



THE INSTITUTE OF CHARTERED ACCOUNTANTS OF NIGERIA

(Established by Act of Parliament No.15 of 1965)

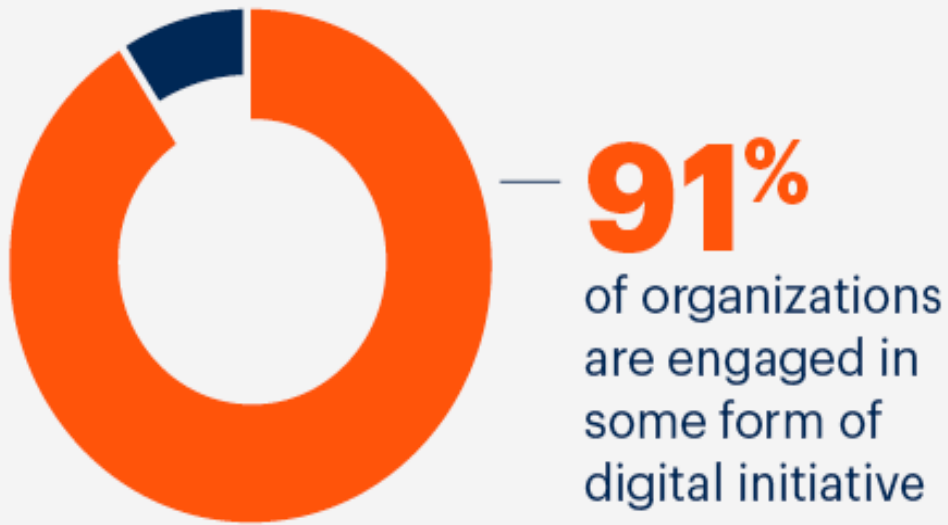
EMERGING TECHNOLOGIES : OPPORTUNITIES FOR ACCOUNTING TECHNICIANS

AATWA INDUCTION

CHIMENKA EZERIBE (FCCA, FCA, FCTI, CISA, CFE, MSc)

DEC 2020

WHY THIS TOPIC?



Source: Gartner
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Gartner.

Organizations that have embraced digital transformation are **26% more profitable** than their average industry competitors and have a **12% higher** market valuation

-CAPITA

www.icanig.org



The Accounting Technicians – What is your current task?

Accounting technicians carry out a range of practical accounting tasks, working towards the collation, checking and basic analysis of financial information, which is then utilized by accountants or business managers



The Accounting Technicians – What is your current task?

- Data Collation and Entry
- Processing of Invoices/Receipts
- Payroll and Expense Administration
- Preparation of reports/budgets
- Monitoring fin. transactions
- Computation of numerical data
- Reconciliation of accounts
- Funds transfer (Payments)
- Verification of fin. transactions

The Accountant



Identify, Record,
Measure, Verify
and Report

The Self-Employed Accounting Technicians

Although the Accounting Technicians often work with and assist chartered accountants, many provide independent accounting services. Self-employed ones typically render more complex services to their clients, including:

- calculating end of year accounts
- Consulting and advisory
- ensuring compliance with taxation legislation.
- managing income and expenditure budgets

The Accounting Technicians – What is your DREAM?

DO YOU KNOW THAT

“One in twelve chartered accountants began their accountancy studies by working toward an AAT qualification”

UK Survey Report



Career Progression For Accounting Technicians

From the role of an Accounting Technician, one can progress to higher positions such as:

- CFO/Finance Controller
- Data Analyst
- Internal or External Auditor
- Tax Analyst
- Payroll Manager
- Director of Finance
- Etc.



The Current State of Accountancy Profession



One cannot overemphasize the important role accountants play in the business world, instilling confidence in the quality of financial reporting.

The Current State of Accountancy Profession



60% of accounting errors are the result of simple bookkeeping mistakes

The illustration features a light blue wooden-textured background. On the left, there is a stack of papers with a bar chart and a line graph. Below the papers is a red calculator with a finger pointing at the equals button. A yellow pencil is also visible. On the right, there is a white coffee cup. The text '60% of accounting errors are the result of simple bookkeeping mistakes' is written in white on the background.



Accounting negligence is the common cause of failure among business start-ups. Today, clients expect their accountants to offer automated services, and accounting professionals of all specializations are struggling to meet those demands.

LIFE WIRES OF MODERN ORGANIZATIONS

COMPUTER SYSTEMS

CASH

NETWORK

PEOPLE

DATA

**Are Accountants Technicians Involved?
To what extent?**

KEY QUESTIONS BEFORE US

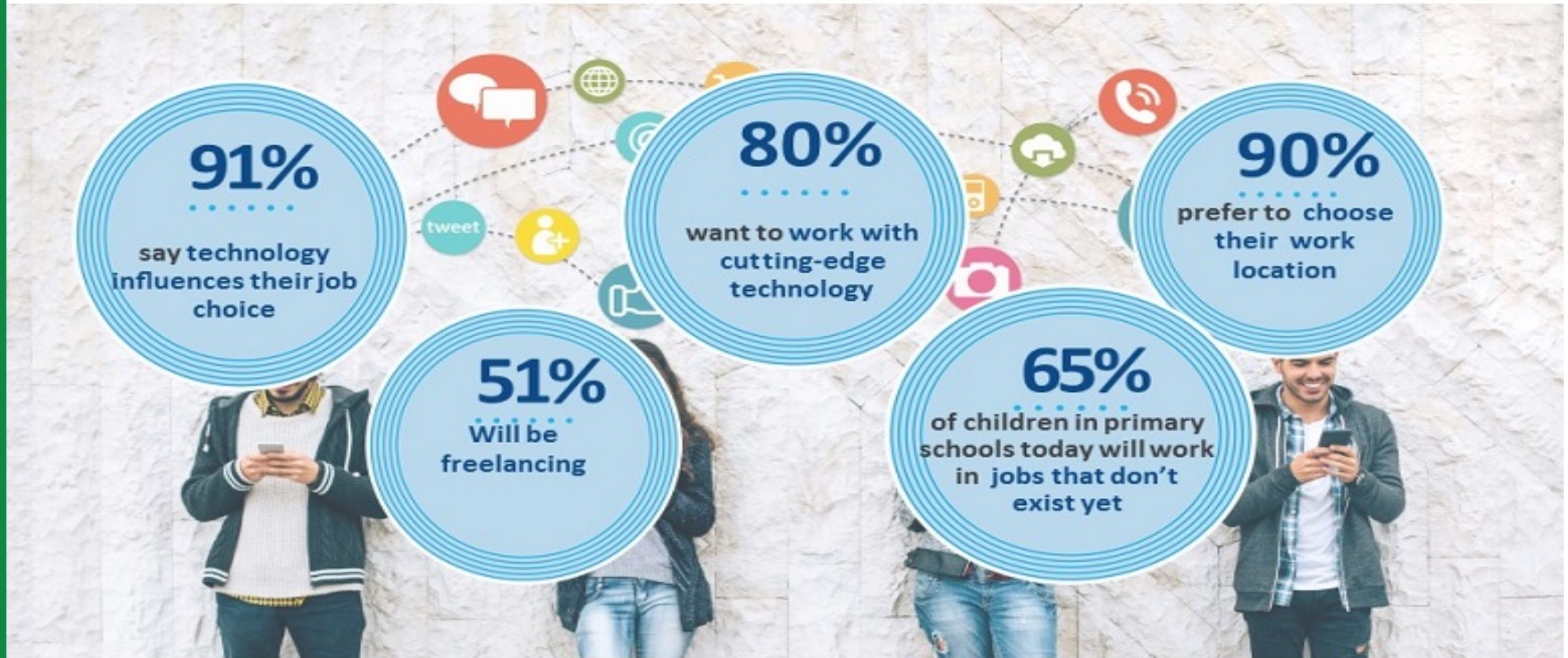
Key Questions:

- Are you really SATISFIED with your current job role?
- How will DIGITALIZATION and TECHNOLOGY affect your accounting role?
- What new OPPORTUNITIES and THREATS will these systems create in accountancy profession?
- Is the Accountancy profession and professionals ready to CHANGE?

These questions are being asked and discussed in the accounting industry by stakeholders.

The Future of Work

The Workforce of Tomorrow



Source: Frost & Sullivan, World Economic Forum, Dell Technologies

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The Future of Accountancy Profession

Two Different Futures – Both Rest on Technology

- **Increasing use of Digital Technology** – Professionals will use increasingly sophisticated technologies to enhance their traditional ways of working. Already happening today across the globe.
- **A Radical Shift (Total Takeover)** – Here, technology doesn't simply streamline and optimise that traditional approach, it actively displaces the work of traditional accounting professionals.

EMERGENCE OF NEW TECHNOLOGIES

Artificial Intelligence
and Robotics

Internet of Things &
Data Analytics

Blockchain

Cloud Technology

Digital Transformation inspired by technological advancement is disrupting nearly every industry, and Accounting is no exception. The pace of technological change today is unprecedented.

EMERGING TECHNOLOGIES



ADVANCEMENT

ADOPTION

ADAPTATION

SOME INTERESTING STATISTICS

By 2020, labour intensive tasks like tax preparation, audits and banking will be fully automated in most parts of the world - *Forbes*

By 2030, Intelligent agents and Robots could replace as much as 30% of the world's current human labour causing 375 million people to switch job categories - *McKinsey*

The overall adoption of cloud accounting as at 2019 was between 45% and 58% depending on company size – *Accounting Today*

Worldwide spending on Machine Learning and AI is expected to reach \$57.6 billion in 2021

SOME INTERESTING STATISTICS

The Cloud computing market is expected to reach \$411 billion this year (2020) and over 50% of small businesses in US use cloud accounting

By 2027, global big data market revenue is expected to reach \$103 billion while that of Accounting software will hit \$11.8b

Gartner predicts that the business value added from Blockchain technology will exceed \$3.1 trillion by 2030 from almost nothing today

Employment of Accounting professionals is projected to increase by 10% over the next 10yrs – US Bureau of Labour Statistics

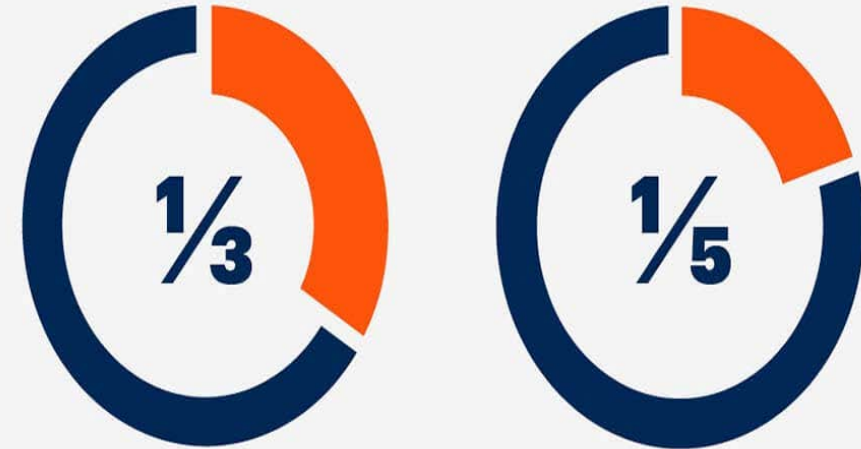
SOME INTERESTING STATISTICS

Percentage of activities that are highly automatable



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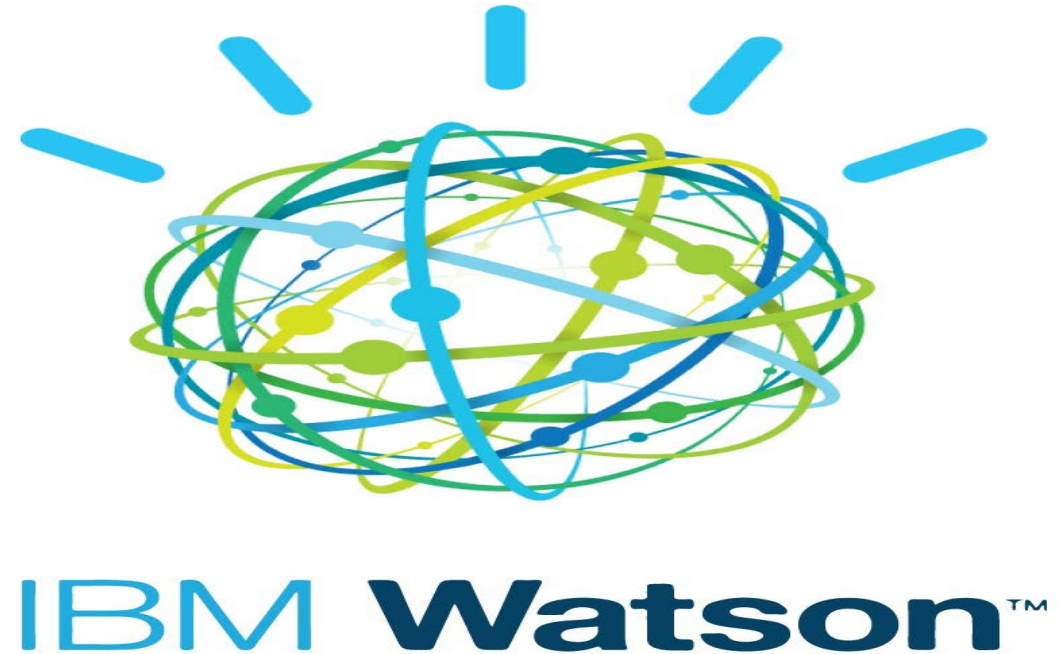
Robotic process automation technology usually costs **one-third** the amount of an offshore employee and **one-fifth** of an onshore employee.

Source: Gartner
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EMERGENCE OF TECHNOLOGY

A recent report by Sage revealed that the average small business, including smaller consultancy firms, spends 120 days per year on admin tasks – time which would otherwise be spent growing their client base and creating new opportunities.



KPMG has partnered with IBM's Watson platform - which is capable of reading 800 million pages per second

EMERGENCE OF ARTIFICIAL INTELLIGENCE



According to Kai-Fu Lee, a pioneer in AI
AI is going to change the world more than anything in the history of mankind. He predicted that artificial intelligence will automate and potentially eliminate 40 percent of jobs within 15 years.

In fact, experts anticipate that as many as 800 million jobs could be replaced with AI technology by the year 2030.

ACCOUNTING TASKS MACHINES CAN DO

- Data Entry
- Bank Reconciliation
- Audits/Verification
- Monthly/Quarterly/Yearly processing
- Accounts Payable/Receivable processing
- Supplier vetting and set up
- Evaluation of bids/proposals
- Expense management
- Responding to queries from other functions (AI Chatbots)



TOP ACCOUNTING JOBS UNDER THREAT

- Compilation/
Bookkeeping

“I will happily pay for my daughter’s university education, provided she won’t pursue a degree in Accounting” ----Why?



TOP ACCOUNTING JOBS UNDER THREAT

- Financial Analysts

Human financial analysts can no longer compete with Artificially Intelligent financial analysis software that can read and recognize trends in historic data to predict future market moves.



TOP ACCOUNTING JOBS UNDER THREAT

- Inventory Managers & Stockists

The supermarket employee restocking the cans in the aisle may soon no longer be a person. A robot called the Tally is designed to audit shelves for out-of-stock items, misplaced items, and pricing errors



TOP ACCOUNTING JOBS UNDER THREAT

- Bank Tellers
and
Representative

First it was the ATM that ate into human banking jobs, then the smartphone app. It's likely that many of the remaining human-based teller and representative banking jobs will be finished off by AI very soon.

AI won't just be able to conduct cash transactions, it will be able to open accounts and process loans at a fraction of the cost and time it takes for human employees.

TOP ACCOUNTING JOBS UNDER THREAT

- Tax Consulting

If your role as a tax consultant is limited to tax computations and filing of tax returns, then you are at the risk of becoming redundant in future. Even resolution of tax disputes is being automated through AI.

The aspect of Tax consulting job that seems a bit safe for now is Tax Planning & Advisory Service.

APPLICATION OF TECHNOLOGY IN ACCOUNTING

Cloud Accounting Opportunities



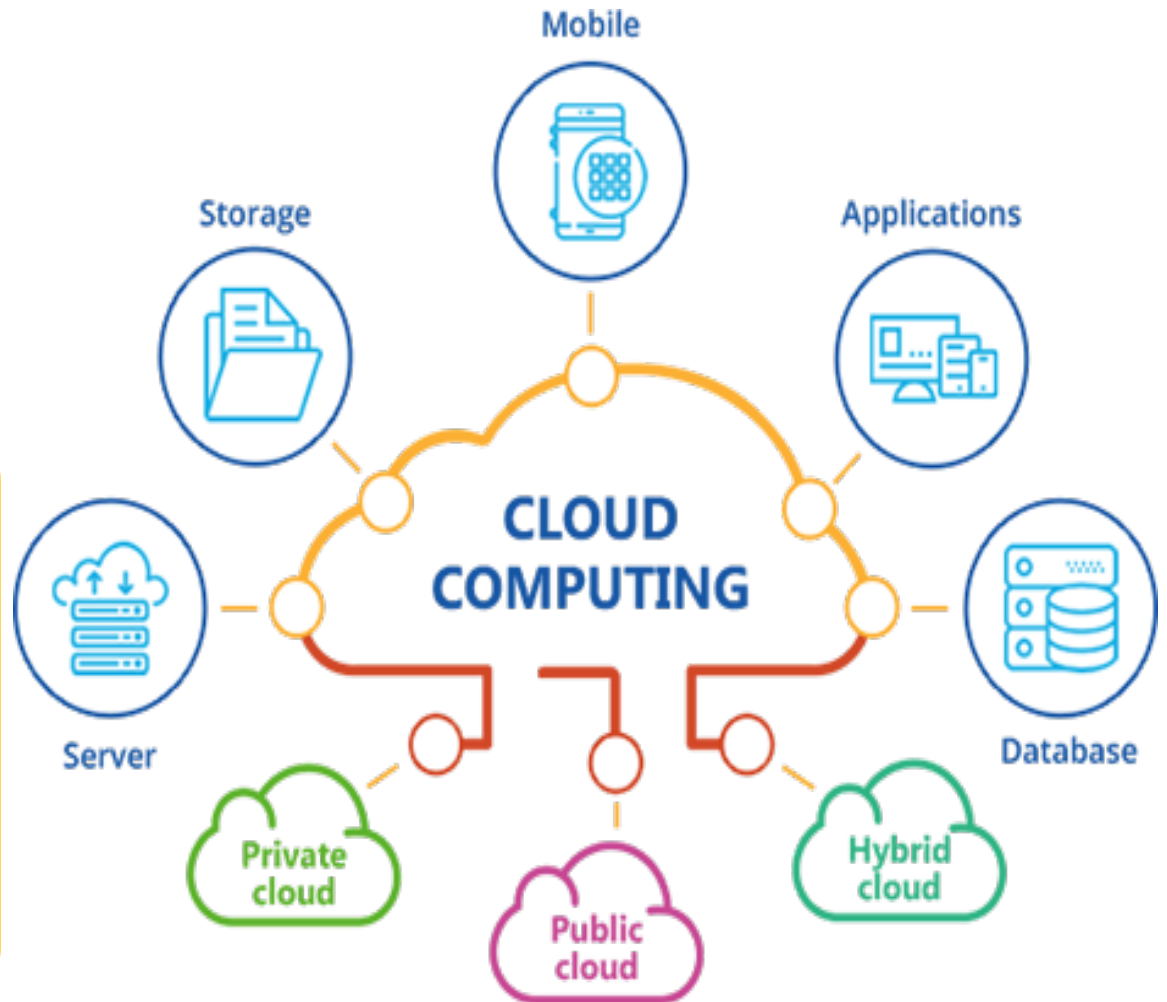
The cloud offers the Accounting industry a new way of doing business. Some of the advantages:

- Real-time Services to clients - financial reporting and others.
- Increased collaboration between Accountants and their clients.
- Files can be viewed, shared, edited from anywhere and at anytime.

APPLICATION OF TECHNOLOGY IN ACCOUNTING

Cloud Accounting

- Storage & retrieval of transaction data
- Access and analyse data anytime, anywhere and on any device
- Present results in dashboards
- Collaboration and exchange of information



APPLICATION OF TECHNOLOGY IN ACCOUNTING

Big Data & Analytics



This offers Accountants/Auditors some advantages:

- Testing Transactions at Source – No audit of print-outs
- Testing complete set of data (100% check)
- Predictive Analytics (Assist in Risk Assessment)
- Evaluation of programmed controls
- Avoidance of Analysis Paralysis due to human limitations

APPLICATION OF TECHNOLOGY IN ACCOUNTING

Data Analytics



- The use of statistics to gain better business insight
- Identification and prediction of risk factors and anomalies
- Data and process mapping
- Improved business advisory



APPLICATION OF TECHNOLOGY IN ACCOUNTING

Artificial Intelligence & Robotics



- Zero Data entry
- Responding to Queries
- The machine can be made to learn from Auditor's conclusion and uses it on future scenarios.
- Identify patterns in both structured and unstructured transactions data – which ones are “normal and abnormal”.

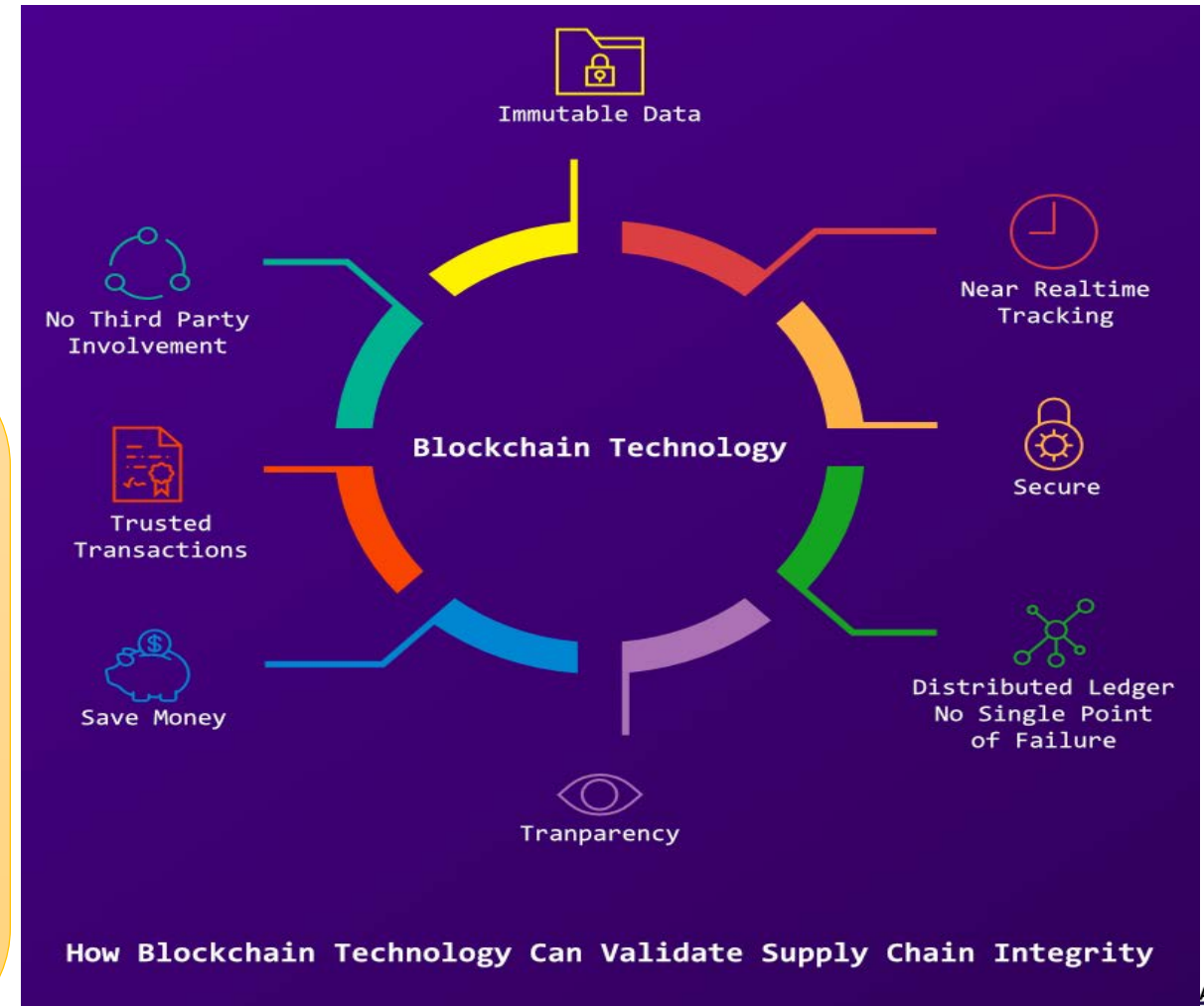
Artificial
Intelligence



APPLICATION OF TECHNOLOGY IN ACCOUNTING

Blockchain

- Decentralization and distribution of shared database
- All parties to a transaction are involved in recording and validation
- No reconciliation required
- No audit required



APPLICATION OF TECHNOLOGY IN ACCOUNTING

Blockchain Opportunities



Blockchain technology is like the internet as it has a built-in robustness. By storing blocks of information that are identical across its network, the blockchain:

- Cannot be controlled by any single entity – Decentralized to all Nodes
- Has no single point of failure
- Immutable ledger – Enhanced Security
- Enhanced transparency of transactions
- Is faster and cost effective

APPLICATION OF TECHNOLOGY IN ACCOUNTING

Why These Technologies will continue to be in use



- No employee holidays
- No sick leave
- No disciplinary issues
- No wage pressure – no industrial strike
- Easy to replace
- No Redundancy cost
- Low cost in the long term
- Consistent output



OPPORTUNITIES FOR ACCOUNTANTS

- Finance Professionals to focus on higher level jobs - Service more clients
- Offer personalized services to clients
- Adapt to change & offer new services
- Save Time – Become more efficient & focus on relevant data
- Save Cost (Long term)
- Mobility of service – Geography is now unimportant
- Enhanced visibility on client's transactions
- New Skills for Accountants – Beyond number crunching

OPPORTUNITIES FOR ACCOUNTANTS

- You can work collaboratively with anyone from any part of the work
- Emerging technologies will increase audit quality, as it begins to allow auditors to ask a lot more questions. It will improve efficiency in audit work by providing more insight.

ETHICAL CHALLENGES OF TECHNOLOGY ADOPTION

- Possible Job Losses
- Wealth Inequality
- Artificial stupidity.
How can we guard against mistakes?



NEW TITLE FOR ACCOUNTANTS

DATA SCIENTIST

BUSINESS ADVISOR

STRATEGIC
BUSINESS PARTNER

DATA INNOVATION
ACCOUNTANT

FINANCE
TECHNOLOGIST

CHANGING SKILLS SET

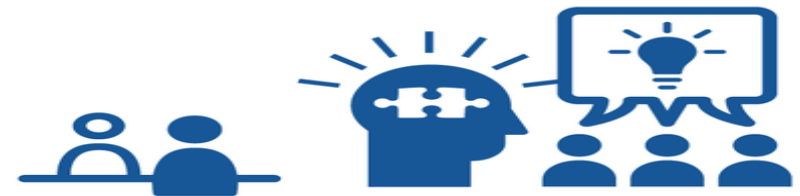
Top 10 skills

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



KEY SKILLS FOR ACCOUNTING TECHNICIANS

Employers look for evidence of:

- Strong mathematical and problem-solving skills
- Excellent commercial and business sense
- Good IT skills – beyond spreadsheets
- Strong Inter-personal and communication skills
- Team playing skills

Are you going into practice, take advantage of:

- Cloud Technology
- Social media
- Video Conferencing and Collaborative Platforms
- Big Data & Analytics
- CRM Systems

TO BE RELEVANT

- Be The Value Intermediary



- Don't let "IT" be between YOU and the Business Logic
 - Be the master of Technology

CONCLUDING THOUGHTS

You may have the AAT certificate after this induction programme but if you're ambitious looking to progress your careers in an ever-evolving role, your focus needs to be more on a broader range of skills, trust and emotional intelligence – if you are serious about bagging the job of your dreams.

Accounting is not going away soon. Companies will continue to prepare financial statements for investors, deal with tighter regulations, borrow money and need someone to balance their books

CONCLUDING THOUGHTS

Accounting departments overall will be trimmed down and the employees left will be able to focus on more strategic initiatives, like process improvement, cost control, and capital optimisation

Carry out a SWOT Analysis of Yourself. Upgrade yourself as a future accountant with knowledge in digital technology, globalization and evolving regulations in readiness for Accounting Intelligence era

Let's go into Action!!!!

Thank
you!!

TIME FOR QUESTIONS

My Contact

Chimenka Ezeribe FCCA, FCA, FCTI, CISA, CFE

08034087710

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