

## **DIGITIZATION:**

# A PROVEN GAME CHANGER

**NSE 3<sup>rd</sup> Annual Market Data Workshop** 

Presented by

Mr. 'Bola Adeeko Head, Shared Services Division, NSE

October 19, 2018

#### The Age of Digital Disruption



Digital disruption is no longer a myth, it is the real deal and it's here to stay.

A quick peek at these industries:

#### **MUSIC**



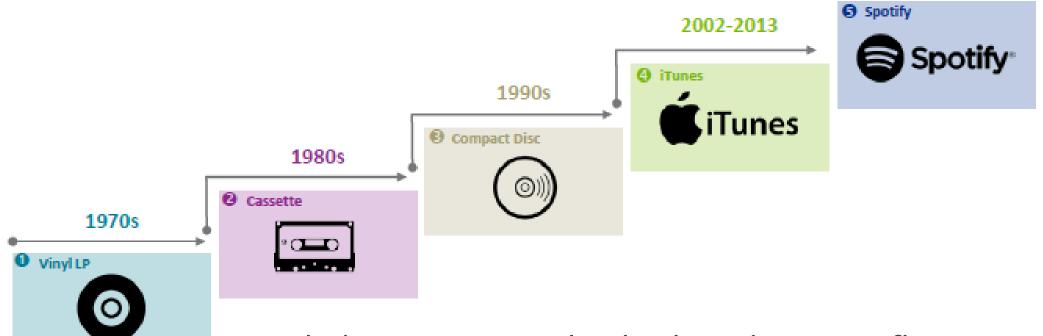
#### **TAXI**



#### The Music Industry



The music industry is a perfect example of continuous digital disruption going back 40 years.



Each disruption completely altered revenue flows, creating new winners and leaving behind those who could not adapt fast enough

#### The Taxi Industry



The taxi industry is another perfect example of an industry complacent about change until the tide turned in 2010.

#### One App

completely disrupted an age long industry, stirred up labour protests and forced government to reconsider transport legislation across continents, even in Lagos



#### And the list goes on ...



Many Industries Have Already Been 'Digitally Disrupted'

The world's largest taxi company that owns no taxis?	UBER
The world's largest accommodation provider that owns no rooms?	
Two of the largest phone companies that own no Telco infrastructure?	WhatsApp facebook
The world's most valuable retailer that has no inventory and owns no stores?	Alibaba.com
Two of the world's most popular media firms that create no content?	facebook. Google
The world's largest movie house that owns no cinemas?	NETFLIX
Two of the world's largest software companies that do not write applications?	Google Apple
The largest providers of computer infrastructure that do not make servers?	amazon Microsoft Azure

>US\$10b revenue, >US\$250b payments, Market value greater than all listed Banks in Germany

330% larger than PayPal, 96% of online payments in China do not involve a Bank

#### Adopters, Competitors, Losers



To survive in this era, businesses will fall into any of these 3 categories.



**Early Adopters** tend to often survive the trend and emerge **Winners** 





To remain market relevant, businesses will need to be **Competitive** to remain **Safe**.





Businesses that **fail to adapt** to the trend by reinventing themselves, certainly end up **Losers** 



#### Amazon vs Sears





**Founded:** 1994.

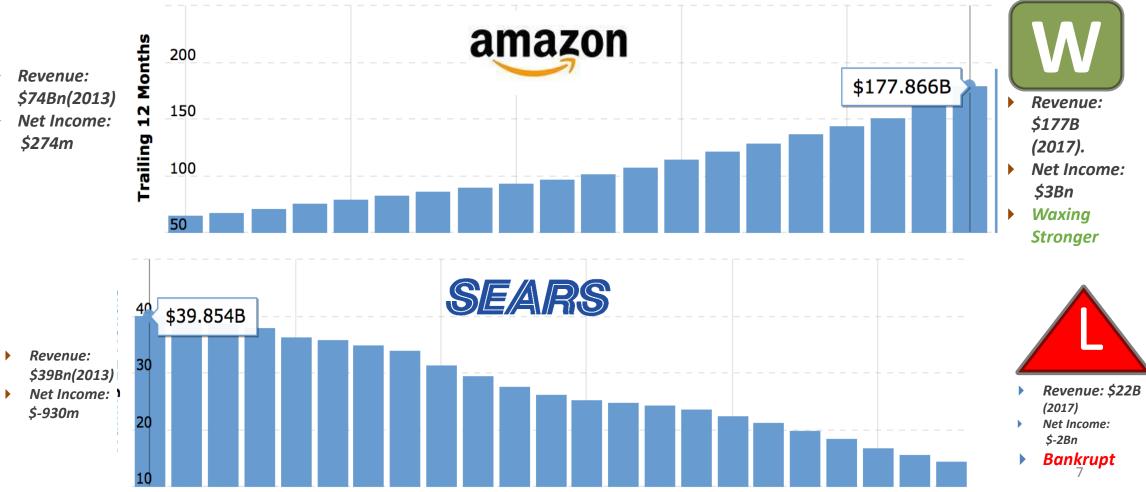
*Industry:* Retail, Diversified

# Amazon's Online Sales Dwarfs the Competition



**Founded:** 1886.

Industry: Retail, Diversified



Source: macrotrends

#### Ride Hailing Apps vs Taxi (US., NYC)





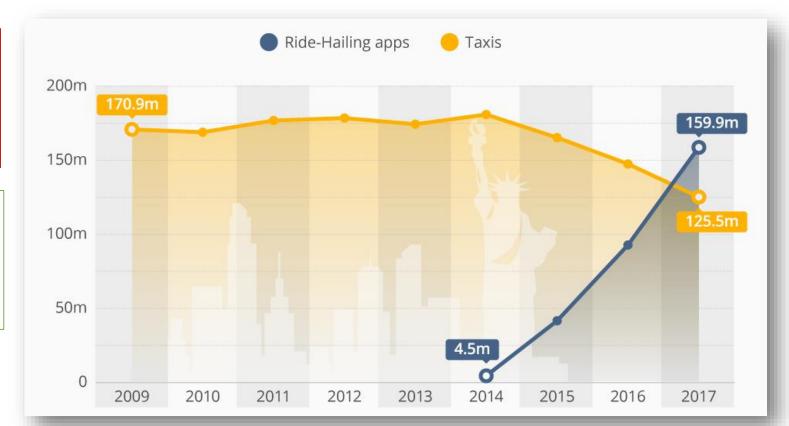
#### Ride-Hailing Apps Surpass Regular Taxis in NYC



**4.5***m*Pickups in **2014** 

**160m**Pickups in **2017** 





**171m**Pickups in **2009** 

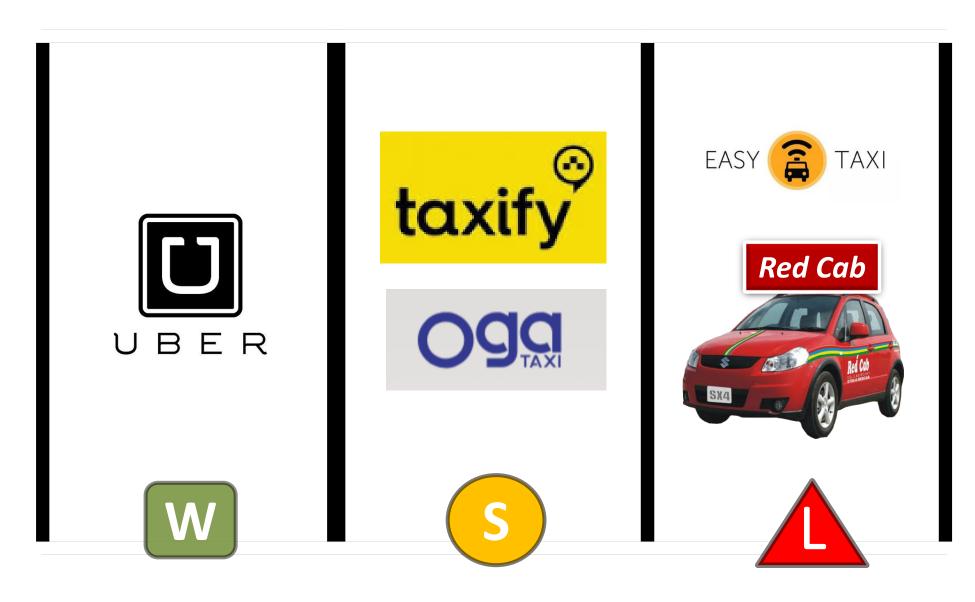
**126m**Pickups in **2017** 



Yearly Taxi Pickups in New York City compared to Ride-Hailing Apps

#### What about Taxi in Lagos?





#### The Right Attitude for the Era





*In order to Adapt and be* Competitive, businesses should listen intently to what customers need and want, coupled with meaningful insights, innovative technologies, understanding context and rapid delivery are keys to business survival. Business needs to become customer-centric and customerobsessed.

#### At the Exchange



Our approach is to

# ... swim with the tide



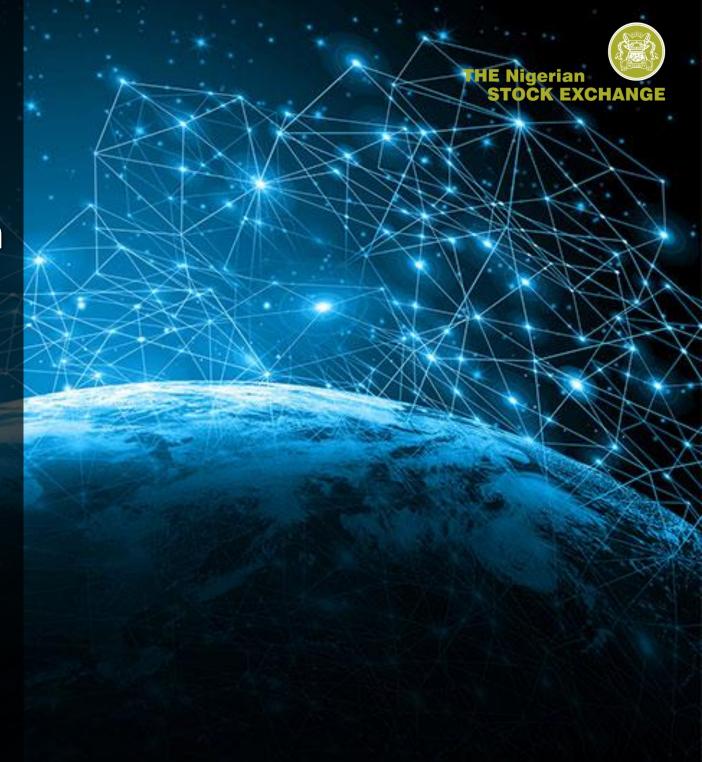
Using our Enterprise Innovation Hub to venture into emerging technologies — including:





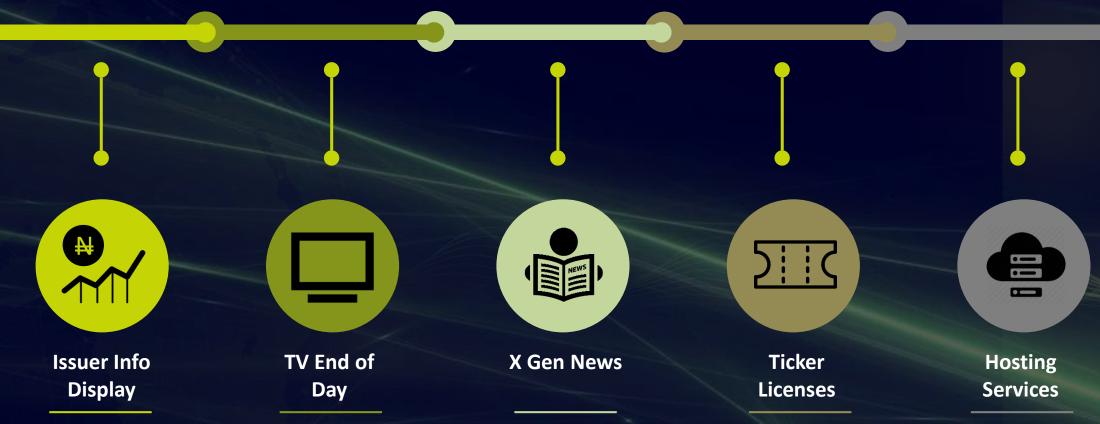


The data revolution is upon us, and it is absolutely critical for the Nigerian Capital Market to get involved, otherwise we will be left behind.



#### The NSE Provides...





Enables listed companies display own stock quotes on corporate website on a near real time or delayed basis.

Enables authorized user to display the end of day all share index and top traded in each sector.

Receive e-mail alerts on company disclosures as they are disseminated on the trading floor.

Enables a contracted user to display the NSE scrolling Ticker across TV, website, video walls or other public spaces.

Includes colocation, disaster and recovery plans and hosting solutions.

#### Contact



For further information on our services, data packages and cost please contact:

#### **Market Services Department**

17th Floor, Stock Exchange House, 2-4 Custom Street, Lagos, Nigeria

**Telephone:** +234 1 4485857

**Email:** Marketservices@nse.com.ng

Website: www.nse.com.ng



# THANK YOU



#### MARKET DATA PRODUCT SUITES

An NSE Presentation

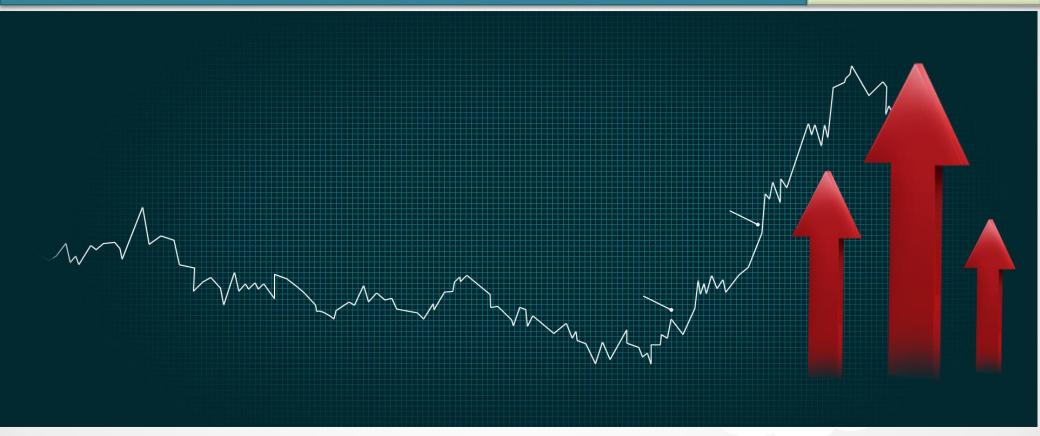
By

**Market Services Department, Shared Services** 

The Nigerian Stock Exchange

October 19, 2018





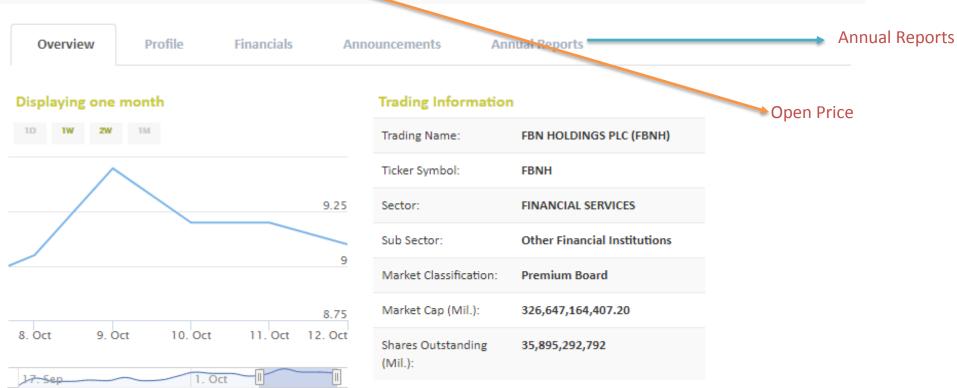
Market Data is the information that investors sees when trying to buy or sell a security. It is a broad term for trade-related data such as price, ask/bid and volume for financial instruments.



#### FBN HOLDINGS PLC (FBNH)

9.1NGN | -0.1 (-1.09 %)

Trading Symbol				Official Close					Volume	Value
FBNH	9.2	9.2	-		9.35	9.1	15.16	5.91	14,900,175	135,641,054.05





# Real Time Market Data.

Real Time Data is the information that is made available during the continuous trading from the exchange.





#### **END OF DAY INFORMATION**

Daily Official List (Equities) For 17/10/2018

EQTY - Main Board

#### FINANCIAL SERVICES

Ba	nking																			
							Ex	- 2		Business Do	ne	52	wk	Last		Di	ivider	nds		
Symbol	Security Name	Public Quotation Price (N)	Official Open	Official Close	Current Market Price		Div	Sc	Price	Date	Qty	High	Low	Ex- Div Date		Date Paid		Fina	EPS	P.E
DIAMONDBNK	DIAMOND BANK PLC	0.50			1.20	-			1.20	17/10/18	3,500	3.73	0.97	16/0	15/0	16/0		0.10	0.00	
ETI	ECOBANK TRANSNATIONAL INCORPORATED	32.00			17.45				17.05	17/10/18	8,183	22.1	16.0	05/0	22/0	19/0		0.63	0.00	
FIDELITYBK	FIDELITY BANK PLC	0.50			1.81	-			1.81	17/10/18	8,000	4.33	1.40	18/0	22/1	18/0		0.14	0.53	3.40
GUARANTY	GUARANTY TRUST BANK PLC.	0.50			37.00	+			36.80	17/10/18	25,000	57.0	31.9	28/0	07/0	28/0		2.40	4.90	7.55
JAIZBANK	JAIZ BANK PLC	0.50			0.51				0.53	17/10/18	31,505	1.29	0.45						0.03	17.6

**DAILY EQUITIES** 

**DAILY BOND** 

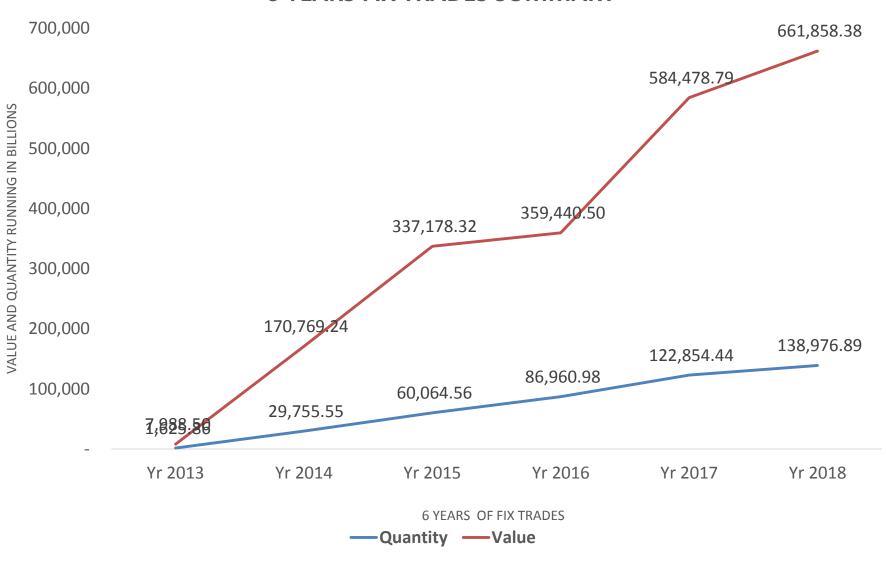
STOCK PERFORM ANCE

**PRICES** 

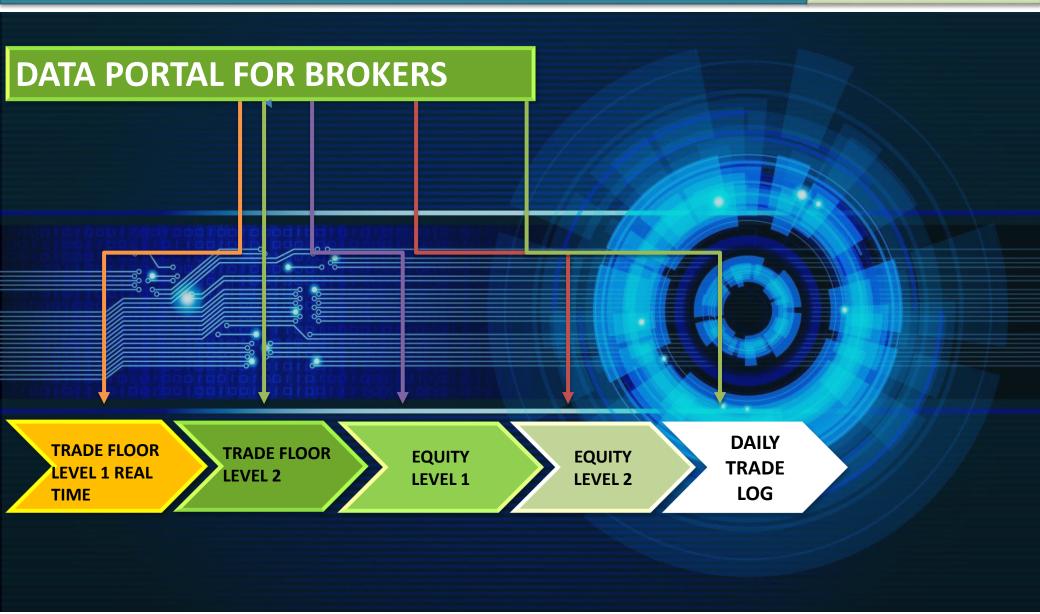
**ASI** 











#### **MARKET DATA PRODUCTS**







NSE Trading Floor Level 1 Realtime For: 28/09/2014

**OFFER PRICE** 



	Market Watch											
	Symbol	Company Name	Bid Depth	Bid-Price(NGN)	Offer-Depth	Offer-Price(NGN)	Total Volume Traded	Average Price(NGN)	High Price(NGN)	Low Price NGN		
1	AUSTINLAZ	AUSTIN LAZ & COMPANY PLC	0		72905	2.09	0					
z	ELLAHLAKES	ELLAH LAKES PLC.	0		4390	4.05	0					
3	AFRPAINTS	AFRICAN PAINTS (NIGERIA) PLC.	0		40705	2.59	0					
4	UHOMREIT	UNION HOMES REAL ESTATE INVESTMENT TRUST (REIT)	0		77920	45.22	o					
5	ETRANZACT	E-TRANZACT INTERNATIONAL PLC	0		360699	2.10	0					
6	CONTINSURE	CONTINENTAL REINSURANCE PLC	3500	0.95	5000	1.00	555233	0.96	0.96	0.96		
7	GNI	GREAT NIGERIAN INSURANCE PLC	0		412470	0.50	0					
8	CHELLARAM	CHELLARAMS PLC.	0		10000	4.14	0					
9	PREMPAINTS	PREMIER PAINTS PLC.	0		703955	10.39	0					
10	UACN	U A C N PLC.	112000	36.00	4441	60.00	47127	57.42				
11	SOVRENINS	SOVEREIGN TRUST INSURANCE PLC	0		59071289	0.50	0					
12	VANLEER	GREIF NIGERIA PLC	0		147	12.00	0					
-												

SEPLAT V

Market by Price - Symbol Selected										
Buy Order Count Buy - Depth Buy - Price Sell Orders Count Sell - Depth Sell - Price(N										
1	1	398	647.00	1	1	670.00				
2	1	5000	632.51	1	3579	671.90				
3	2	1500	620.00							

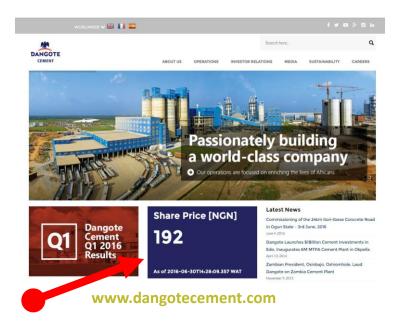
SI	EPLAT	3	~									
Market By Order - Symbol Selected												
	Buy - Price(NGN)	Buy City	Buy Total Oty	Sell - Price(NGN)	Sell Oty	Sell Total Oty						
1	620.00	500	500	670.00	1	1						
2	620.00	1000	1500	671.90	3579	3580						
3	632.51	5000	6500									
4	647.00	398	6898									



#### **Issuer Share Price**

Display your share price on your corporate website in Real Time.









# NSE MARKET DATA

## TIMELY, ACCURATE, RELIABLE

Website: www.nse.com.ng

Email: marketservices@nse.com.ng

Telephone: 01-4485857

# BLOCKCHAIN TECHNOLOGY: The Disruption

Are We Ready?



#### What is **BLOCKCHAIN?**

A distributed ledger that is shared and updated by the members on the Blockchain

\* Members are also commonly referred to as nodes

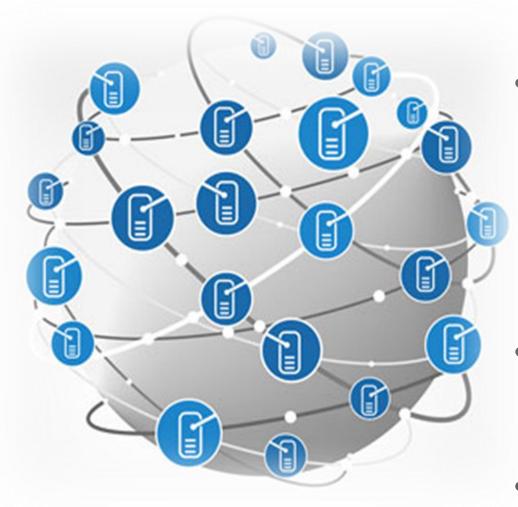
A decentralized asset register with [programmable] transaction capabilities





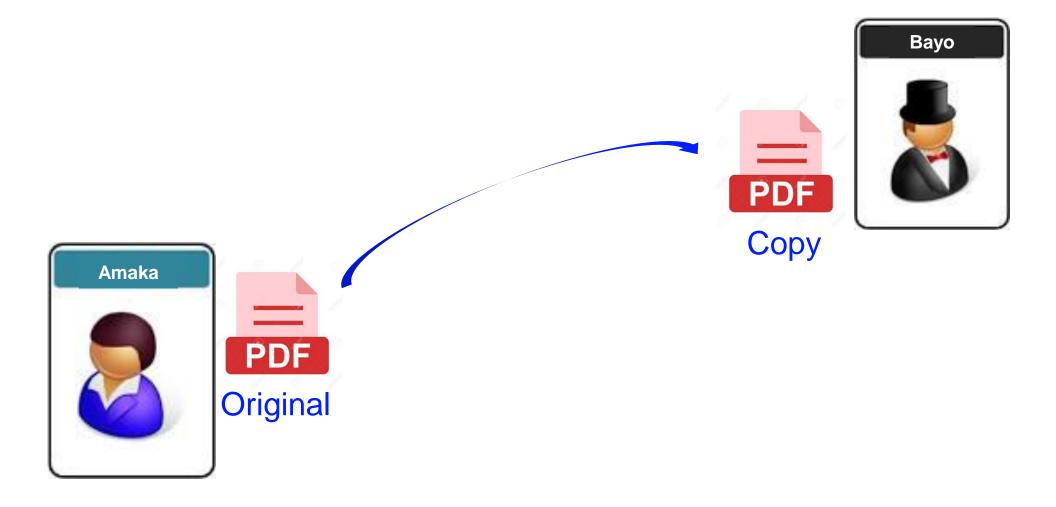
# The Origin of BLOCKCHAIN





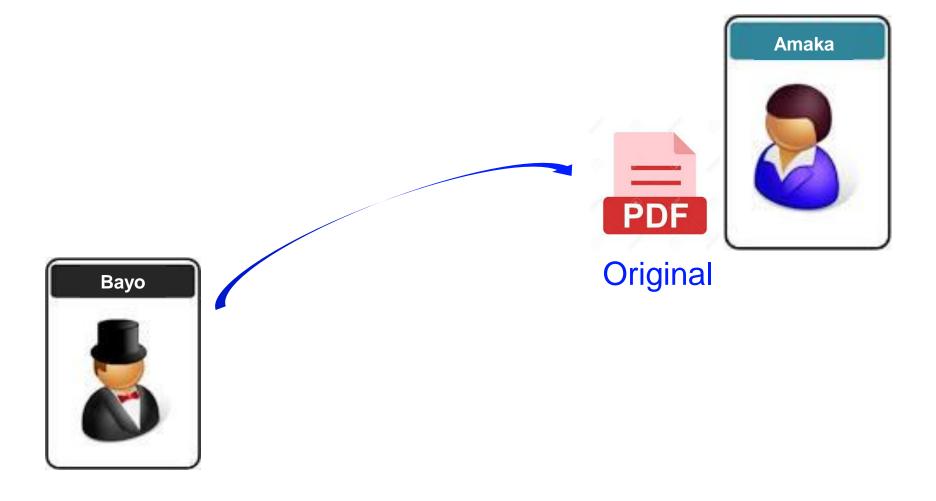
- Blockchain was invented by Satoshi Nakamoto
- Satoshi Nakamoto authored the Bitcoin whitepaper in 2008 giving details on how to implement a "A Peer-to-Peer Electronic Cash System" which we now know today as cryptocurrencies.
- Solves the problem of Double Spending via its P2P network
- Was invented to serve as the public transaction ledger of the cryptocurrency
  - Bitcoin

## INTERNET OF INFORMATION





## **BLOCKCHAIN - INTERNET OF VALUE**





## **BLOCKCHAIN = Chain of Blocks**



Bayo wants to send money to Amaka

The transaction is configured online into a block

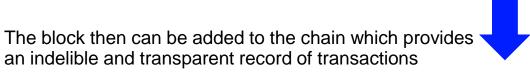


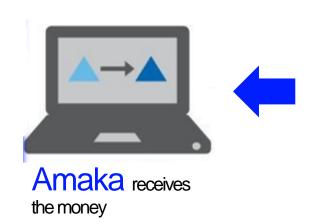
The block is broadcast to every party in the network





Those in the network verify the transaction is valid





Block 0

index: 0
timestamp: 17:15 1/1/2017
data: "block0data"
hash: 0xea34ad...55
previousHash: 0

Block 1

index: 1 timestamp: 17:17 1/1/2017 data: "block1data" hash: 0xf6e1da2..deb previousHash: 0xea34ad...55 Block 2

index: 2 timestamp: 17:19 1/1/2017 data: "block2data" hash: 0x9327eb1b..36a21 previousHash: 0xf6e1da2..deb

**Chain of Blocks** 



#### A CENTRALIZED MODEL



Today, most industries operate in a centralized model where you always have a Trusted central authority.

CLEARING HOUSE











## **KEY FEATURES OF THE CENTRALIZED MODEL**

Exchange of Value

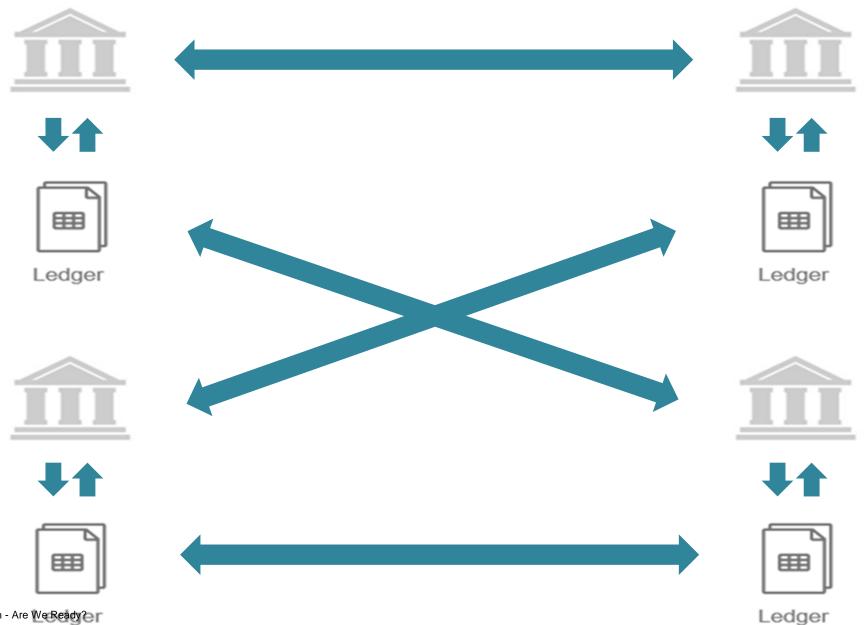
Ease of Regulatory and Supervisory Oversight

Presence of (multiple) intermediaries

High Transaction costs & fees



## A DECENTRALIZED MODEL



# FEATURES OF THE BLOCKCHAIN (DISTRIBUTED LEDGER)

Records are Decentralized

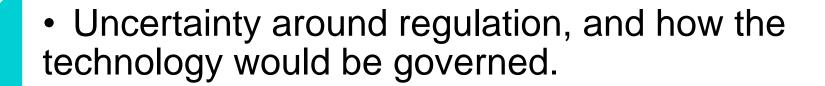
Immutability

Transparency

Trust



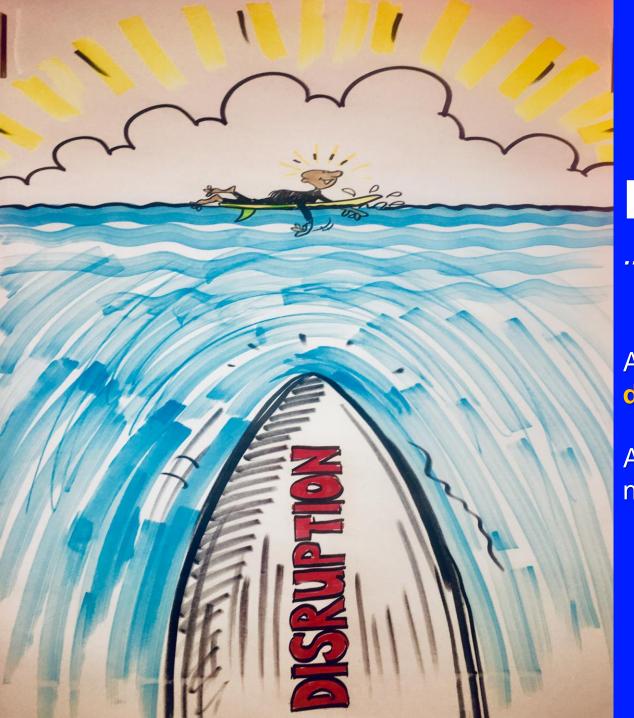
# SOME CHALLENGES FACING BLOCKCHAIN & DISTRIBUTED LEDGER TECHNOLOGIES



General lack of Understanding and public awareness

Integration with Legacy Systems





### **DISRUPTION**

... massive, rapid, and most likely permanent change!

A disruptive technology (or solution) is one that displaces an established technology;

A revolutionary technology that creates a completely new industry

REFINITIV<sup>™</sup>

### **KEY POINTS ON DISRUPTION**

Disruption

displaces an incumbent, or creates an entirely new model / industry / process

Disruption is a process

It would usually happen over a period of time

If you get disrupted

you are not coming back!





#### **INCUMBENT SOLUTION**

- More focused only on their most profitable customers
- Neglects other customer segments
- Misjudges "smaller" customer needs.
- Deploys services on legacy technologies

A Disruptive solution is simpler, more affordable and more accessible to either a non-consuming group or the low-end of an existing market



#### **DISRUPTIVE SOLUTION**

- Accessible to wide-range of consumer groups
- Simple, more affordable products and solutions
- Prioritizes and Enhances customer experience
- Employs newer, more efficient technologies



# SOME INDUSTRIES THAT COULD BE DISRUPTED BY BLOCKCHAIN

Banking & Financial Industry



**Agriculture & Food Technology** 



**Legal Industry** 



**E-commerce & Trade** 



**Healthcare Industry** 



**Education Industry** 



**Real-Estate Industry** 

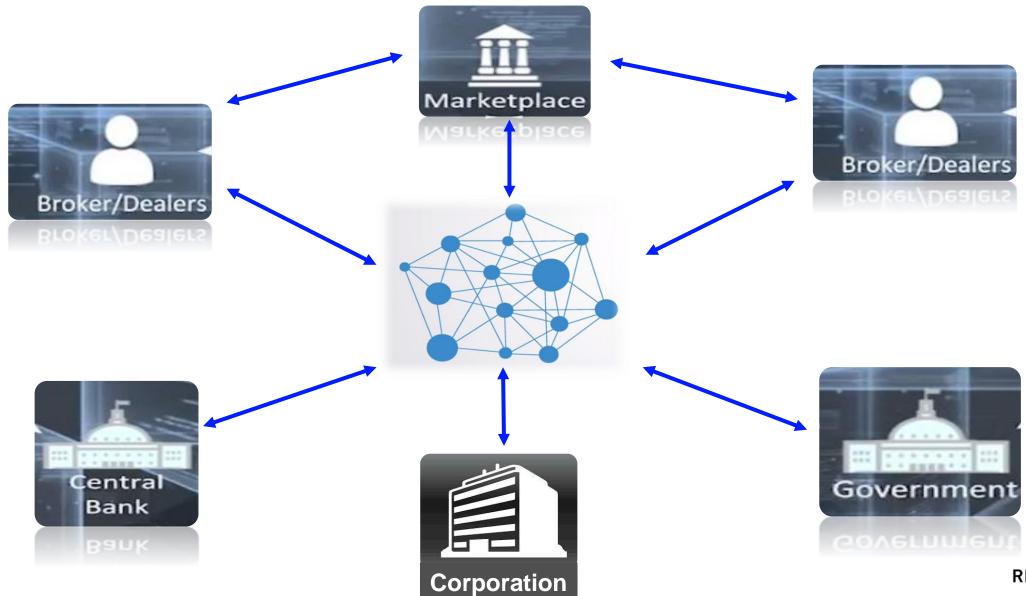


**Politics** 





### THE FINANCIAL INDUSTRY



# **BLOCKCHAIN: Some Use Cases in the Financial Industry**

#### **Clearing and Settlement**



**Speed up and Simplify cross-border payments** 



**Syndicate Lending** 



**Trade Finance** 



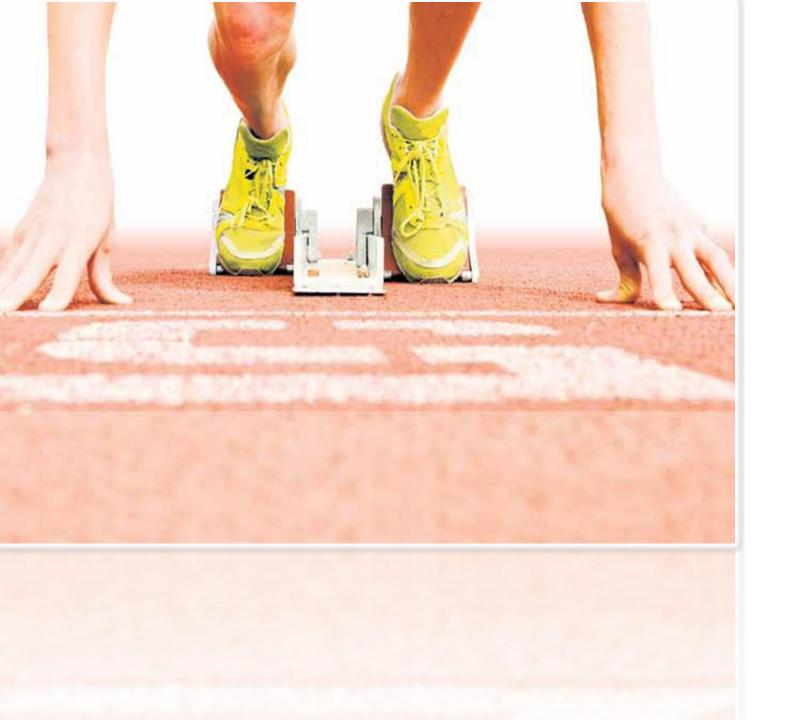
**Fraud Detection** 



**Digital Currencies** 





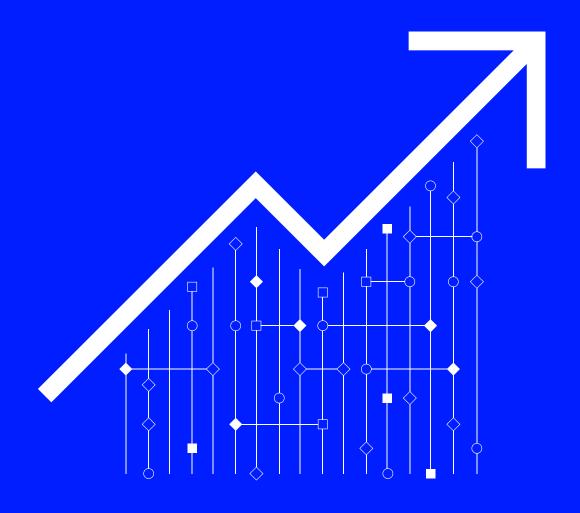


### ARE YOU READY FOR BLOCKCHAIN???



HOW CAN YOU BE AHEAD OF THE DISRUPTION?

- Join the Blockchain ecosystem
  - Partner, Collaborate, Co-create with Blockchain innovators, Blockchain oracles etc.
  - Experiment with Blockchain to make maximum profit
- Build Capacity and Invest
  - Organize and/or attend Hackathons, Events, Seminars
  - Hire requisite skill sets and develop human capital
- Identify & Assess the impact to your Industry/Business/Organization
  - How can Blockchain can be used in your industry/business/organization
  - Critically examine your industry for opportunities
  - Radically internalize your consumers' perspective(s)
- Understand the basics of Blockchain technology
  - Go beyond the hype and learn all about the technology





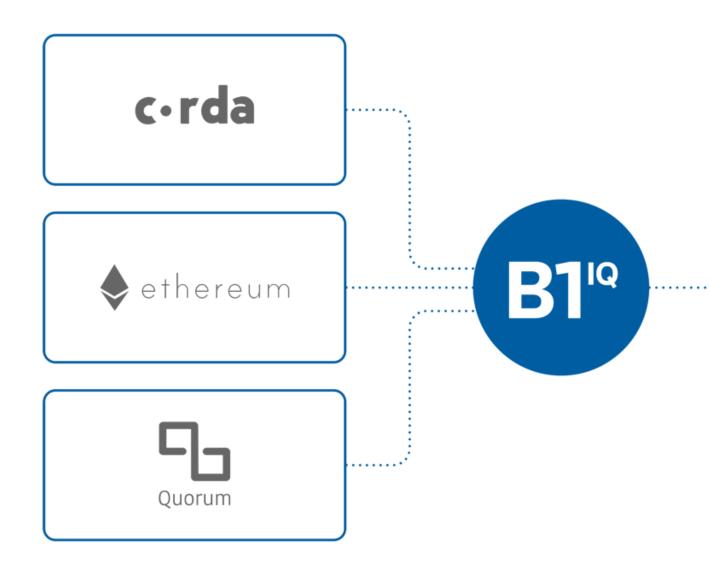
# Our Activities in BlockChain





### BlockOne

IQ



**Share Prices** 

Foreign Exchange Rates

**Corporate Actions** 

**Cryptocurrency Rates** 

Financial Benchmarks

Knowledge Graph

"The Fear of Disruption Can Be More Damaging than Actual Disruption

Resist the urge to react too hastily to major change - or to use it as an excuse not to take action."

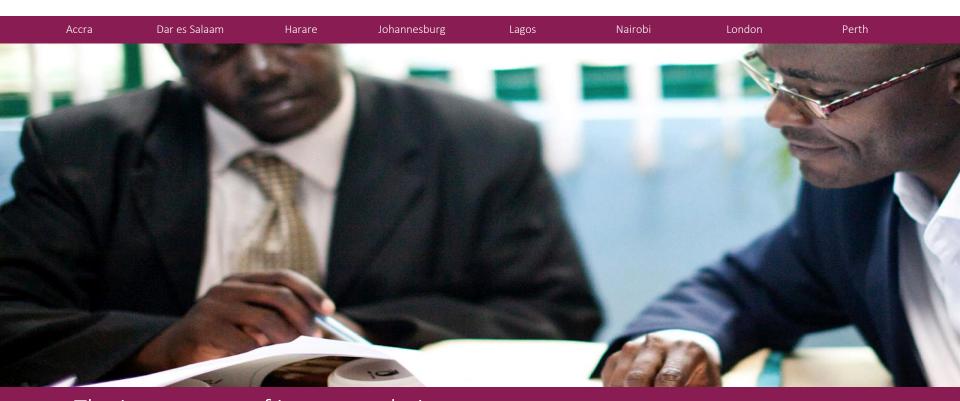
- **Paul Leinwand**Thought leader - strategy, growth, and capability building



# Thank you



### africapractice



The importance of investor relations *October 2018* 

- 1. What is Investor Relations (IR)
- 2. Snapshot of IR best practice versus non IR practice ones
- 3. The growing importance of social media in IR
- 4. How IR fits into Sustainable Reporting
- 5. IR engagement approach



It is not a process of stock price manipulation



It is not about performing "magic" to ensure positive analyst coverage on a company goes from 0 to 100



It is not for a closed group of individuals



It is not only about numbers, accounting and finance



It acts as a bridge between listed entities and the investing community



It is about engagement, visibility and managing perception



It is about enhancing transparency and disclosure to ensure fair valuations



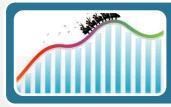
It is about effective strategic communications to keep all stakeholders abreast of material information



It protects shareholder value in challenging times



It attracts the right investor class



It helps reduce volatility of investor activity and flows

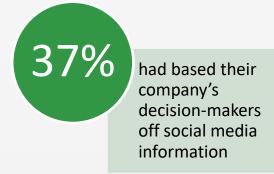


It provides a transparency premium for valuations

#### The Growing Importance of Social Media in IR











expect to increase their use of social media in the coming year

Source: Greenwich Associates - Institutional Investing in the Digital Age: How Social Media Informs and Shapes the Investing Process, 2016.

It helps companies listen and engage directly with their target audience

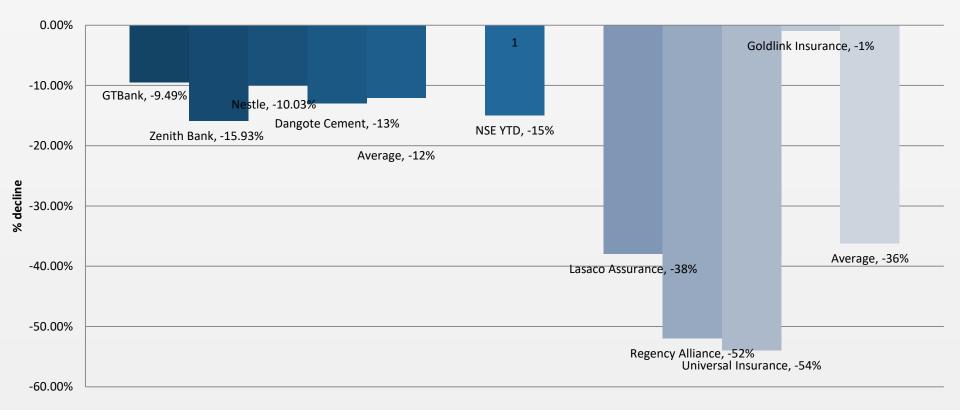
It allows companies reach more current investors and potential investors than traditional press releases

It creates an avenue for companies to get to measure investors' perception of stock

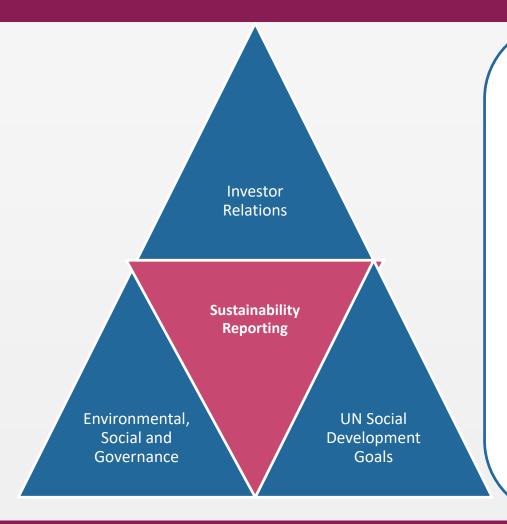
It helps companies deal with issues real time which in turn helps to reduce message misalignment.

#### A snapshot of IR best practice versus IR non practice

#### **Comparison of 2018 YTD stock performance**



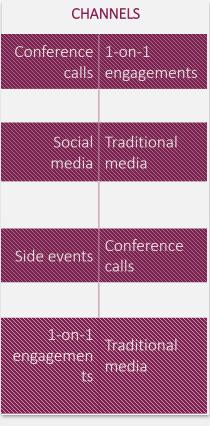
#### Sustainability reporting and IR



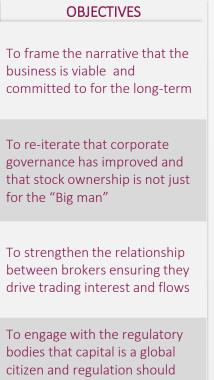
- Sustainable reporting is the intersection between investor relations, ESG and the UN SDGs
- Companies are evolving from operating without consideration for the environment to ensuring the entire ecosystem is factored.
- Sustainability in Africa is minimal as only 2 African stock exchanges out of 28 have issued ESG guidance for issuers.
- However, 41% of global businesses are expected to embed SDGs into their business over the next 5 years
- Aligning is critical as global institutions are investing based on sustainability











#### africapractice

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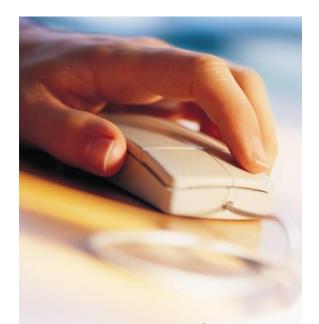
#### **Tim Newbold**

tnewbold@africapractice.com

#### www.africapractice.com

africapractice advises industry and governments; helping them to identify opportunity, manage risk and overcome critical communications challenges.





Presentation @ NSE Market Data Conference

Optimizing Business Performance Through Technology

19<sup>th</sup> October 2018

Financial Service Solutions www.zanibal.com



### Agenda

- FSI Challenges & Opportunities
- Leveraging technology to drive business performance.
- Questions

www.zanibal.com

# Critical Capabilities Of a Business Technology Platform

Unified Single
Source Of Truth
To Run A
Business



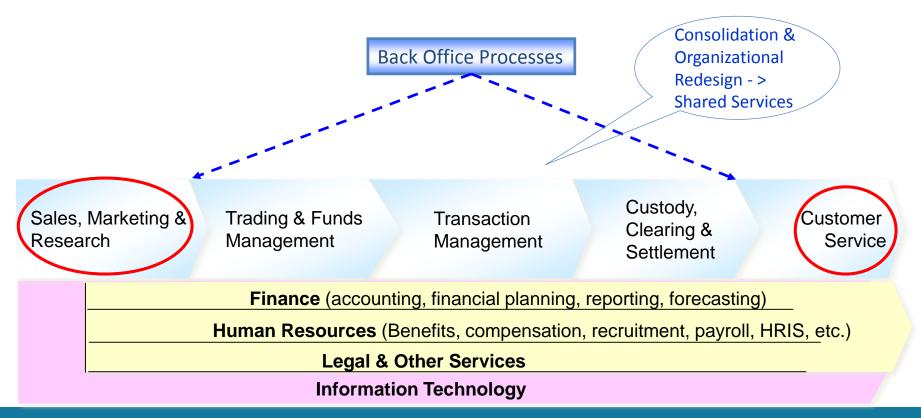


Zanibal



### Transforming the value chain

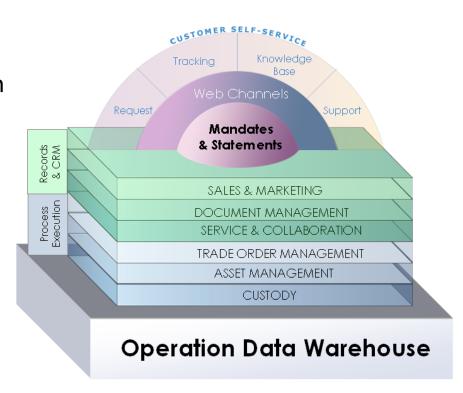
- To become a leading capital market firm, Organization Technology & Processes must be transformed to deliver strategic capabilities and drive value creation.
- Core functions in the business units reengineered and automated with technology to be at least on par with best practice benchmarks.
- Organizational design must reflect consolidated back office functions with STP





### A Capital Market Platform

- Leverage technology across all touch points to drive business performance
- Analytics to drive performance mgmt. and planning
- Integration with all key stakeholders to drive accelerate TAT and drive efficiency.
- Support for exiting and new products
- Flexible and cost effective
- Lease what you need and avoid huge capital commitments.



### **Key Platform Capabilities**



A front-to-back technology platform to support:

client interaction (Web & Mobile Enabled)

aggressive growth plans (Scalable)

process reengineering (Single Data Model)

lead generation (CRM functionality)

client agreements (Document Management)

transaction lifecycle (Workflow Tools)

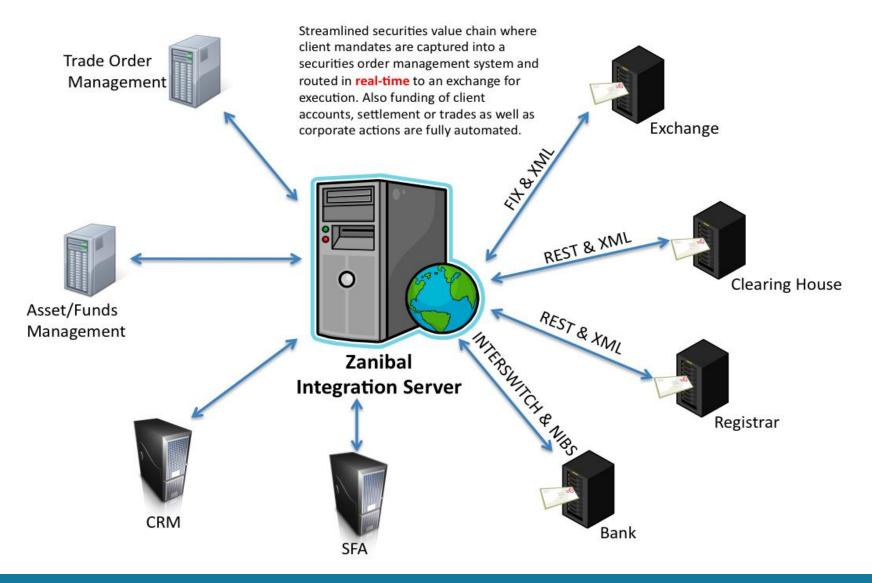
asset servicing (Interface to Ledgers)

teamwork (User Groups)

Technology must deliver strong ROI



### Integrate your processes



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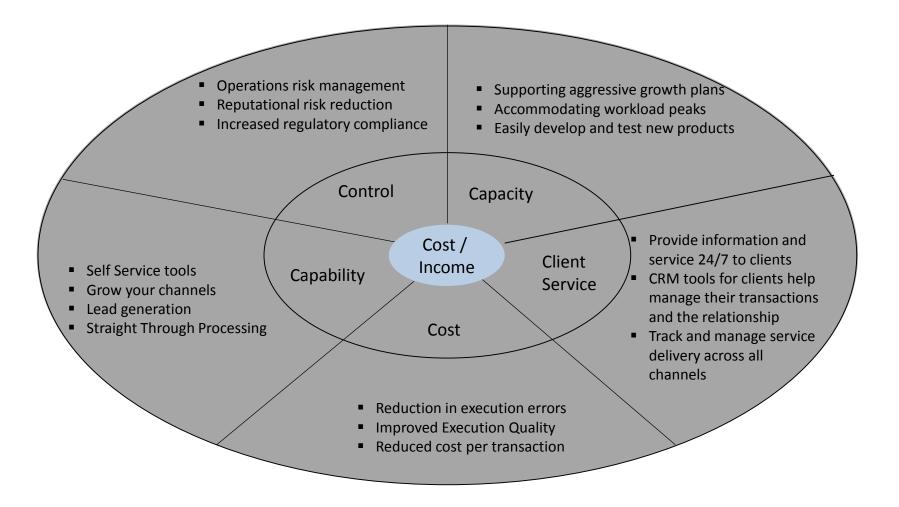
### Insight from your data





- Operational Excellence
  - Responsive and accurate delivery of customer requests across all channels
- Analytical Insight
  - Analyze, predict and drive customer behavior
  - Identify the right time to make the right offer to the right market
- Process Optimization
  - Improve visibility and performance across all involved business processes

## Key Benefits Of Deploying Technology Zanibal



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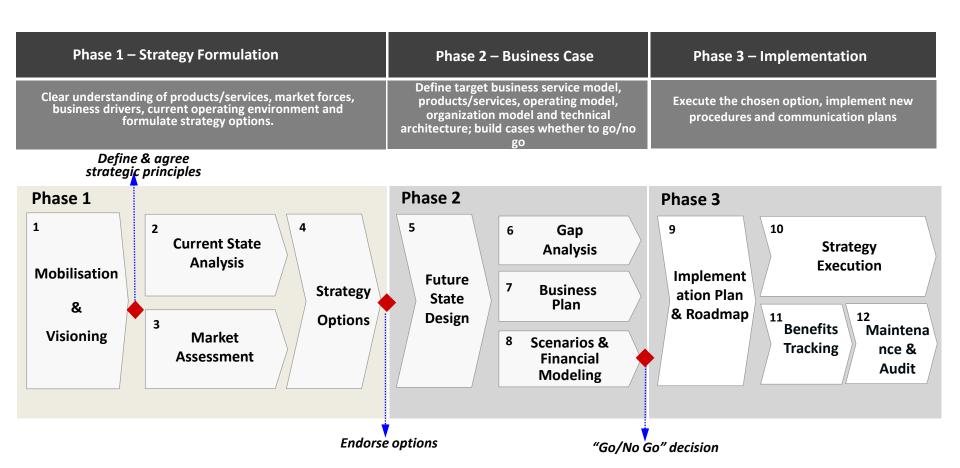
### Summary

- Technology should deliver a single, real-time view of your transactions, customer and sales processes across all departments and all locations
- Solutions should have a low cost of ownership and enterprise class scalability and performance.
- Easily extend functionality
  - Via Built In Customization APIs & Web Services



#### The Delivery Process

3-phased approach that breaks down transformation roadmap into distinct and manageable stages, each with their own timeline, milestones and deliverables



The first step to transformation needs to be driven through a clear articulation of the problems with the existing architecture and the establishment of a set of strategic principles

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### Questions ??

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