

#### 8th CFOs Breakfast Forum

#### Robotics Process Automation

Presentation by: CPA Cliff Nyandoro

16 April 2019, The Stanley Hotel, Nairobi

## Introduction





### Presentation agenda



- □ Introduction
- ☐ Technological advancements
- ■Automation of the accounting function
- □Place of the CFO in light of emerging trends



- ☐ Digital evolutions
- ☐Artificial Intelligence (AI)
- Automation of the accounting function
- ☐ Robotic Process Automation



**Technology** is the future of our profession.

According to David Powell, Global Brand Manager at IBM Cognitive Process Services and President of the Association of Chartered Accountants in the United States.

Automation, robotics, and blockchain are just a few of the disruptive (digital transformative) technologies beginning to reshape the accountancy profession and the CFOs role.



Mr. Powell emphasizes the need to begin adapting to these technologies and start putting them into practice in order to stay relevant.



A look inside \*MIT's Media Lab reveals stunning developments in the technology world.

Some of the remarkable projects being built, include devices that can Google your thoughts and capture the brain's creativity while one goes to sleep.

\*MIT – Massachusetts Institute of Technology, USA







Arnav Kapur, a student in MIT's Media Lab, has developed a system to surf the internet with his mind.

He silently Googled the interviewer's questions and heard the answers through vibrations transmitted through his skull and into his inner ear.



A look at a variety of projects from the Media Lab, reveals this most outlandish project of the brain-to-Google device.

Called AlterEgo, the system detects neuromuscular signals in the jaw and face that stem from internal verbalizations, the brain's thought process.



After detecting questions in the mind, AlterEgo then transmits the answers through bone vibrations in the ear canal.

This allows for the user's natural listening process to continue uninterrupted. *MULTI-TASKING*?

## Trends in Accounting Software





## Trends in Accounting Software



1960 – 1980's: The Mainframe and Mini Computer Features of the accounting software:

- Centralized intelligence; dumb terminals; and batch processing mode; no Graphical User Interface (GUI) support
- Flat files or indexed file organization
- Hierarchical or network databases
- High transaction processing capacity
- Large number of users supported

## Trends in Accounting Software



1980 – 1990: The Micro-Computers, Local Area Networks

#### Features of the accounting software:

- Shared intelligence across network
- File sharing architecture
- Indexed file organization
- Limited transaction processing capacity
- Limited users supported

## Trends in Accounting Software



1990 - Early 2000s: Client-Server architecture, LAN and WAN

#### Features of the accounting software

- Mixture of mainframe, mini and PCs supported
- Shared intelligence across network
- Client-server architecture
- Relational database systems
- Databases can be centralized or decentralized
- High transaction processing capacity
- Large number of users supported

### Current trends





#### Current trends



The Client-Server, Local Area Networks, Wide Area Networks, The Browser-Server, The Internet and the World Wide Web.

#### Features of the accounting software:

- Mixture of mainframe, mini and PCs supported
- Shared intelligence across network or centralized intelligence
- Client-server architecture and browser-server architecture

#### Current trends



- Relational databases, multidimensional databases, objectoriented databases
- Databases can be centralized or decentralized
- Flexible transaction processing capacity
- Large number of users
- Support for world-wide users







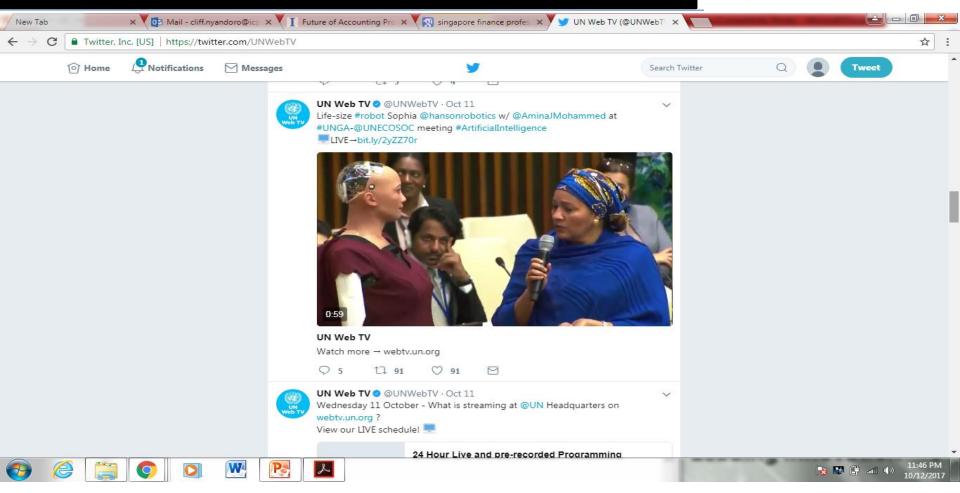
- □RPA (Robotic Process Automation): Use of software to handle repeatable tasks at a fast rate and a higher volume
- □AI (artificial intelligence): Automating processes that are of a minimal value to the organization

(the development of computer systems which able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.)



RPA thus implies that routine activities can easily be performed by the RPA tool based on predefined rules within the accounting system.





https://twitter.com/UNWebTV/status/918129450058899456

## All about Data





### All about Data



While RPA and AI systems are getting better all the time, most still rely on oversight from trained individuals.

Embracing the future means positioning yourself to "oversee" these systems – which at least partially means being proficient with data.

There is imperative need to Create it, store it, bring it together, interpret it, manipulate it – for decision making.

## Expectation from automation





### Interactive Session



Q&A

## Thank You!



