



PRACTITIONERS' & PROFESSIONAL FIRMS GROWTH FORUM WEBINAR

Date: 12th to 13th Aug 2020

Time: 08:00 – 17:00 Hours

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Technology and the Future of the Accountancy Practice

Timothy Oriedo

Founder CEO Predictive Analytics Lab

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Time: 9:00-9:45am

Q&A: 10:30-11:00am

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ABOUT US OUR 4 PILLARS



Technical

Infrastructure &

Machine Learning Softwares
app.predictiveanalytics.co.ke



Knowledge Sharing

masterclass.predictiveanalytics.co.ke



Strategy & Consulting

Data Governance &
Reculturization



Community

[4ir.predictiveana
lytics.co.ke](http://4ir.predictiveanalytics.co.ke)

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WHAT'S DRIVING IT



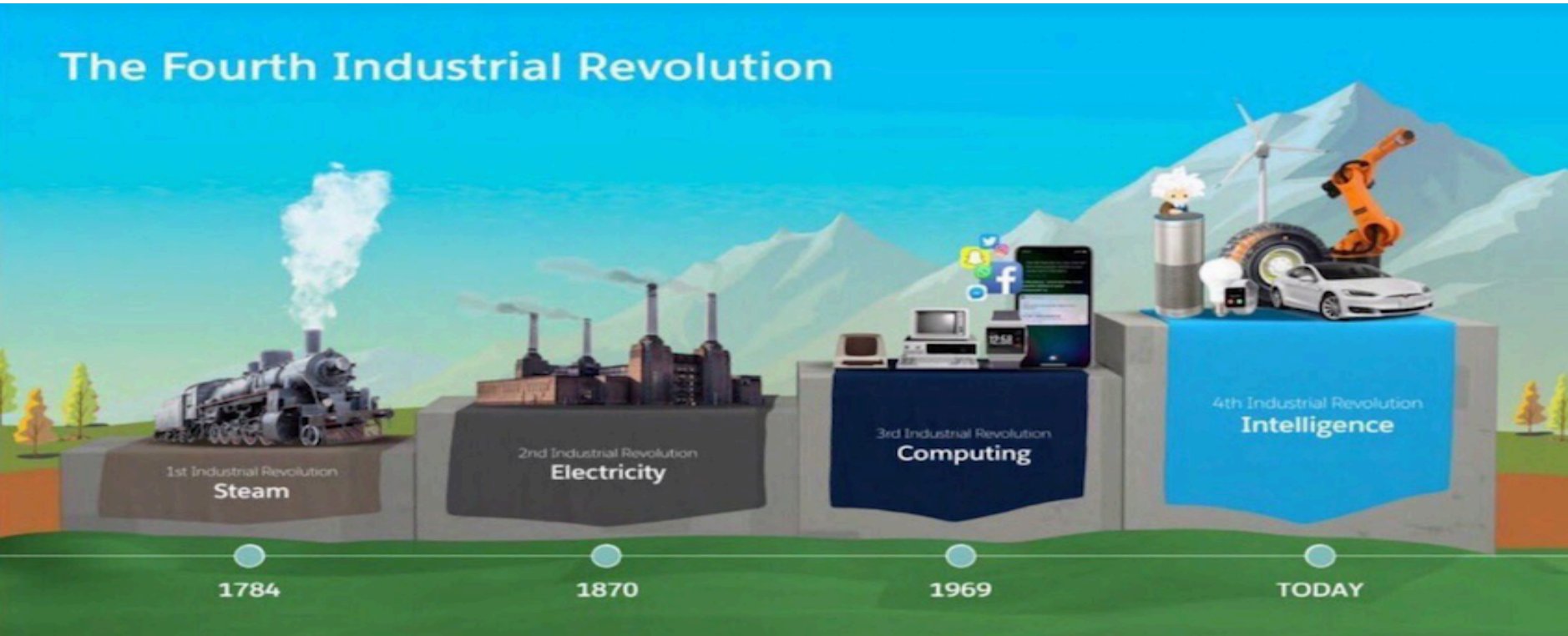
- **People**
- **Regulatory Boundaries**
- **Technology**

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4th Industrial Revolution

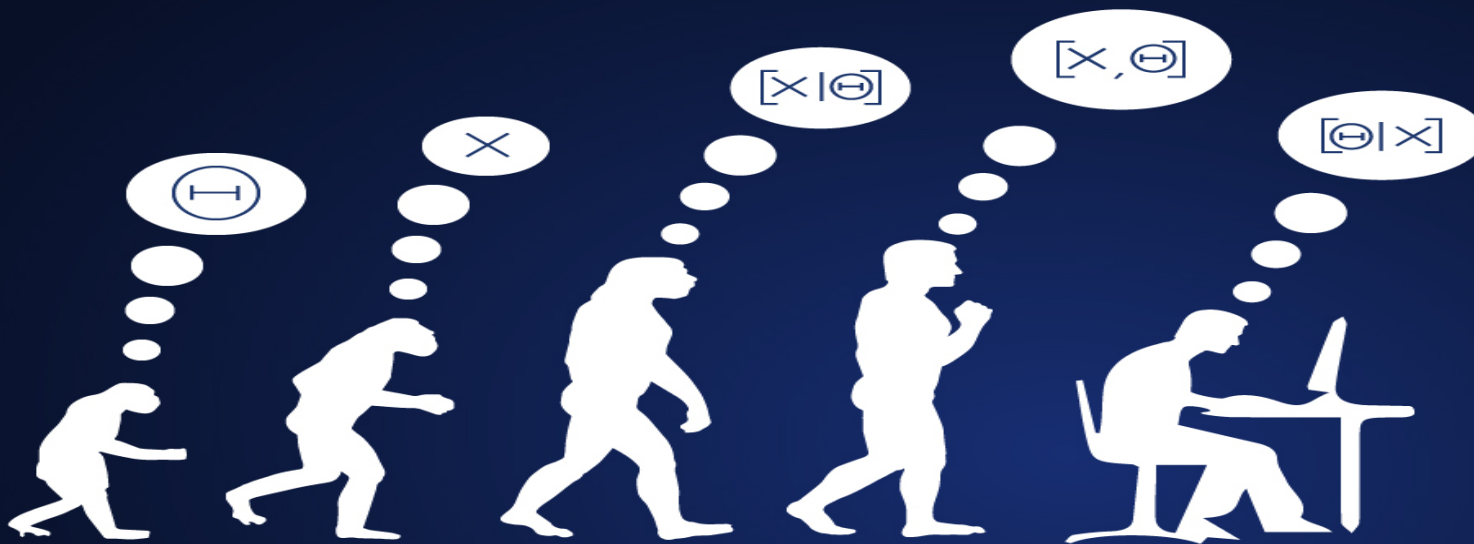


The Fourth Industrial Revolution



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(Yet another) History of life as we know it...



Homo
Apriorius

Homo
Pragmaticus

Homo
Frequentisus

Homo
Sapiens

Homo
Bayesianis

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DASHBOARD



Predictive Analytics
Drilling sense out of data

MANAGEMENT ACCOUNTS
VISUALS - KEY METRICS

All amounts in these reports are displayed in R'000

REPORT CREATION DATE

2/24/2020 3:48:54 PM

CLUSTER: Multiple

ENTITY: Multiple

AS AT END: All



Predictive Analytics
Drilling sense out of data

Year

2017

2018

2019

2020

Month

January

February

March

April

May

June

July

August

September

October

November

December

Company

Company 1

Company 3

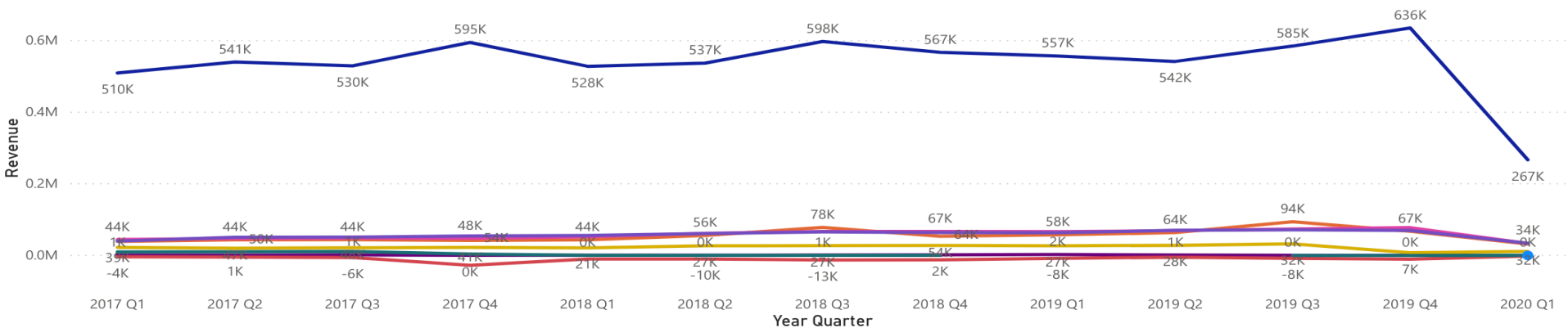
Company 5

Company 7

Company 8

Revenue by Year Quarter and Company

Company (Blank) Company 1 Company 2 Company 3 Company 4 Company 5 Company 6 Company 7 Company 8



Revenue by Quarter Number and Year

Year 2017 2018 2019 2020



Revenue by Company



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INFORMATION SUPPLYCHAIN



INFORMATION SUPPLY CHAINS



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DATA FORMATS



Data Definition Framework

Data Format

Structured



Human-Generated

- Survey ratings
- Aptitude testing

Machine-Generated

- Web metrics from Web logs
- Product purchase from sales Records
- Process control measures

Unstructured



Human-Generated

- Emails, letters, text messages
- Audio transcripts
- Customer comments
- Voicemails
- Corporate video/communications
- Pictures, illustrations
- Employee reviews

Data Source

Internal



External



Human-Generated

- Number of Retweets, Facebook likes, Google Plus +1s
- Ratings on Yelp
- Patient ratings ratings

Machine-Generated

- GPS for tweets
- Time of tweet/updates/postings

Human-Generated

- Content of social media updates
- Comments in online forums
- Comments on Yelp
- Video reviews
- Pinterest images
- Surveillance video

TYPES OF DATA

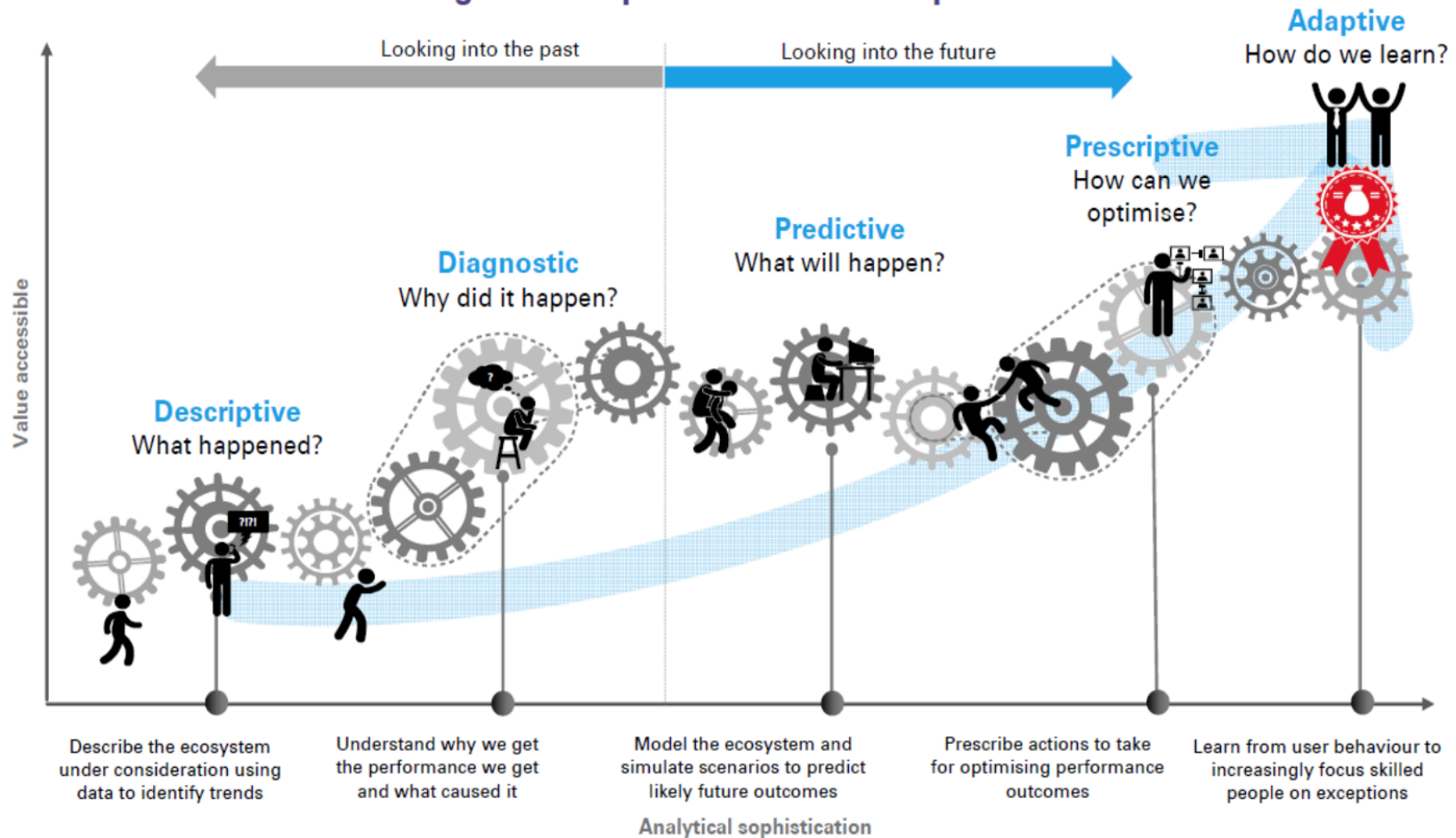
Types Of Data: Internal or External



MATURITY CURVE



"Learning from the past to chase future performance"



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COVADIT (Corona Virus Accelerated Digital Transformation)

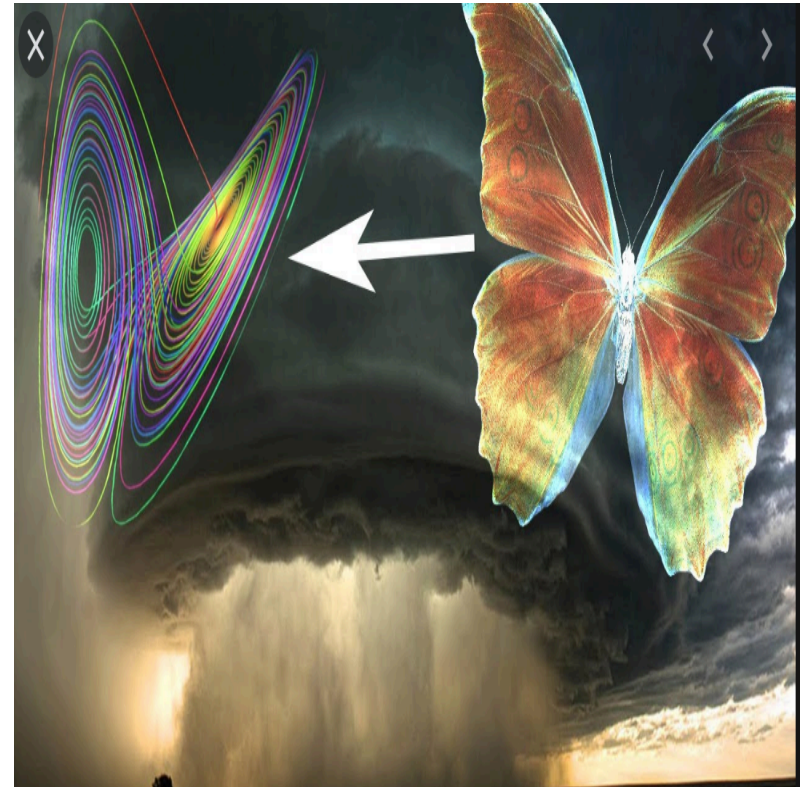
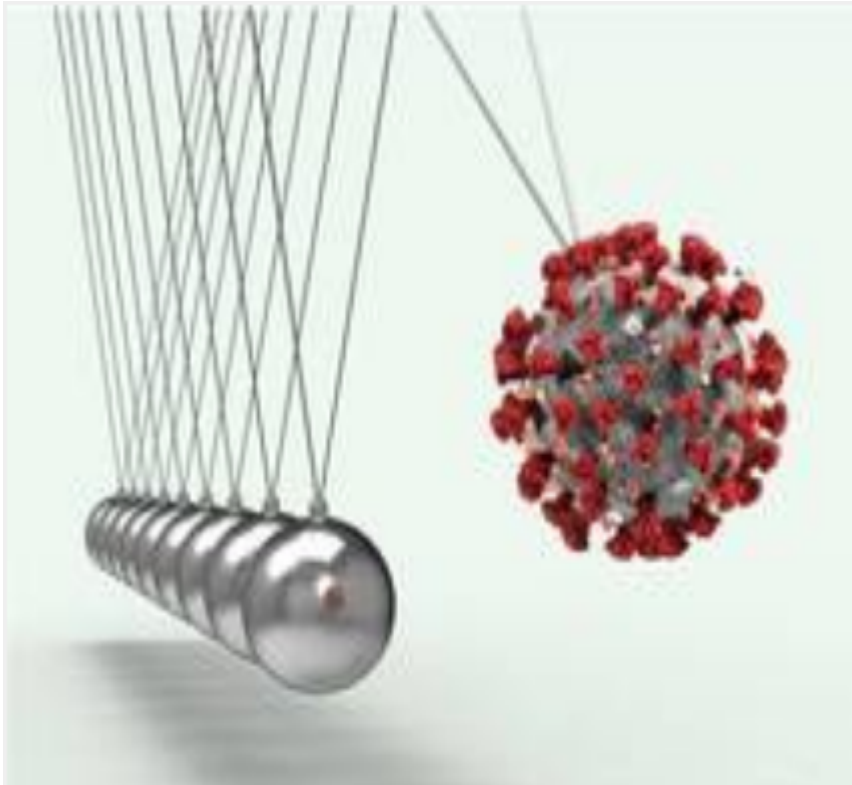


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FLUID VUCA ENVIROMENT



BUTTERFLY EFFECT







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RESILIENCE



Responses need to be targeted based on the nature of the shock and recovery timeline for each industry

	 'New winners'	 Hibernate	 Lengthy recovery	 Managed decline
Description	Industries experiencing a combination of rising demand as a result of COVID-19, or benefiting from the transformative effects COVID-19 could have on behaviours post-crisis	Industries experiencing short-term shocks, but that still remain fundamentally competitive and will be able to resume trade at a fairly rapid pace as COVID-19 impacts lessen	Industries with risk of being severely hit by both supply disruptions and demand contractions, and although these still remain viable are likely to require more time before recovering	Industries likely to be fundamentally re-shaped by long-term transformative forces of COVID-19 – potentially accelerating decline or consolidation of less competitive industries
Example industries	Digital sector players; Potential for local manufacturers driven by focus on supply chain resilience + diversification from China	Ag exports e.g., tea, coffee, horticulture etc as cargo trade resumes; SMEs that serve basic needs e.g., restaurants, beauty/grooming	Domestic and leisure tourism; export-oriented heavy manufacturing (hit by global recession)	Business travel + MICE – core behaviour shifts of operating in WFH environment in addition to climate change concerns

How well do you understand your direct and indirect exposure to these spaces?

How quickly can you understand and pursue opportunities?

Source: Dalberg analysis



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BUSINESS RECOVERY CURVES



L CURVE

U CURVE

W CURVE

V CURVE

↗ CURVE

PWC RESILIENCE REPORT



The PwC Global Customer Resilience To COVID-19 Disruption.

Short-Term Industry Exposure (Q2 FY20) Ability to Recover

Aerospace & Defense	Low
Automotive	Low
Higher Education & Research	Medium/High
Industrial Machinery & Components	Low
Oil & Gas	Low
Professional Services	Medium
Sports & Entertainment	Medium
Travel & Transportation	Low
Chemicals	Low/Medium
Mill Products	Low
Mining	Low
Public Sector	High
Retail	Medium
Banking	High
Consumer Products	Medium
Defense & Security	High
Engineering, Construction & Operations	Low
High Tech	Medium
Insurance	High
Life Sciences	Low/Medium
Utilities	High
Wholesale Distribution	Low
Healthcare	Medium
Media	High
Telecommunications	High

Mid-Range (2H20)*

Aerospace & Defense	
Automotive	
Higher Education & Research	
Industrial Machinery & Components	
Oil & Gas	
Professional Services	
Sports & Entertainment	
Travel & Transportation	
Chemicals	
Mill Products	
Mining	
Public Sector	
Retail	
Banking	
Consumer Products	
Defense & Security	
Engineering, Construction & Operations	
High Tech	
Insurance	
Life Sciences	
Utilities	
Wholesale Distribution	
Healthcare	
Media	
Telecommunications	

Long-Term (2021 and beyond)

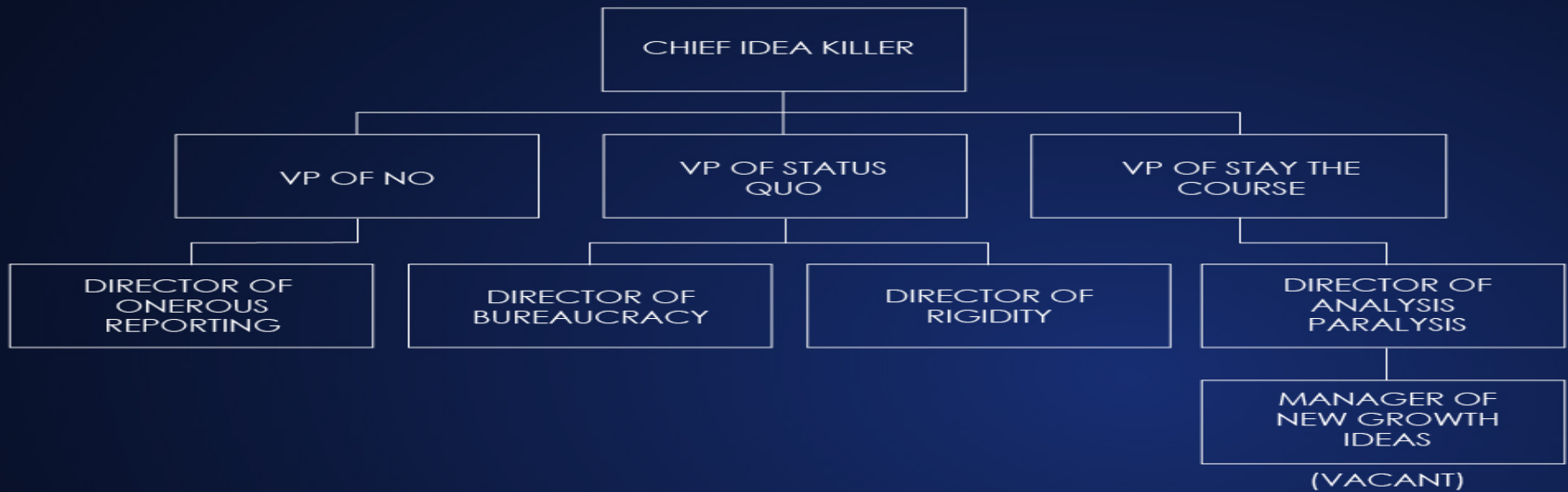
Aerospace & Defense	
Automotive	
Higher Education & Research	
Industrial Machinery & Components	
Oil and Gas	
Professional Services	
Sports & Entertainment	
Travel & Transportation	
Chemicals	
Mill Products	
Mining	
Public Sector	
Retail	
Banking	
Consumer Products	
Defense & Security	
Engineering, Construction & Operations	
High Tech	
Insurance	
Life Sciences	
Utilities	
Wholesale Distribution	
Healthcare	
Media	
Telecommunications	

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STRUCTURE - COBOT



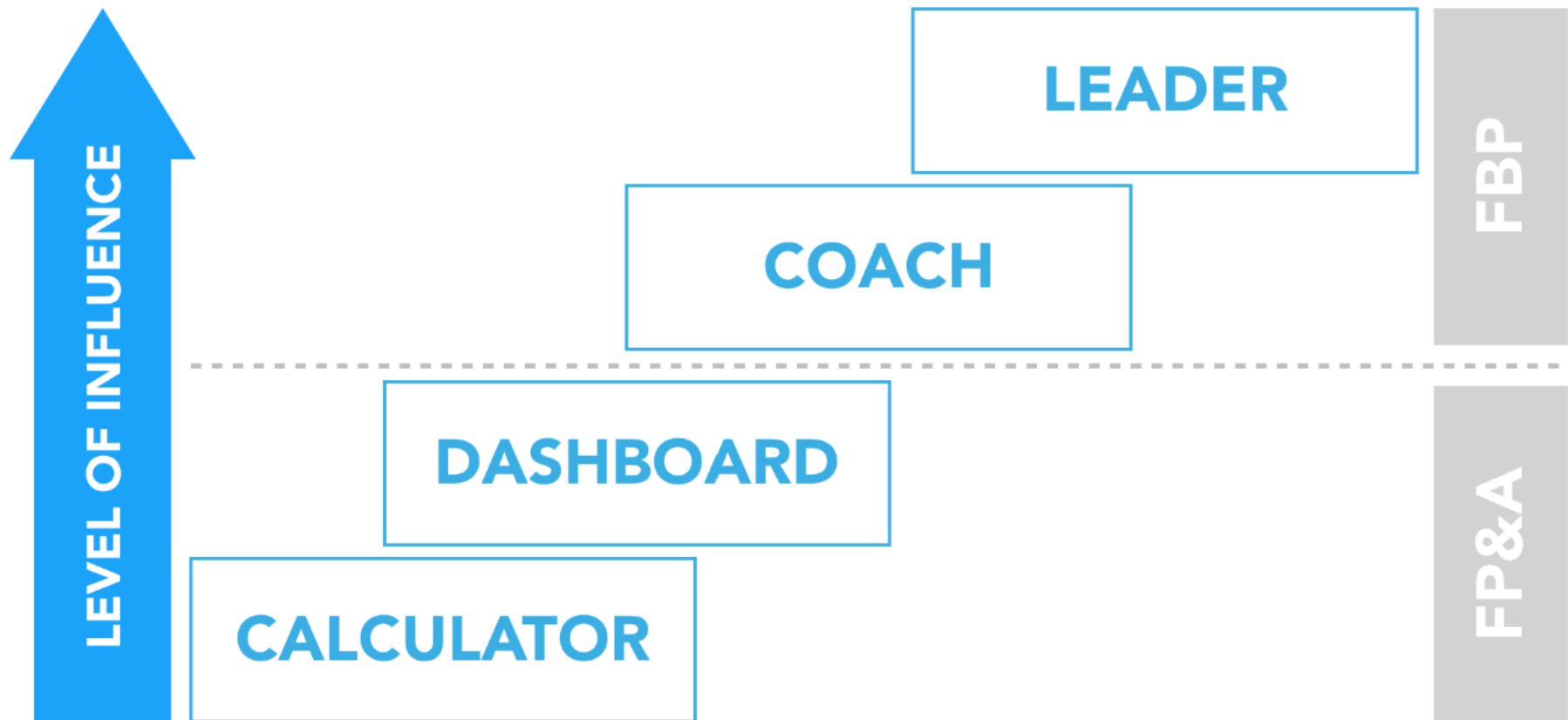
CULTURE



FINANCE PARTNER



WHAT TYPE OF FINANCE PARTNER ARE YOU?



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TYPES



If you spend most of your time at reporting, budgeting or forecasting you're ***the CALCULATOR.***

Spend most of your time building dashboards and working in BI, you're ***the DASHBOARD.***

Spend most of your time with people, getting to know them, finding the WIIFM and influencing decisions, you're ***the COACH.***

And if you've transcended finance and seen as a broad commercial leader, you're ***the LEADER.***

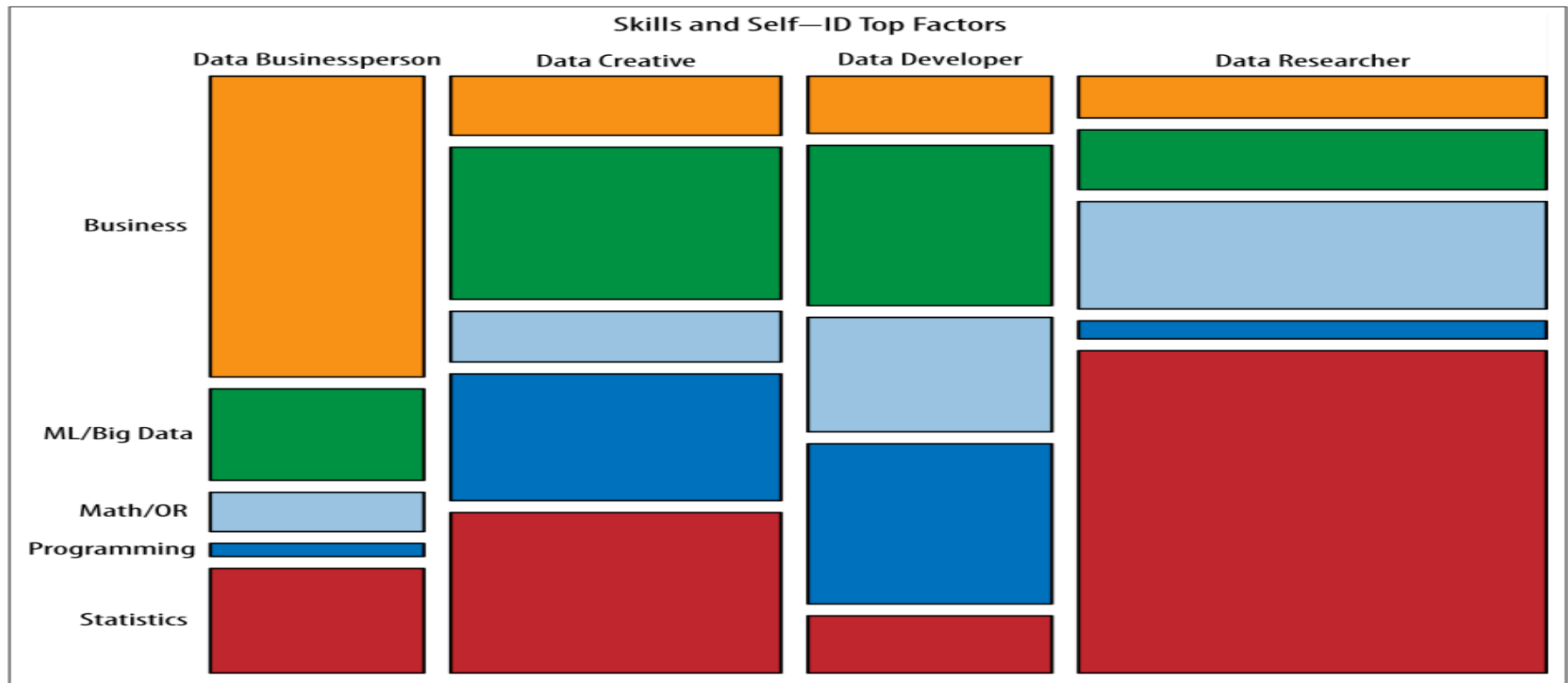


Predictive Analytics
Drilling sense out of data

Mental Model Biases



SKILLS



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TALENT



Getting Data Scientists

01

Competitive Hiring

- There exists some skills of already experienced data scientists who are good at entry level classification and regression problems.

02

Internal Training

- Boot Camp training and entry level data science programs are good methods of ensuring that the Data IQ within organizations is raised

03

Scaling technical staff

- Statistics, Finance, Engineering, Information Technology, Mathematics, Risk and Computer Science are great fields to identify and scale up select staff

04

Outsourcing

- For immediate results and return on Investment, outsourcing to experienced consulting firms also ensures that value can be derived from existing data

05

Strategic Sponsorships

- Hackathons and partnerships with the academia ensures that problems within organizations can be solved by brilliant minds within the industry

06

Organic growth

- Easiest approach as skills development is pegged on organic growth and internal self driven scale up of existing staff

WHAT NEXT?



To meet data requirements, companies should strive to perform the following duties.

- 1. Develop Strategy**
- 2. Softwares**
- 3. Upskilling**
- 4. Behaviour Change**
- 5. Continuous Innovation Testing**
- 6. Build culture**