE, I never predicted with any degree of certainty what we would audit more than 3-6 months out. The PG at one point even mentions moving to a 7 year plan!

Audit approach based on Risk Maturity

	Controls	Monitoring	Audit approach
Risk enabled	All risks identified and assessed. Regular reviews of risks. Responses are in place to manage risks	Management monitor that all types of response are operating properly. All managers provide assurance on the effectiveness of their risk management and are assessed on their risk management performance	Assurance
Risk managed		Management monitor that all types of response are operating properly. Most managers provide assurance on the effectiveness of their risk management and are assessed on their risk management performance	
Risk defined	Majority of risks identified and assessed. Regular reviews of risks. Responses are in place to manage most risks	Some management monitoring that all types of response are operating properly	Consultancy
Risk aware	Controls may be in place but are not linked to risks	Little monitoring	
Risk naive	Controls, but some may be missing or incomplete	Very little, if any monitoring	

Courtesy Unisa

<https://na.theiia.org/standards-guidance/Public%20Documents/IPPF-Standards-2017.pdf>

Risk and Opportunity management is a 'Living' thing



Consequences of poor risk management

The consequences of poor risk management

- Decision making
 - Michael Ferendinos, Risk Officer, AECI: Risk and Opportunity management is a 'living' thing. We need to remind management and exco who are 'flat out with 'business as usual' of the inter-connectedness of risks and the external environment (context) and to raise awareness and stimulate debate. In this way, we as risk practitioners will elevate our standing within our organisations and risk and opportunity management will take its rightful place as a strategic business enabler and imperative rather than a 'compliance / tick box' exercise
- Business Resilience
 - Steve Simmonds, CEO, SynergyGRC: Some things in life are unavoidable – we certainly cannot control all the threats to our business that lead to most of these unforeseen situations. However, by doing our due diligence and looking at ways of developing strategies to mitigate these threats and the impact they have on our businesses we will be well prepared to maintain business functions and overcome these unavoidable situations and as a business be resilient when we are faced with new unavoidable situations!

Consequences of poor risk management

The consequences of poor risk management

- Reputational risk
 - Warren Buffet, Salomon Brothers: “Lose money for the firm and I will be understanding; lose a shred of reputation for the firm and I will be ruthless”
- Technology disrupter risk/s
 - Mark Casey, Director, Deloitte: “We need a strategy for the future that will ensure that we stay relevant and stay in business when today’s asset becomes free” (Nokia, Blackberry, Air BnB, Uber, Amazon etc.)
 - The Fifth Revolution is around the corner with game-changers in the areas of nano-technology, material technology, genetic engineering, robotics, medical, The Internet of Things, advanced information management (e.g. biometrics, social media, drones), energy etc. The better our tools get (i.e. technology) the faster things change. A few classic examples of household names which carried on with ‘business as usual’ are Kodak, Polaroid, Blockbuster etc. I wonder when and how the Middle East and oil businesses will re-invent themselves in the next few years with the advent of ‘fracking’ and the huge advancements of electric cars

Consequences of poor risk management

The consequences of poor risk management

- People risk
 - Miles Crisp, CEO Tarsus: “I contend that the biggest risk in your organisation is the culture of the organisation, through leadership and people, inability to hold people accountable, and unwillingness to hold people accountable, mistrust between people and none of these things happen without interventions in your organisation”. Putting the right people in the right seats to achieve success, removing the clots (people and groups blocking the vision / strategy and smooth flow of the organisation) and ethical and honest leadership (genuine tone from the top) results in a winning business
- Political and Economic risk
 - Nicky Weimar, Senior Economist – Nedbank: The other thing I would do is, while we in this crisis, I would revisit some of those structural constraints holding back growth in SA. I would get legislators and regulators working on legislation, which will lower the cost of production, reduce the regulatory and legislative burden on companies and generally lower compliance costs. To view the recordings of the webinar sessions, click [here](#)

Elevating audit through objective / risk-based auditing

Strategic Risks Destroy the Greatest Value

Share Price Impact and Audit Time Allocation Across Risk Categories
n = 61.

Likelihood of Occurrence
Percentage of Risk Failure Leading
to a Significant Market Decline*

Executive Time Spent
Percentage of Time Spent by
Audit Departments on Risk Types



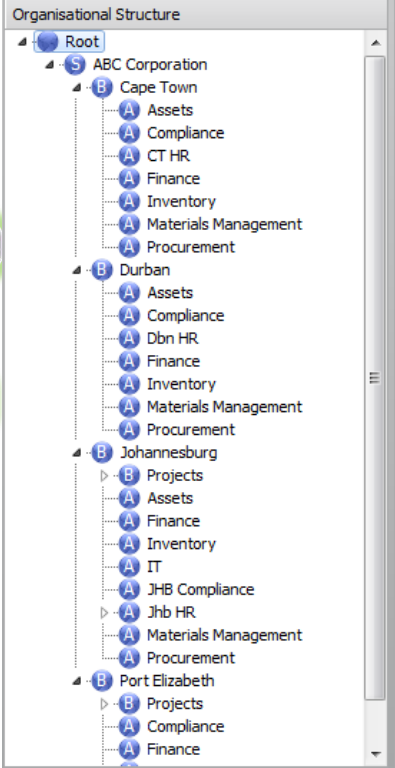
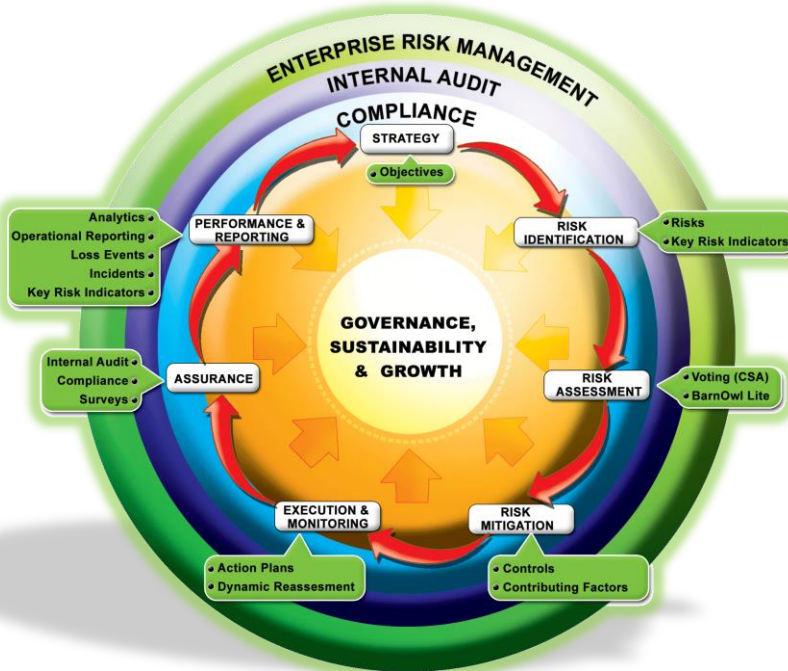
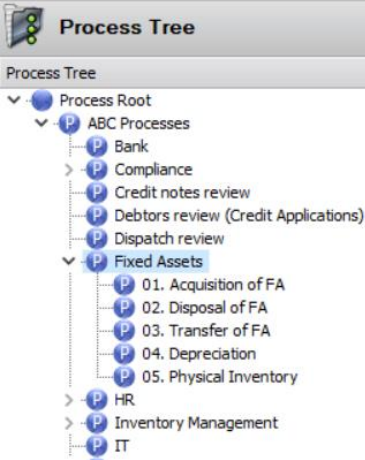
Source: CEB 2014 Share Shocks Analysis.

* A significant market decline is defined as a drop in market capitalization of more than 40% in a single year.

Among the more than 10,000 companies that make up CEB's global membership including almost 2,000 general counsel, chief compliance executives, chief audit executives, chief information security officers, and heads of ERM - the best companies employ three standout risk management practices to avoid Organisational Drag:

- Incorporate Risk Management in Strategy (and Vice Versa) and Establish a Healthy Risk Appetite
- Coordinate Disparate Risk Information for Decision Makers
- Manage Human Behaviour as Part of the Risk Management Process

Integrated Risk Management & Assurance



<http://www.barnowl.co.za/introduction/>
<http://www.barnowl.co.za/insights/a-3-step-approach-to-implementing-risk-appetite-and-tolerance/>



Objective based risk management and assurance

Organisational Structure

BarnOwl Dashboard - ABC Corporation | Objective Rainbow - ABC Corporation | Objective Register - ABC Corporation

Lock Register Refresh Expand Register Wrap Text Print Export Register Favourite View Show Filter Close

Drag a column header here to group by that column.

Objective Title	S	C	IOP
Commitment to environmental issues	4.00	2.00	9.00
Commitment to socio-economic development	4.00	4.00	16.00
Effective and profitable operations	5.00	3.00	15.00

Unit Title	Child Objective Title	S	C	IOP
Cape Town	Effective and profitable operations	4.00	4.00	16.00
Durban	Effective and profitable operations	5.00	4.00	20.00
Johannesburg	Effective and profitable operations	4.00	3.00	12.00
Port Elizabeth	Effective and profitable operations	5.00	3.00	15.00

UnitPath	Objective Title	S	C	IOP
Root\ABC Corporation\Johannesburg	Effective and profitable operations	4.00	3.00	12.00
Root\ABC Corporation\Johannesburg\Assets	To ensure effective management of assets	4.00	4.00	16.00
Root\ABC Corporation\Johannesburg\Finance	To ensure accurate and effective dispatch process	4.00	6.00	24.00
Root\ABC Corporation\Johannesburg\Finance	To ensure that credit notes are properly authorized and monitored.	4.00	5.00	20.00
Root\ABC Corporation\Johannesburg\Finance	To ensure that debtors' details are properly recorded and managed	4.00	5.00	20.00
Root\ABC Corporation\Johannesburg\Inventory	Continuous supply of raw materials to ensure production is not halted and demand is met	5.00	4.00	20.00

Objective Title	S	C	IOP
To ensure accurate and effective dispatch process	4.00	6.00	24.00

Risk Title	II	IL	IR	RI	RL	RR
02. Incorrect goods or quantities may be dispatched which may lead to unnecessary additional operational costs.	4.00	5.00	20.00	3.00	3.00	9.00
03. Accountability of goods not accepted by the customer.	4.00	3.00	12.00	3.00	4.00	12.00
07. Missing PODs	4.00	5.00	20.00	2.00	3.00	6.00
09. Possible theft or deliveries not recorded.	0.00	0.00	0.00	3.00	2.00	6.00

Risk scorecard (qualitative / quantitative)

Business Units	TOTAL	1	2	3	4	5	6
ABC Corporation	9.40	0.00	8.86	0.00	10.29	9.15	9.90
- Cape Town	8.49	0.00	9.00	0.00	9.00	9.50	9.60
- Durban	8.62	0.00	9.00	0.00	12.00	11.00	8.00
- East London	0.00	0.00	0.00	0.00	0.00	0.00	0.00
- Johannesburg	9.16	0.00	12.00	0.00	10.00	8.25	10.44
- Port Elizabeth	10.08	0.00	0.00	0.00	9.00	8.67	12.00

#	Risk Category Title
1	01. Revenue Growth
2	Credit notes review
3	Cyber Risk
4	Debtors review (CreditApplications)
5	Dispatch review
6	Employee

Drag a column header here to group by that column.

Title	Unit Type	Incl Res Exposure
ABC Corp	Strategic	2,783,400.00
Child Unit Title	Unit Type	Incl Res Exposure
Australia	Strategic	160,000.00
France	Strategic	160,000.00
Germany	Strategic	160,000.00
Saudi Arabia	Strategic	200,000.00
South Africa	Strategic	658,400.00
United Kingdom	Strategic	1,600,000.00
USA	Strategic	1,600,000.00
South Africa	Strategic	857,400.00
Child Unit Title	Unit Type	Incl Res Exposure
SA BU1	Business	484,400.00
SA BU2	Business	201,000.00
SA BU3	Business	160,000.00
SA BU4	Business	160,000.00
SA BU5	Business	160,000.00
SA BU6	Business	160,000.00
SA BU1	Business	484,400.00
Child Unit Title	Unit Type	Incl Res Exposure
Finance SA BU1	Business Activity	216,000.00
HR	Business Activity	0.00
Investment portfolio	Business Activity	0.00
IT	Business Activity	200,000.00
Sales and Marketing	Business Activity	0.00



BARNOWL



RSM

Top risks showing no. of findings by year by site

All cells, rows and columns in this report filter all other cells, rows and columns. Click to SELECT, click again to DESELECT.

TOP 10 RISKS

RiskTitle	Year of EndDate		
	2011	2012	2013
Inadequate adherence to controls in place to prevent losses	27	3,483	2,412
Misappropriation of bulk deposit funds due to the inability to identify the customer making the bulk deposit.	45	3,798	1,701
Inaccurate recording of working hours.	54	2,799	1,962
Stockholding Inaccurate		3,177	1,278
Excessive shrinkage due to inadequate stock monitoring		2,889	1,476
Lack of timely, complete and accurate banking of daily takings.			3,834
Injuries / death due to inadequate monitoring, maintenance and or operation of machinery.	9	1,737	1,602
Causes for not achieving targets not identified thereby not addressing the actual problem.	72	3,204	
Unauthorised price overrides taking place	18	2,223	945
Out of stock situations arising due to poor supplier performance	54	2,169	738

TOP BUSINESS UNITS @ LEVEL 3

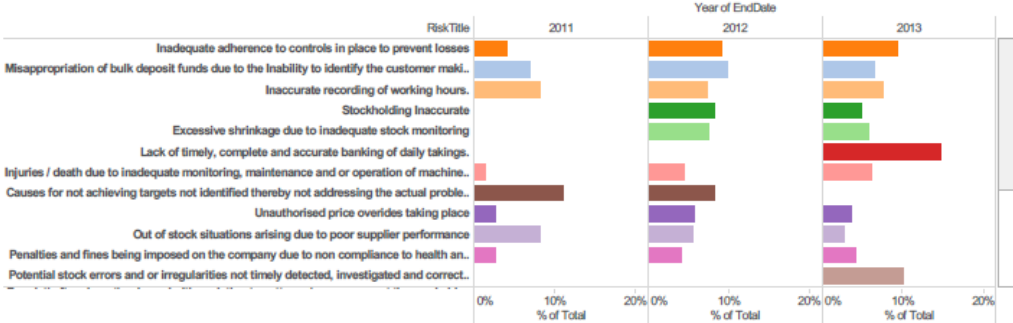
Unit Level 1	Unit Level 2	Unit Level 3		
ABC Retail Group Ltd	Operations	Ops Area 1	■	60,984
		Ops Area 2	■	45,945
		Ops Area 3	■	27,990
		Ops Area 4	■	54,225

Risk trends with root cause analysis

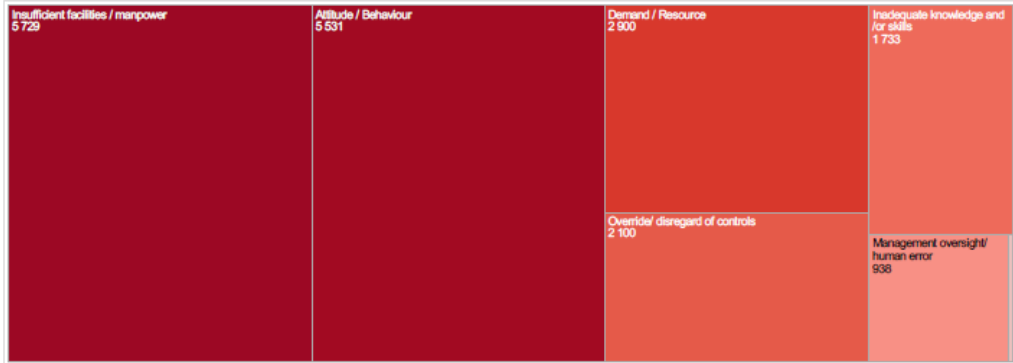


FINDINGS DASHBOARD 3

TOP 20 RISKS



CAUSE OF WEAKNESS



Root cause by site



FINDINGS DASHBOARD 5

CAUSES



Unit Level 1	Unit Level 2	Unit Level 3	Unit Level 4	2011	2012	2013	ProcessLevel3	2011	2012	2013
ABC Retail Group Ltd	Operations	Ops Area 1	Division 1			2 142	Null		9	
			Division 2		4 959	4 194	Cash (AR - Extensive)			5 409
			Division 3		4 833	3 906	Cash (AR)			5 499
			Division 5	2 700	6 048	4 167	Cash (Pegasus)	351	13 383	4 527
			Division 6		5 112	3 996	Debtors (AR - Extensive)			2 430
			Division 7		4 248	1 503	Debtors (AR)			2 943
			Division 8		5 814	1 251	Debtors (Pegasus)	198	13 959	5 112
			Division 9		585	180	Fixed Assets	144	1 962	1 233
			Division 12		1 737	2 871	Human resources	207	8 019	5 922
	Ops Area 2	Division 13		522	1 953	Inventory (AR - Extensive)			855	
		Division 14		3 177	1 377	Inventory (AR)			6 741	
		Division 15		2 970	1 998	Inventory (Pegasus)	927	27 927	10 899	
		Division 16		2 745	3 501	Management & Administrati..			2 880	
		Division 17		5 580	2 934	OHASA	324	11 862	7 524	
		Division 18		3 249	2 448	OHASA (Update)			1 431	
		Division 19	369	4 878	1 935	Operations	162	11 583	6 570	
		Division 20		1 701		Ready For Business	522	10 269		
	Ops Area 3	Division 4		3 204	2 619	Security	270	7 281	4 428	
		Division 24		3 762	3 762	Store Closure		153	270	
		Division 25		2 304	3 969	Store Closure (Update)			90	
Division 29			5 139	3 231	Store Handover		2 268	1 638		



Combined assurance reporting

BarnOwl Evolution									
Assurance Landscape : (All)									
Business Unit: Jhb HR									
			Assurance provider						
Unit	Risk	Controls	Management		Internal			External	
			Exco	Management	Specialist	Compliance	Internal Audit	PwC	Deloitte
Jhb HR	Headhunting by competitors	Career planning	M	W	A	A	A		A
		Competitive remuneration	W				M		A
		Promotion and transfer	W				M		A
	Lack of ability to attract and retain new talent	Career planning	M	W	A	A	A		A
		Competitive remuneration	W				M		A
		On the job mentoring	W				M	A	
	Lack of appropriate training	Certifications and licensing							
		Cross training							
		Formal training							
		On the job mentoring	W				M	A	
	Lack of core competencies	Certifications and licensing							
		Cross training							
		Established performance measures							
		On the job mentoring	W				M	A	
		Performance appraisal system							
	Lack of succession planning	Career planning	M	W	A	A	A		A
		On the job mentoring	W				M	A	
	No follow up on staff losses	Perform exit interviews							
		Setup alumni programme							
	Non compliance with laws and regulations	Disciplinary policy and procedures							
Employment contracts									
Equal employment opportunity									
Harassment and discrimination policy and procedures									

Key Indicators (KPIs, KRIs, KCIs)

XYZ Municipality
Performance Dashboard Quarter on Quarter



KPI Category

Basic Service Delivery

Ward	KPI Subcategory	KPI	Objective	Target	2013				2014				2015				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Community Services	Community and social services	Appointment of a service provider to implement approved human settlement plan	Ensure social upliftment and maintain basic services	1	●	●	●	●	●	●	●	●	●	●	●	●	
		Completion of 1st phase of the Library	Ensure social upliftment and maintain basic services	1	●	●	●	●	●	●	●	●	●	●	●	●	
		Completion of bus route in Valley Pass	Ensure social upliftment and maintain basic services	1	●	●	●	●	●	●	●	●	●	●	●	●	
	Number of screenings at the Shadow Centre	Ensure social upliftment and maintain basic services	500	✗	◆	◆	✗	✗	✗	✗	✗	✗	✗	◆	◆		
					488,3	515,0	506,7	483,3	495,0	473,3	495,0	426,7	470,0	490,0	526,7	513,3	
Electricity	Completion of the new 11/66kV electricity substation at city center	Ensure social upliftment and maintain basic services	1	●	●	●	●	●	●	●	●	●	●	●	●		
					1,0	0,9	1,0	1,0	1,0	0,9	1,0	1,0	1,0	1,0	1,0	0,9	
Waste water management	Completion of the construction of new retention ponds in Valley Pass	Ensure social upliftment and maintain basic services	10	✗	◆	◆	◆	◆	◆	✗	✗	◆	◆	◆	●		
					9,5	10,6	10,4	10,5	10,7	10,3	9,5	10,0	10,8	10,0	11,4	10,0	
Water	Average water quality level as measured per SANS 241 criteria	Ensure social upliftment and maintain basic services	95	◆	KPI Subcategory: Waste water management KPI: Completion of the construction of new retention ponds in Valley Pass Objective: Ensure social upliftment and maintain basic services Ward: Community Services Quarter of Input Date: Q1 Year of Input Date: 2015 Target: 10 Avg. KRI Input Value: 10,8 KPI Variance: Above Target												
		Completion of phase 2 of the upgrade of supply pipe line	Ensure social upliftment and maintain basic services	1	●												
		Completion of the upgrade of the Booster Pump Station	Ensure social upliftment and maintain basic services	1	●												
					1,1	1,0	1,0	1,0	1,1	1,0	1,0	1,0	0,9	1,0	1,1	1,1	
Financial Services	Water	Limitation of unaccounted water	To provide a maintain basic services and ensure social upliftment of the Breede Valley community	25	✗	◆	◆	◆	◆	●	✗	◆	◆	◆	●	✗	
					24,8	26,2	27,3	25,3	28,3	24,8	24,0	27,1	25,6	28,4	24,8	21,8	



In summary

- In order for the auditor to add value to and improve the company's operations, it is important for the auditor to understand the business objectives of the organisation and the risks that threaten or need to be taken (opportunity) to achieve these objectives. Knowing where the biggest risks lie, makes it easier for the internal auditor to focus their audit effort on the areas where the most value can be added.
- <http://www.barnowl.co.za/insights/6-ways-risk-based-auditing-adds-value-to-your-organisation/>
- '[The risks of risk management](#)' written by C. Burt, Halex Consulting Limited UK
- Arbutus Data Analytics by Anton Bouwer: [Managing Procurement Fraud Risk through Continuous Monitoring](#)

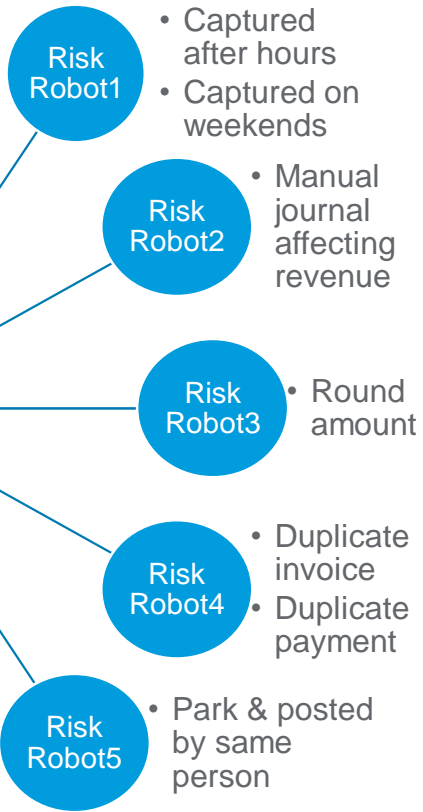
Continuous Risk Measurement through Data Analytics

- Risk indicators resides with data records.
- Each record carries a wealth of information that can on its own, or compared to appropriate benchmarks, distinguish the record from its peers.
- Process of measuring risks through data analytics must cater for the fact that data records can change over time. Eg, a Journal can change from parked to posted to placed on-hold to marked for cancellation and back to posted. Can happen over a relatively long period of time. Obviously, a journal placed on-hold carries a higher risk rating than a Journal parked and awaiting approval.
- Similarly can a vendor invoice be unique in the system today but tomorrow the invoice can be duplicated and immediately the risk associated with that invoice increases.
- Risk measurement of data must be dynamic. It must be attached to a data record. The concept of Robotics is perfectly suited for Continuous Risk Measurement.
- Methodology – Attach robots as fields (computed columns) instead of independent programs. Robot lives with data record; continuously.

Continuous Risk Measurement through Data Analytics

G	General Ledger	Tuesday, March 6, 2018	8500000	VAT CONTROL	ZContras	4	-350.00	350.00	Tax entry Tax Invoice	
G	General Ledger	Tuesday, March 6, 2018	2400000	ADMIN FEES RECD	ZContras	4	-2,500.00	0.00	Tax Invoice IN141945 - IN141945	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	5	70.00	-70.00	Tax entry Tax Credit note	1
G	General Ledger	Wednesday, March 14, 2018	8500000	VAT CONTROL	ZContras	5	954.80	-954.80	Tax entry Tax Credit note	1
G	General Ledger	Thursday, March 22, 2018	8500000	VAT CONTROL	ZContras	5	851.00	-851.00	Tax entry Tax Credit note	1
G	General Ledger	Thursday, March 22, 2018	8500000	VAT CONTROL	ZContras	5	191.52	-191.52	Tax entry Tax Credit note	1
G	General Ledger	Monday, March 26, 2018	8500000	VAT CONTROL	ZContras	5	3,734.50	-3,734.50	Tax entry Tax Credit note	1
G	General Ledger	Thursday, March 29, 2018	8500000	VAT CONTROL	ZContras	5	2,154.96	-2,154.96	Tax entry Tax Credit note	1
G	General Ledger	Thursday, March 29, 2018	2300000	SALES	ZContras	5	53,262.69	0.00	Tax Credit note IC020291 - IC020296	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-373.80	373.80	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-700.00	700.00	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-700.00	700.00	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-364.00	364.00	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-336.00	336.00	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-1,477.84	1,477.84	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-1,274.00	1,274.00	Tax entry Tax Invoice	1
G	General Ledger	Thursday, March 1, 2018	8500000	VAT CONTROL	ZContras	4	-509.60	509.60	Tax entry Tax Invoice	1
G	General Ledger	Monday, March 5, 2018	8500000	VAT CONTROL	ZContras	4	-191.52	191.52	Tax entry Tax Invoice	1
G	General Ledger	Monday, March 5, 2018	8500000	VAT CONTROL	ZContras	4	-1,209.60	1,209.60	Tax entry Tax Invoice	1
G	General Ledger	Monday, March 5, 2018	8500000	VAT CONTROL	ZContras	4	-872.00	872.00	Tax entry Tax Invoice	1
G	General Ledger	Tuesday, March 6, 2018	8500000	VAT CONTROL	ZContras	4	-385.28	385.28	Tax entry Tax Invoice	1
G	General Ledger	Tuesday, March 6, 2018	8500000	VAT CONTROL	ZContras	4	-249.90	249.90	Tax entry Tax Invoice	1
G	General Ledger	Tuesday, March 6, 2018	8500000	VAT CONTROL	ZContras	4	-219.52	219.52	Tax entry Tax Invoice	1
G	General Ledger	Tuesday, March 6, 2018	8500000	VAT CONTROL	ZContras	4	-77.56	77.56	Tax entry Tax Invoice	1

Data records in General Ledger



Seamless integration with Risk Management System

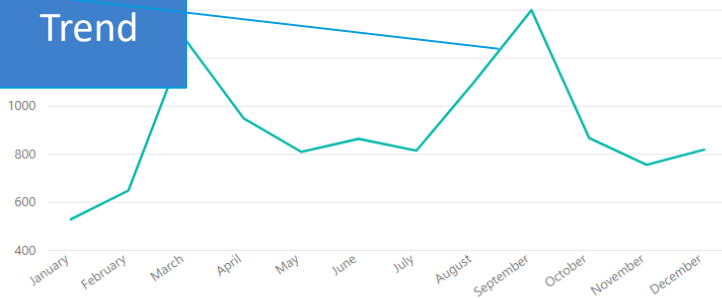
The screenshot displays a financial software interface with a table of transactions. The table has columns for Date, GC Code, Description, QTY, SP/Ext Line, Source, Trans Desc, Journal, JCD, Ref, Reference, Amount, and Comment. An 'Export' dialog box is open in the foreground, showing options for 'Fields to Export' (Selected Fields), 'Table' (Gen Transaction_2019), 'Output Type' (ODBC), and 'Send output to' (All Records). A blue callout box points to the 'Export' dialog with the text 'Export directly into BarnOwl'. Another blue callout box points to the transaction list with the text 'Continuous Process Automation'. The interface also shows a sidebar with a tree view of data sources and a top menu bar.

Export directly into BarnOwl

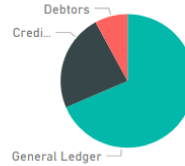
Continuous Process Automation

Continuous Risk Measurement through Data Analytics

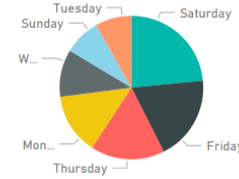
Trend



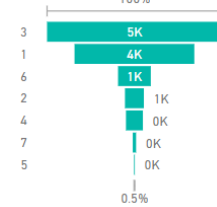
Risk_rating by GDC_Desc



Risk_rating by Day



Risk_rating by EType_txt



AutoNumber	TransactionID	GDC_Desc	GLAcc	Acc_Desc	Reference	DDate	Amount	TaxAmt	Tax_percent	InvoiceID	Risk_rating	T1_fam	Acc_Desc	Risk_rating
431038	3114	General Ledger	2300000	SALES	ZContras	Saturday, June 30, 2018	-3,047,167.51	0.00	0.00	IN143076	4		DIRECT WAGES	647
424421	3020	General Ledger	8130000	SUNDRY CREDITORS	138	Saturday, March 31, 2018	-550,088.14	0.00	0.00		4		DIRECT SALARIES	425
432667	3126	General Ledger	8130000	SUNDRY CREDITORS	145	Saturday, June 30, 2018	543,433.55	0.00	0.00		4		VAT CONTROL	403
440889	3218	General Ledger	8130000	SUNDRY CREDITORS	162	Sunday, September 30, 2018	-588,278.47	0.00	0.00		4		COD ACCOUNT	328
427200	3046	General Ledger	8150000	ACCRUED EXPENSES	ZContras	Sunday, April 1, 2018	750,362.48	0.00	0.00	PN173854	4		HYDRO POWER EQUIPMENT (PTY)LTD	297
432509	3122	General Ledger	8150000	ACCRUED EXPENSES	ZContras	Saturday, June 30, 2018	1,311,877.46	0.00	0.00	PN174971	4		ACCRUED EXPENSES	282
440365	3203	General Ledger	8150000	ACCRUED EXPENSES	ZContras	Sunday, September 30, 2018	1,095,366.85	0.00	0.00	PN176628	4		Inventory - Material (vjs)	245
424407	3020	General Ledger	1950000	INTEREST RECEIVED	138	Saturday, March 31, 2018	-9.69	0.00	0.00		3		VEHICLE EXPENSES	228
432597	3126	General Ledger	1950000	INTEREST RECEIVED	148	Saturday, June 30, 2018	-126.15	0.00	0.00		3		SALARIES - ADMIN.	225
432626	3126	General Ledger	1950000	INTEREST RECEIVED	149	Saturday, June 30, 2018	-8.48	0.00	0.00		3		SUNDRY CREDITORS	180
422033	3002	General Ledger	2300000	SALES	ZContras	Thursday, March 29, 2018	-4,059,867.58	0.00	0.00	IN142110	3		WIP - Material (vjs)	179
425570	3034	General Ledger	2300000	SALES	ZContras	Thursday, April 19, 2018	-1,601,430.06	0.00	0.00	IN142301	3		COGS - Material (vjs)	171
425885	3035	General Ledger	2300000	SALES	ZContras	Friday, April 27, 2018	-2,941,302.23	0.00	0.00	IN142460	3		Inventory - Subcontract (vjs)	171
428253	3081	General Ledger	2300000	SALES	ZContras	Thursday, May 31, 2018	-3,340,989.33	0.00	0.00	IN142808	3		TELEPHONE & TELEX	169
432990	3138	General Ledger	2300000	SALES	ZContras	Tuesday, July 17, 2018	-906,151.39	0.00	0.00	IN143194	3		LESS PROVISION FOR DEPRECIATION	160
433219	3140	General Ledger	2300000	SALES	ZContras	Tuesday, July 31, 2018	-1,194,596.66	0.00	0.00	IN143301	3		WATER & ELECTRICITY	151
433257	3142	General Ledger	2300000	SALES	ZContras	Tuesday, July 31, 2018	-1,173,992.00	0.00	0.00		3		WIP - Subcontract (vjs)	150
436371	3163	General Ledger	2300000	SALES	ZContras	Friday, August 31, 2018	-3,563,108.75	0.00	0.00		3		PURCHASES - MATERIALS	147
Total							3,511.64	6,856,616					Total	10833

Transactions

Summarised Risk Ratings



Thank you

Anton Bower

Director | RSM South Africa

anton.bower@rsmza.co.za

+27 82 371 0578

www.rsmza.co.za

Jonathan Crisp

Director | BarnOwl

jonathan@barnowl.co.za

+27 83 260 1653 (mobile)

+27 11 540 9100 (office)

www.barnowl.co.za



BARNOWL



RSM