

IJA JOBURG REGIONAL AGM 12 NOVEMBER 2019

ELEVATING AUDIT THROUGH OBJECTIVE / RISK- BASED AUDITING AND IT ENABLEMENT

Jonathan Crisp –Director

jonathan@barnowl.co.za www.barnowl.co.za

+27 83 260 1653 (mobile)

+27 11 540 9100 (office)

Anton Boucher – Director (BST)

antonb@bstdata.co.za

+27 82 371 0578

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 organization's operations. It helps an organization 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

Elevating audit through objective / risk-based auditing

- **The consequences of poor risk management** ((<https://youtu.be/X-Q0CA-bjQ4>)):
 - Reputational risk
 - Technology disrupter risk/s
 - People risk
 - Political risk
 - Decision making
- **Effective Risk Management and Assurance:**
 - enables an organisation to optimise the level of risk being taken to best achieve the organisation's objectives whilst still operating within the risk appetite of the organisation.
 - Internal Audit transitions from the business of providing subjective opinions on "control effectiveness" on a small fraction of the risk universe to ensuring senior management and the board are aware of the current residual risk status linked to key strategic value creation objectives and potential value erosion objectives.

Elevating audit through objective / risk-based auditing



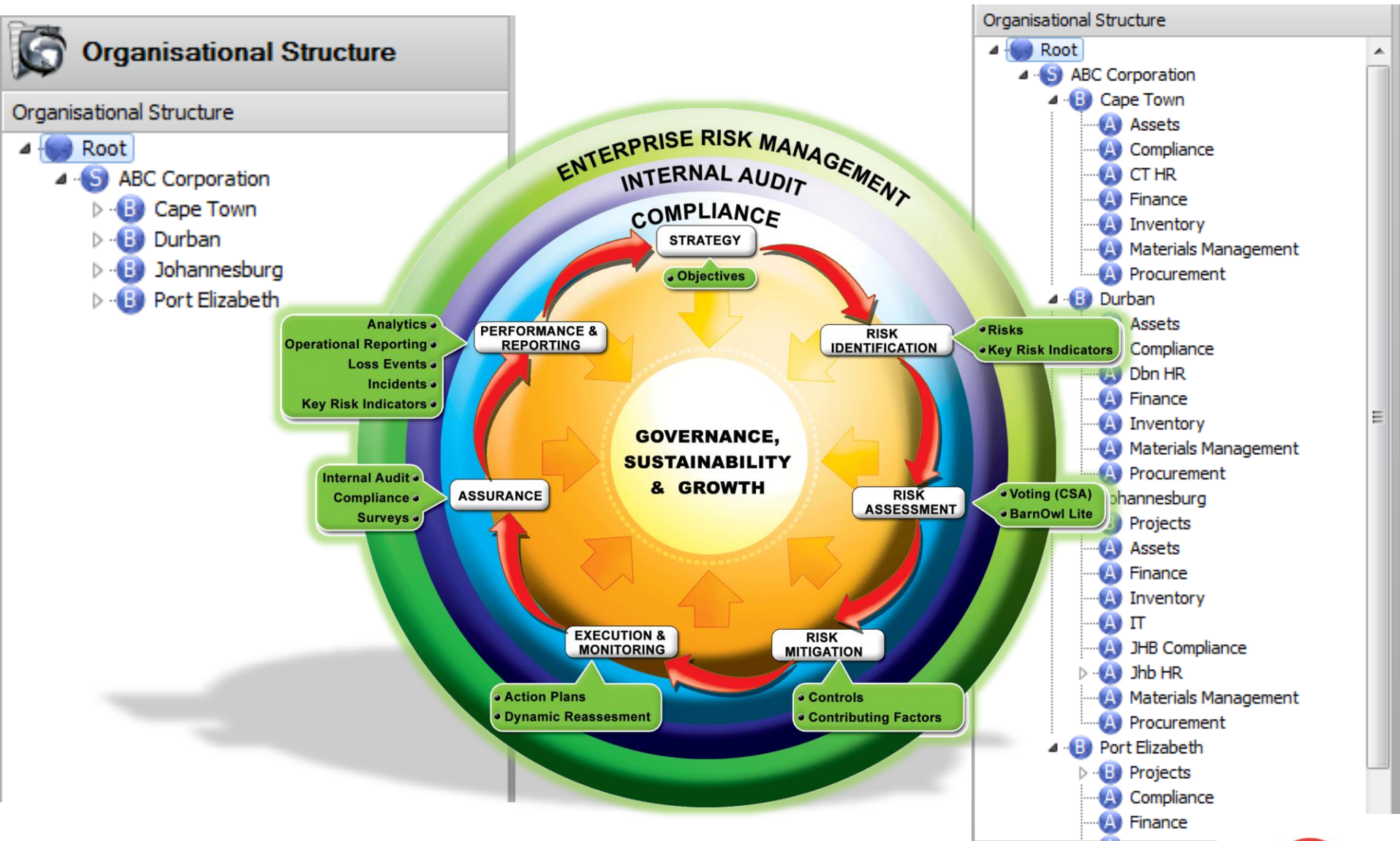
Among the more than 10,000 companies that make up CEB's global membership—including almost 2,000 general counsel, chief compliance executives, chief audit executives, chief information security officers, and heads of ERM—the best companies employ three standout risk management practices to avoid Organizational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

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

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	

ERM PROCESS



<http://www.barnowl.co.za/introduction/>

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

BARNOWL

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

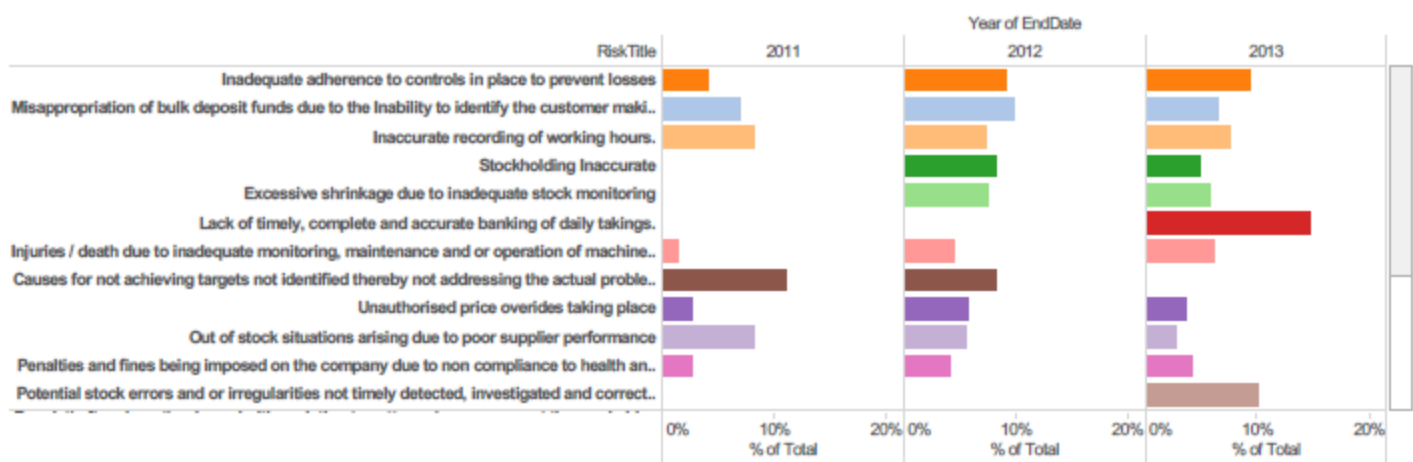
TOP BUSINESS UNITS @ LEVEL 3

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
		Roofbuild		504
		Support Office	Advertising (Ops / Dept Level)	
		Creditors (New Program)		459
		Creditors (Old Program)		63
		Finance		171
		Legal		54
		Payroll		162
		Procurement (Ops / Dept level)		297
		SO - Debtors		18
		SO - Fixed Assets		27



FINDINGS DASHBOARD 3

TOP 20 RISKS



CAUSE OF WEAKNESS

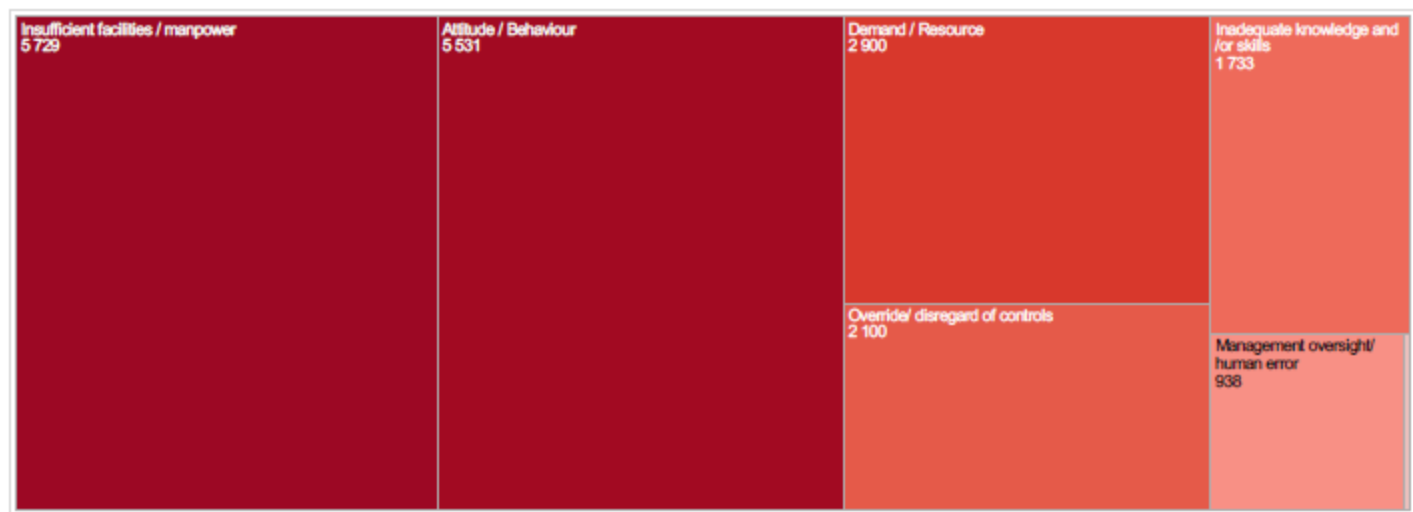


FIGURE 2.4 – FINDINGS BY ROOT CAUSE (BI)



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			5 301	2 142			9			
			Division 2			4 959	4 194				5 409		
			Division 3			4 833	3 906					5 499	
			Division 5	2 700		6 048	4 167			351	13 383	4 527	
			Division 6			5 112	3 996					2 430	
			Division 7			4 248	1 503					2 943	
			Division 8			5 814	1 251			198	13 959	5 112	
			Division 9				585	180			144	1 962	1 233
			Division 12				1 737	2 871			207	8 019	5 922
	Ops Area 2	Division 13				522	1 953				855		
		Division 14				3 177	1 377				6 741		
		Division 15				2 970	1 998			927	27 927	10 899	
		Division 16				2 745	3 501					2 880	
		Division 17				5 580	2 934			324	11 862	7 524	
		Division 18				3 249	2 448					1 431	
		Division 19	369			4 878	1 935			162	11 583	6 570	
		Division 20				1 701				522	10 269		
		Division 4				3 204	2 619			270	7 281	4 428	
	Ops Area 3	Division 24				3 762	3 762				153	270	
		Division 25				2 304	3 969					90	
		Division 29				5 139	3 231						
		Store Closure											
		Store Closure (Update)											
										2 268	1 638		

FIGURE 1.5 – 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								

FIGURE 1.4.4 – KPIs

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	●	●	●	●	●	●	●	●	●	●	●	●
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 an 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

6 ways objective / risk-based auditing adds value to your organisation

- **Business focussed approach assisting the organisation to achieve its objectives:** Audit focus on providing assurance on achievement of business objectives as opposed to standard audit programmes where it is not always clear how these impact the bigger picture.
- **Internal Audit focuses on the top value creation and potential value erosion objectives elevating IA's stature and value add:** Audit recommendations provide the greatest value added in terms of the optimising the level of risk being taken to best achieve the organisation's objectives whilst still operating within the risk appetite of the organisation.
- **Inclusive audit approach facilitating buy in and ownership from management:** Management is far more likely to support the audit work when they are involved in the process and can see how the audit's recommendations relate to the achievement of their business objectives. Embedded risk management down to all levels.
- **Optimal level of assurance supporting the achievement of business objectives:** Risk-based auditing is more efficient because it directs audits at the high-risk areas, as opposed to simple rotation of predominantly financial areas, which may not represent the greatest risk.
- **Improved operational efficiency:** Risk-based auditing should highlight key processes and risks that are inadequately controlled and / or over-controlled.
- **More effective use of audit resources:** The audit plan is based on clear instructions from senior management and the board on the level of risk assessment rigor and independent assurance they require related to strategic / business objectives. It differs from the alternative approach, whereby the resources available determine the audits that can be conducted.

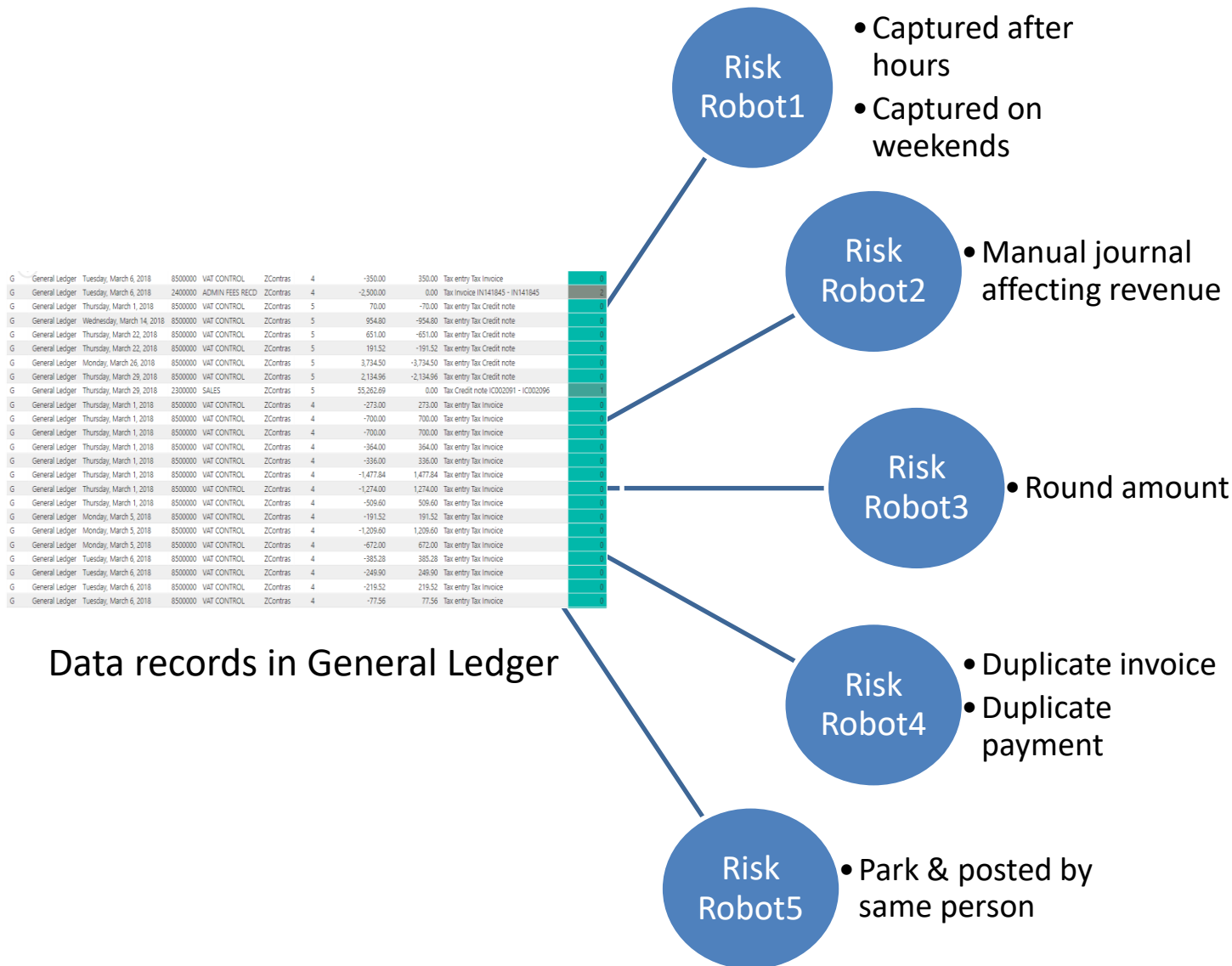
In summary...

- 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/>
- Tim Leech: [Risk Oversight Solutions](#)
- '[The risks of risk management](#)' written by C. Burt, Halex Consulting Limited UK
- Arbutus Data Analytics by Anton Boucher: [Managing Procurement Fraud Risk through Continuous Monitoring](#)

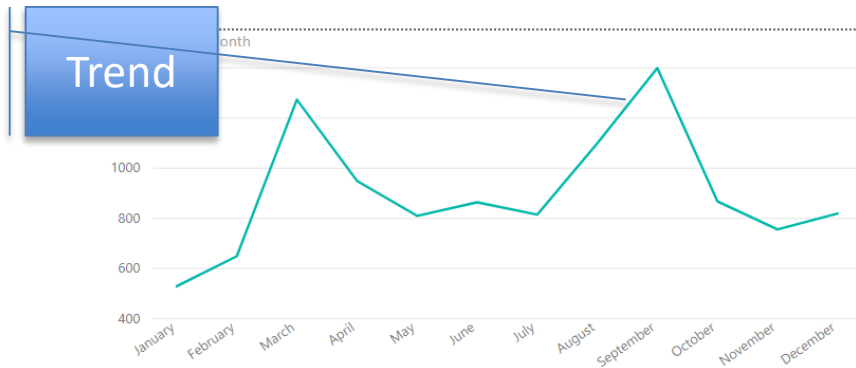
Continuous Risk Measurement through Data Analytics

- 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
- The 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. This 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

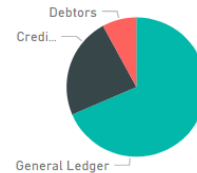
Continuous Risk Measurement through Data Analytics



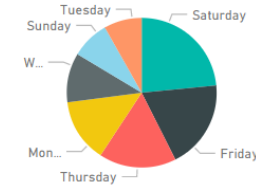
Continuous Risk Measurement through Data Analytics



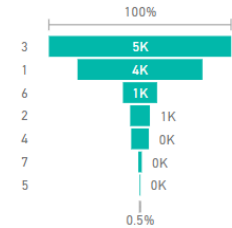
Risk_rating by GDC_Desc



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	1,898,366.85	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	IN143319	3		WIP - Subcontract (vjs)	150
436371	3163	General Ledger	2300000	SALES	ZContras	Friday, August 31, 2018	-3,563,108.75	0.00	0.00	IN143603	3		PURCHASES - MATERIALS	147
Total							3,511.64	6,856,616.00	-2,870.64		10833		Total	

Transactions

Summarised Risk Ratings



Thank You

Jonathan Crisp –Director

jonathan@barnowl.co.za

+27 83 260 1653 (mobile)

+27 11 540 9100 (office)

Anton Bouwer – Director (BST)

antonb@bstdata.co.za

+27 82 371 0578

www.barnowl.co.za

