

Generating Knowledge - Impacting Health



Digital Alignment, Changing the FACE of I.T.





Stimulating discussion based on my PERSONAL VIEWS and not of CAPRISA



Overview of CAPRISA

CAPRISA conducts research in the following Scientific Programmes:

- HIV Pathogenesis and Vaccines
- Prevention and Epidemiology
- HIV and TB treatment

CAPRISA research team (N=279)

Gender: Women = 81% & Men = 19%





Africa has 70% of all people with HIV

With <1% of the world's population, South Africa has 19% of all people living with HIV





Source: UNAIDS Global Report 2017

Quick Introduction

- Wayne Janneker
- Head: Information Technology @ CAPRISA
- Born and Raised in Pietermaritzburg KZN
- Previous backgrounds include
 Dev Ops in Logistics and Business Systems Development,
 IT Operations in Chemical, Manufacturing, FMCG and Banking.
- Passion for growing leaders and building a leadership culture in teams.





Quick Introduction

- I am a B.SC DROP OUT not by choice
- My first job was in KFC
- Spent the next 12 years finding my way in IT
- Working abroad, but back to South Africa
- Leading the way in Barloworld Logistics 4th IR
- Enough of Corporate lets work for the people. CAPRISA
- SAPS, COMMUNITY RESPONSE, BIG IDEAS









Changing the face of IT



CAPRISA – currently does 3.8TeraBytes of data per day across its clinical trial sites

We were a team of highly skilled individuals that sometimes "Miss the boat".

As the IT Team we had to swiftly become part of the connected drive within our environment. We had to step out of a traditional IT Mindset.

We became a partner to the organisation so that we could Enhance and Invest back.





Team Disruption :

- Are we ready to be disrupted? With the growing amount of technology and cloud-based services have we engaged the mind-set that business demand will fast out way IT Supply.
- Are we ready for the next wave of Digital Disruption ? If we can not fulfil the need now, what next? Does business automatically turn to the cloud?
- At what stage do we loose control or worse reputation ?

Are we there yet? Are we Intune with business, are we listening are we innovating?



Digital Shadowing

We as I.T. Had to understand our users Digital DNA

- **Drive** We focused on what drives our users, How do they see I.T. and what enables them to see I.T. as a user centric experience.
- Need Users have needs, We started sitting in on their meetings, we started understanding their business and used as a platform to sell our Value Add Proposition. We used this time as a method to change their landscape without them creating a "NEW SOLUTION" outside of our control.
- Achieve Our users need to do what ever it takes to achieve their goals, So did I.T. so part of our contribution in these sessions was to insure we encourage ITIL, SDLC, proper IT Project Management and more so InfoSec.







Industrial Revolution

The MACHINE will take my job

Digital Transformation challenge is the Robot vs Me !

Mindset vs Reality is always a major challenge and we need to not scare Our users but rather empower them to embrace change.

When we started talking automation our users immediately transformed but not what we expected. **SPECULATION (FUD - Fear, uncertainty, and doubt)**

Back to the drawing board !!

We introduced digital workshops to allow the users to engage technology

Hour Of Code (code.org) PowerApps Fish Boal Sessions (Innovation with pizza and coke)





How do we do this?

Chatbot's

Using Artificial Intelligence we able to interface our servers and networks to not just monitor but as it to run checks via a Chatbot.

In doing this our vaccine trial network noticed the value of chatbots.

We now building a chatbot for Clinical Trials which allow Participants to send in symptom monitoring information.

The A.I. looks for warning signs and starts to send additional questions, whilst notifying Medical Staff.





What we thinking about

Video observed Therapy

Use of VOT to Link and Retain Patients in care by observing the consumption of medication The times of consumption, Geo Location, and a 3 point visual check using mobile video we able to determine weather participants are actively taking medication, their geo zone and based on their lab results we now able to link their behaviour to lab based outcomes.

Data Trade Off

IT is involved in a existing project using high density spatial imaging in a peri urban environment and introduced GPS Telemetry, Air Quality, Participants Proximity, Manufacturing and other concerns into a randomised control study.

By overlaying this data using a Geo Spatial Algorithm we able to determine what other factors are at play in the risk of TB infection rates. (This project was designed by IT using Garmin Etrax, IoT Weather Stations and Big Data Analytics.)





D level Officer replace C

Traditional CIO

Focus on:

- Automating existing processes
- Internal operations and functions
- Legacy business models
- Optimizing delivery of offerings
- Systems of record
- Centralizing IT capability

Today's CDO

Focus on:

- Transforming business processes
- Customer-facing solutions
 - New digital business models
- Optimizing the digital experience
 - Systems of engagement
 - Decentralizing/democratizing IT



The Justin Effect ③

Who are we and why do we exist?

We a ever changing BU that is required to diversify to the day to day needs and requirements of dynamically changing Industry, that is pushing the boundary's and breaking the normal image of I.T. Guys.

We are here to solely serve our customers (the users of our business) and be the friendly face.

Where are we going and why?

Are we the right department for the business, if we had to hit the reset button how would we like to see the department? Are we working towards the same goal? Are we the right people for the job?

What info do we need to make our strategic decisions?

Be able to know our business, define our users' needs and understand the GAP between Business/users and IT Systems Be able to be reasonably thoughtful of the business and user requirements bearing in mind the basic ITIL and SDL principles. IS IT BEST FOR THE BUSINESS. Defining our decisions by placing the business first.

Also lets define where we see ourselves at, at the moment.

Right now we a team of highly skilled individuals that sometimes "Miss the boat". We are defined not by the awesome technology we know of and can offer. But by the ability to keep our ears and eyes in tune with the business and be able to forecast what they need before they ask for it. With the abundance of cloud technology IT is losing their grip on control. But are we? Instead of been traditional sheep herdsman trying to keep the flocks at bay should we not start adapting to the growing demand for IT cloud based apps, Internet of things and rather focus on educating and securing our systems to meet the IT vision.

IT must have greater capacity for supporting innovation, be better equipped to keep up with a rapidly evolving Business catering for a demand in needs and solutions, Our Customers is forever evolving so should we.



Honest Discussion The Golden Circle

WHAT

Every organization on the planet knows WHAT they do. These are products they sell or the services

HOW

Some organizations know HOW they do it. These are the things that make them special or set them apart from their competition.

WHY

Very few organizations know WHY they do what they do. WHY is not about making money. That's a result. WHY is a purpose, cause or belief. It's the very reason your organization exists.



- 90% of all people living with HIV will know their HIV status
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.
- 90% of all people receiving antiretroviral therapy will have viral suppression.



My View

Digital Transformation is happening around us and some times without us

- Building Block 1 Strategy, leadership and governance
- Building Block 2 Regulation and policies
- Building Block 3 Communications, infrastructures and common platforms
- Building Block 4 Interoperability
- Building Block 5 Partnerships
- **Building Block 6 -** Adequate financing model.





Thank You



