



ICAN INFORMATION TECHNOLOGY CONFERENCE

THE EXPANDING ROLE OF CHARTERED ACCOUNTANTS IN DATA ANALYTICS AND ARTIFICIAL INTELLIGENCE (AI)

APRIL 2024

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THEME



**DIGITAL ECONOMY : NAVIGATING THE
NEW FRONTIER**

SYNOPSIS



It is interesting that we are no longer talking about access to internet but access to AI for us to achieve sustainable digital economies. While AI and Data Analytics Solutions automate routine tasks in many industries, they also create new opportunities, demanding a shift in skill sets.

Understanding this dynamic landscape is essential for individuals and industries navigating the evolving relationship between humans and machines.

This paper is meant to be an eye-opening one for Finance Professionals towards their expanding roles caused by AI and Data Analytics revolution.

BIGGEST CHALLENGES FACING HUMANITY TODAY

1. Diseases/Healthcare Access
2. Climate Change
3. Socio-economic Inequality
4. Food & Energy Insecurity

One technology seems to have the potential to address these challenges - AI

Artificial Intelligence **ICAN**



A survey of over 2,700 AI researchers in January 2024 suggested AI could well be '**better and cheaper**' than humans in **every** profession by 2116 (92yrs from now).

AI has gradually entwined itself into our lives.

Imagine a technology that has become an invisible ally, predicting your preferences, fine-tuning your digital space, and adapting with unparalleled precision. It's not just about convenience; it's about enhancing your daily experience through a silent yet powerful technological companion.

INTERESTING QUOTE



“For hardworking people who seek growth in their careers, the rise of AI represents an opportunity rather than a threat. Embracing AI technology and acquiring the necessary skills to work alongside it can open doors to new and challenging roles”.

Dawood Patel, CEO of Helm

3 KEY QUESTIONS

- Are you an Accountant or a Finance Professional?
- Do you consider yourself a modern Accountant?
 - What is your current job role?
 - Is there a future in that role?
- Have you started the transition journey?

IS ACCOUNTING STILL RELEVANT?

7 Reasons Why Accounting Is Important

1. Understanding Your Business



2. Keeps Business Organised



3. Year-End Reports



4. Decision Making



5. Investments and Loans



6. Business Performance



7. Legally Required



WHAT DO ACCOUNTANTS WANT?

**SAVE
TIME**

ZERO ERROR

**WORK
REMOTELY
& ON THE
GO**

**SAVE
MONEY**

**ADD MORE
VALUE TO &
RETAIN
CLIENTS**

**REAL TIME
REPORTING**

**PURSUE
PERSONAL
GOALS**

THE “SINS” OF ACCOUNTANTS

1. Too Conservative (Prudency Concept?)
2. Focused on Financial Activities only
3. Insistence on Manual processes and hard copies
4. Slow in responding to enquiries
5. Poor definition of Assets and Liabilities
6. Too focused on Compliance

AI IMPACTS



Its ability to analyse vast amount of data, identify patterns and make predictions has enabled unbelievable breakthroughs.

In Finance, AI
and Data
Analytics are
detecting fraud
and predicting
Market trends.

AI-Powered Robots
are taking over
repetitive and
dangerous jobs –
freeing up humans
to focus on more
creative and
complex tasks

SOME INTERESTING STATISTICS

The AI industry could be worth more than \$15.7 trillion by 2030. (PwC)

AI could inject about \$1.2 trillion into Africa's Economy by 2030. (Microsoft). Current GDP of Africa is about \$3.1 trillion

By 2030, China will be the biggest AI market, accounting for 26% of the global AI market share. (PwC)

Global spending on cognitive and AI systems will reach more than \$204 billion in 2025 (IDC)

AI IN THE NEWS



9mobile-Stay Safe 4G MTN Nigeria 100% 10:00

Amazon spend...
From cnbc.com - deliv

WATCH LIVE

TECH

Amazon spends \$2.75 billion on AI startup Anthropic in its largest venture investment yet

PUBLISHED WED, MAR 27 2024 12:50 PM EDT
UPDATED THU, MAR 28 2024 2:55 AM EDT

Kate Rooney
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WATCH LIVE

KEY POINTS

- Amazon is spending billions more to back an artificial intelligence startup as it looks for an edge in the new technology arms race.
- The tech and cloud giant said Wednesday it would spend another \$2.75 billion backing Anthropic, adding to its initial \$1.25 billion check.
- It's the latest in a spending blitz by cloud providers to stay ahead in what's viewed as a new technology revolution.

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Baidu's Ernie AI...
From cnbc.com - deliv

WATCH LIVE

TECH

Baidu's Ernie AI chatbot to power Samsung's new Galaxy S24 smartphones

PUBLISHED FRI, JAN 26 2024 4:17 AM EST
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WATCH LIVE

KEY POINTS

- Chinese tech giant Baidu will partner Samsung to integrate its Ernie chatbot capabilities into Galaxy S24 smartphones.
- The collaboration will equip Samsung's latest Galaxy S24 smartphone series with advanced features such as intelligent summarization, advanced typesetting, and real-time call translation.
- Samsung on Jan. 17 revealed its latest Galaxy S24 lineup with AI-powered features as it attempts to overtake the likes of Apple's newest iPhones with the technology.

AI IN THE NEWS









9mobile-Stay Safe MTN Nigeria 96% 12:43


Vanguard Search

HOME NEWS VANGUARD AWARDS POLITI

NEWS April 19, 2024

Nigeria's AI Strategy receives \$3.5m seed funding



Minister of Communication, Innovation and Digital Economy, Bosun Tijani

By Emmanuel Elebeke, Abuja

The National Artificial Intelligence Strategy has received \$3.5 million seed funding from interested partners

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FG plans national AI... punchng.com **Post**

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FG plans national AI framework with 120 researchers, startups

4th April 2024



Minister of Communications, Innovation and Digital Economy, Bosun Tijani

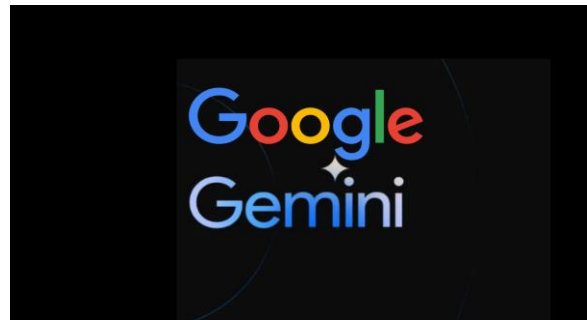
By Olaniyi Apanpa

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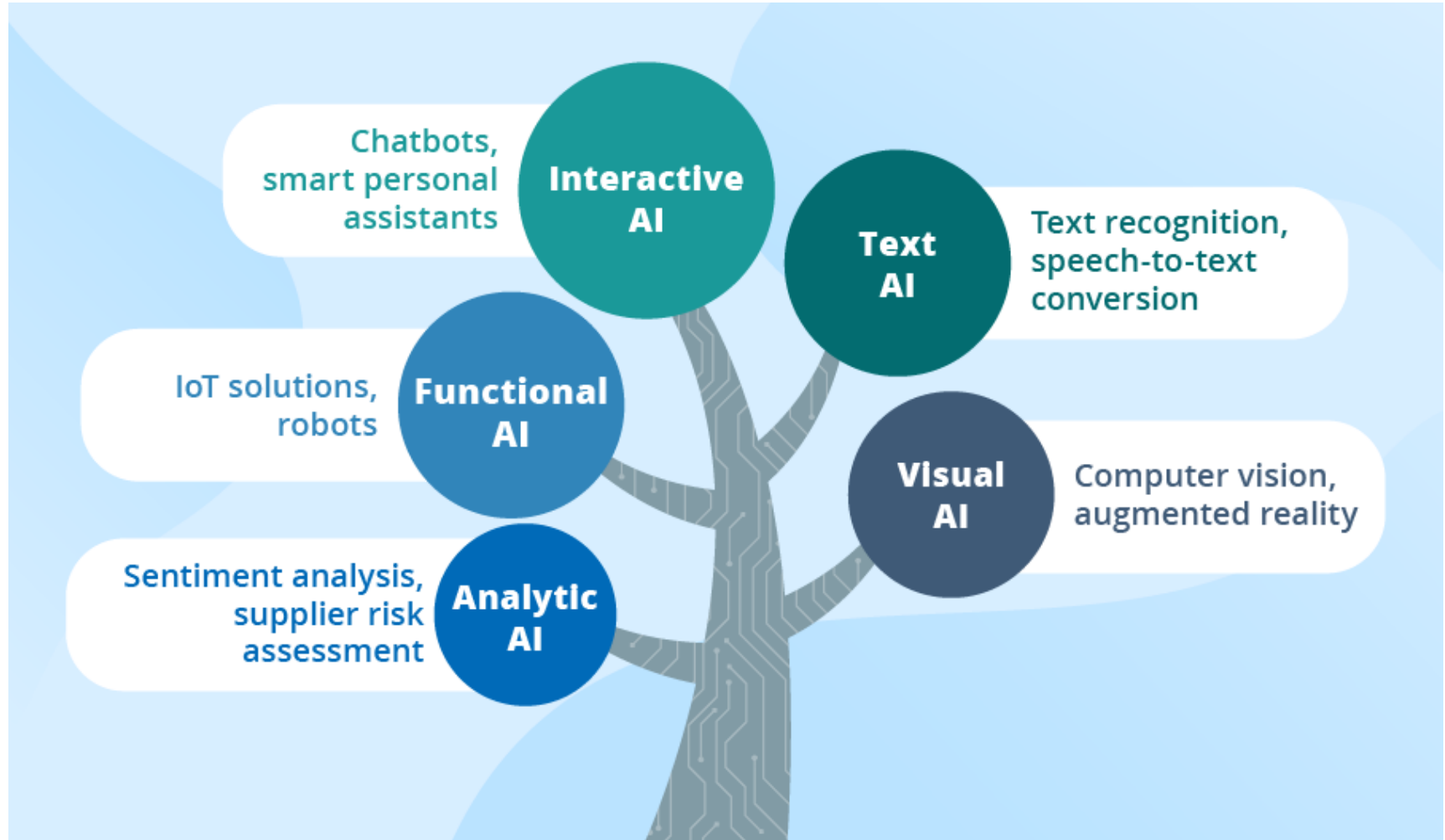


GENERATIVE AI

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TYPES OF AI



What Soft Skills Do You Possess?

Future of Jobs: The top soft skills to develop by 2027

1 Creative thinking

2 Analytical thinking

3 Digital literacy

4 Curiosity and lifelong learning

5 Resilience, flexibility and agility

6 Systemic thinking

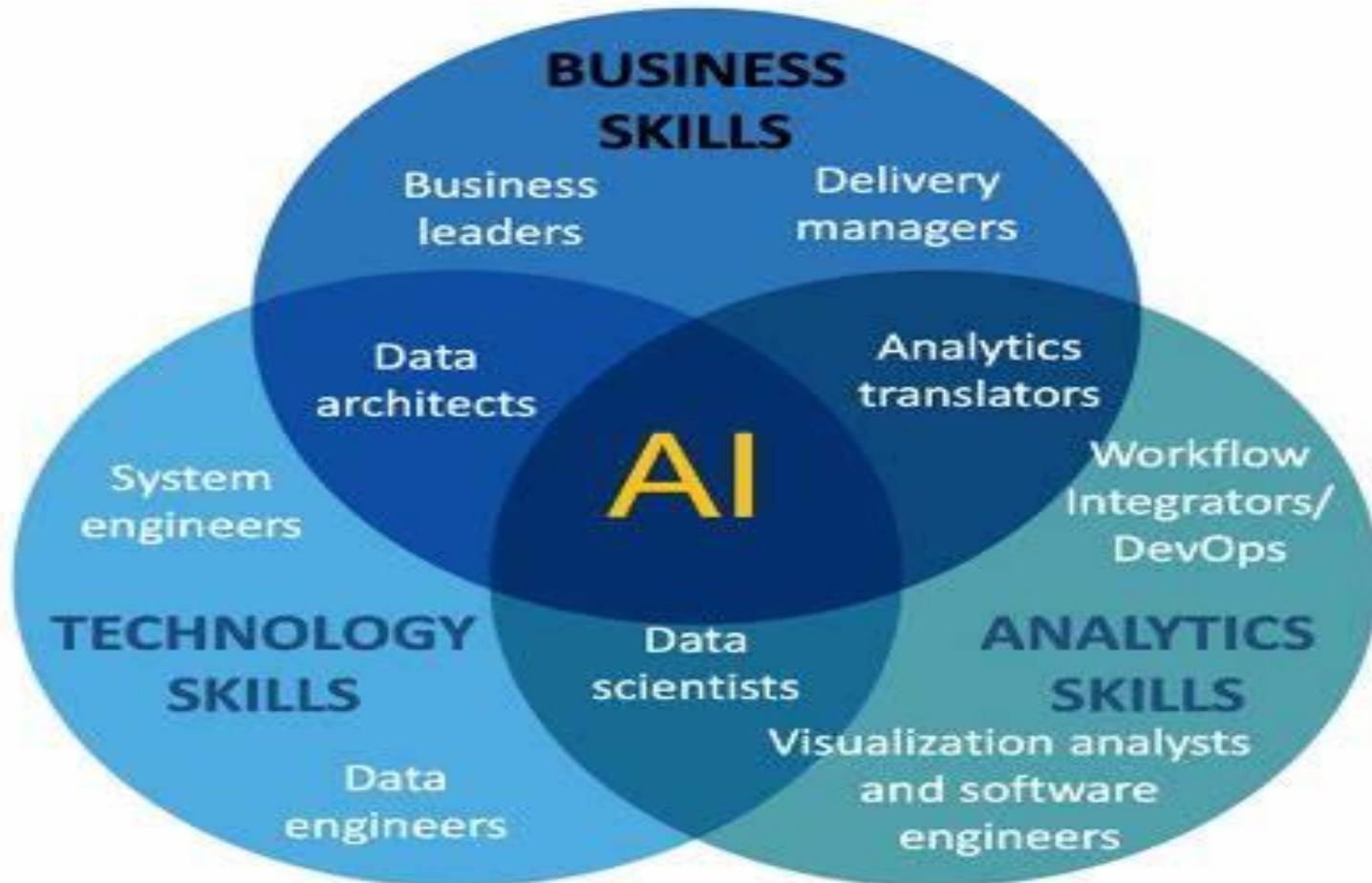
7 Artificial intelligence and big data

8 Motivation and self-awareness

9 Talent management

10 Service orientation and customer service

AI SKILLS SET



WISDOM Vs INTELLIGENCE

While AI and Data Analytics solutions process vast data at lightning speed, human intuition, creativity, and emotional intelligence remain unparalleled for now. Understanding this dynamic interaction unveils the potential for collaboration between humans and machines, where both can augment each other's strengths.

OLD EXPECTATIONS FROM ACCOUNTANTS



- ❑ Data Entry and Bookkeeping
- ❑ Account Reconciliation
- ❑ Payroll Administration
- ❑ Ensure periodic reports are prepared and presented timely
- ❑ Process Payment Vouchers and Invoices
- ❑ Obtain data from other functions to prepare reports
- ❑ Rely on ICT function for data access and protection
- ❑ Analyze funding options and provide advice
- ❑ Prepare Budgets & Forecast Information
- ❑ Traditional Auditing & Verification
- ❑ Tax Computation and Returns Filing

NEW EXPECTATIONS FROM ACCOUNTANTS



- ❑ Understand Data Governance
- ❑ Data Scientist – Data Visualization technician
- ❑ Cybersecurity Specialist
- ❑ Act as Trusted Advisors who are confident and comfortable sharing perspectives
- ❑ Capable of Connecting the Dots
- ❑ Adept Communicators and Presenters
- ❑ Objective source of Assurance on Risk Management and Internal Controls
- ❑ Possess deep knowledge of the business and industry

ADVERTISEMENT FOR A CFO ROLE



OLD ADVERT

Job Requirements:

- BSc & MSc in Finance, Accounting or related field.
- Minimum of 10yrs experience in senior finance role covering budgeting, forecasting and Financial planning.
- Proven ability to analyse and interpret financial data.
- Strong Understanding of Financial Markets, regulations & Standards.

NEW ADVERT

Job Requirements:

- Strong Analytical and Problem-solving skills.
- Ability to understand and oversee Data and Cybersecurity matters.
- Proven track record of success in Financial Management & Strategy
- Excellent Leadership & Management Skills.
- Excellent Communication and Presentation Skills.

- Data is the lifeblood of Artificial Intelligence
 - No Data! No Algorithms
- No Algorithms! No AI! No Quick Insights and predictions.
- The responsible collection, management, and utilization of data is fundamental to unleashing the full potential of AI.
- This is where the modern Accountants come in.

WHO IS A MODERN ACCOUNTANT?

An accountant who has the ability to use digital devices, networks and platforms needed to carry out his/her job effectively in today's world.

An accountant who possesses either or both the basic and advanced digital skills necessary to bring satisfaction to his/her internal and external clients.

An accountant who is able to speak the language of digital technology and appreciates how it is used to alter and improve businesses.

BASIC DIGITAL SKILLS

Data Entry

Computer Literacy

Social Media

Online searching

Spreadsheet

Word
Processing

Emailing

Chatting

Communicate & Collaborate

ADVANCED DIGITAL SKILLS

Programming

Data Science

Web & App
Development

Digital Business Analysis

Digital marketing &
content creation

Data Visualization

Digital Product
Mgt

Digital Design

Develop, Share & Solve problems

ROBOTIC PROCESS AUTOMATION (RPA) IN FINANCE DEPT

- PO Processing
- Invoice Processing
- Accounts Reconciliation
- Travel & Expenses
- Tax Calculations
- Budget Planning & Forecasting
- Financial Reporting
- Payroll Processing
- RPA in KYC



Robotic Process Automation (RPA) refers to bots (software robots) executing repetitive business tasks across applications and system.

AI IN ACTION

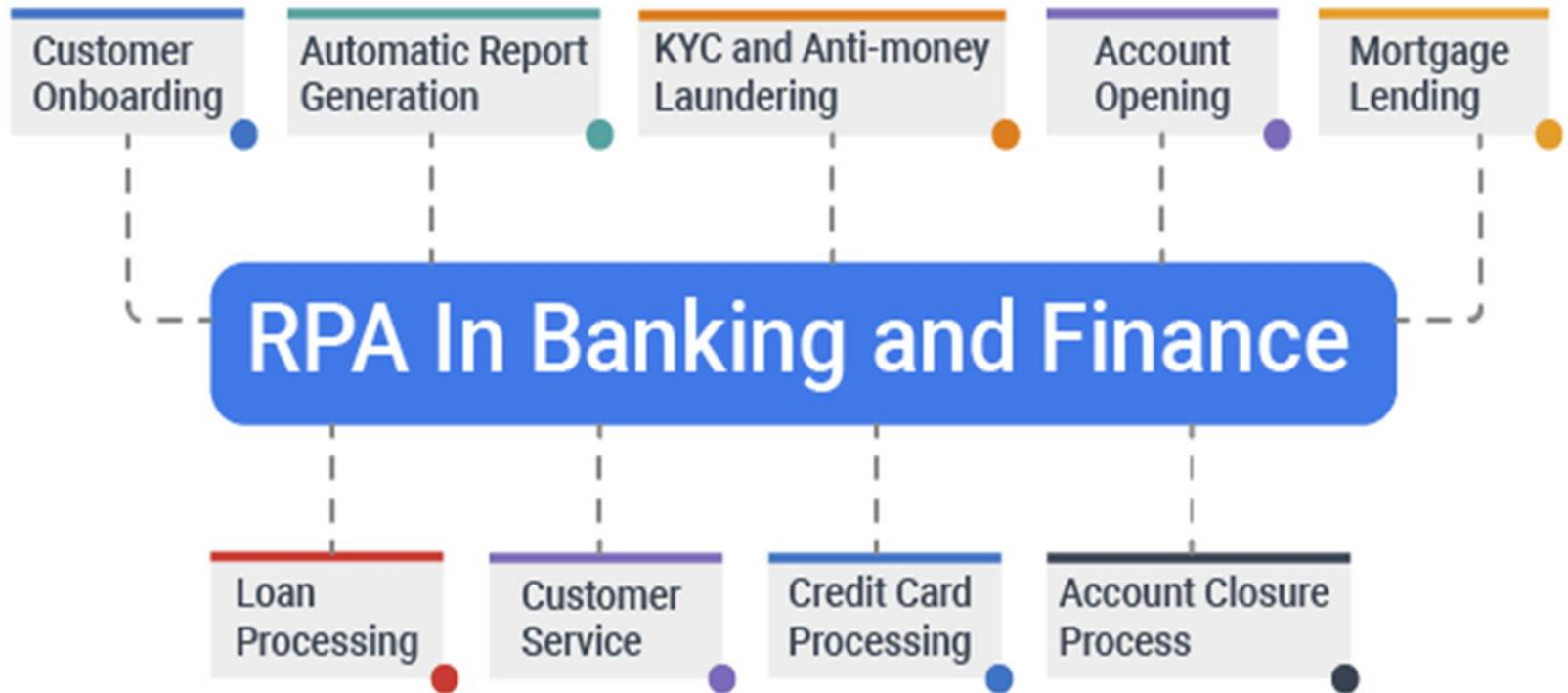


What is the role of an Accountant here?

AI (RPA) IN BANKING & FINANCE



XENONSTACK



NEW TITLE FOR ACCOUNTANTS



CHIEF INNOVATION OFFICER

DATA SCIENTIST

BUSINESS ADVISOR

STRATEGIC
BUSINESS PARTNER

DATA INNOVATION
ACCOUNTANT

FINANCE
TECHNOLOGIST

CHIEF INFORMATION OFFICER

NEW TITLE FOR ACCOUNTANTS

BLOCKCHAIN ACCOUNTANT

**CYBERSECURITY
SPECIALIST**

**FINTECH
ACCOUNTANT**

**PROMPT
ENGINEERS**

RPA ACCOUNTANT

**AI/ML
ALGORITHM
ANALYST**

FINANCIAL SYSTEM DESIGNER

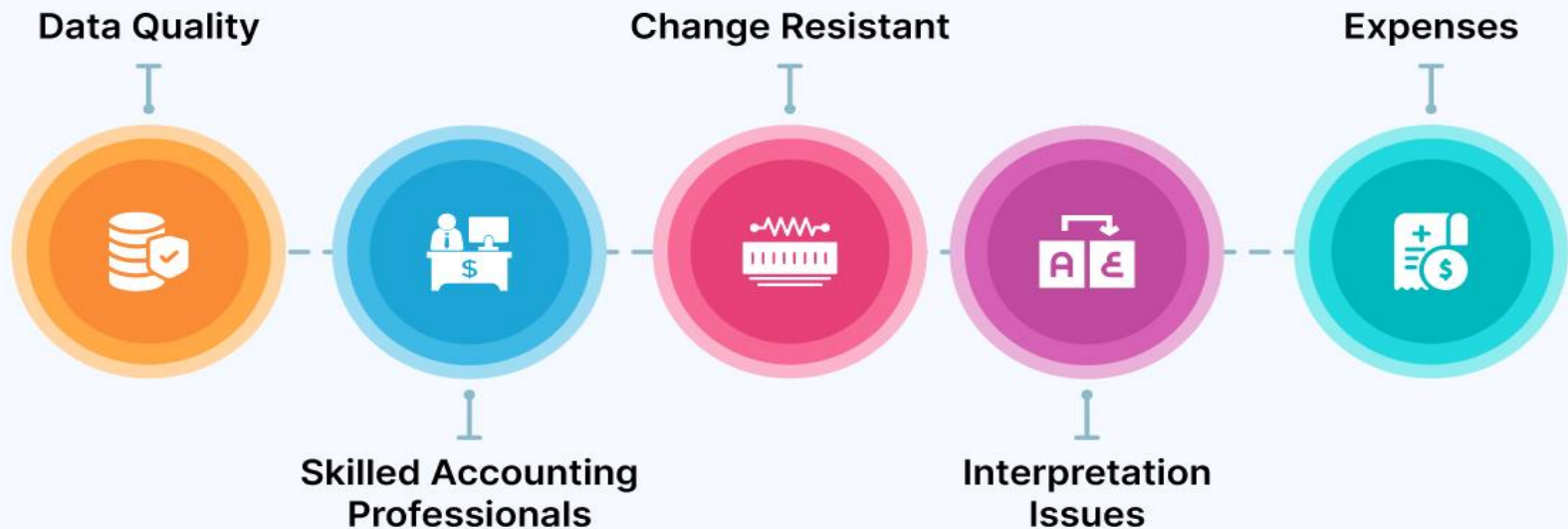
BENEFITS OF AI IN ACCOUNTING

Benefits of Artificial Intelligence in Accounting

- 01 Streamline Data Entry & Analysis
- 02 Reduce Fraud
- 03 Procurement
- 04 AI Chatbots
- 05 Accurate Decision-Making
- 06 Improve Compliance
- 07 Effective Financial Planning

CHALLENGES OF AI IN ACCOUNTING

Challenges of Adopting AI in Accounting



Each of these challenges represent new opportunities for Accountants

AI REVOLUTION – NO GOING BACK

AI is taking over White-Collar jobs like Robots took Blue-Collar ones

- ❑ Consistent output
- ❑ 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



LET'S OPEN OUR EYES

- Think about using AI to create autonomous weapons in warfare just like vehicles or deepfake (synthetic) images and videos.
- Who is responsible for eliminating or reducing bias in AI and ML data in your organization?
- Who is responsible for recommending safeguards to ensure that the use of AI is responsible, ethical and serves the best interest of the organization?
- Who will be responsible to harness the emotion and empathy required or do we want to become a robotic society?
- Who are going to be Prompt Engineers?

WHY DO YOU NEED AI SKILLS

4 reasons accountants need **AI skills**

1

Accounting is becoming a STEM profession

Congress has introduced a bill to recognize accounting as a STEM field to build a highly skilled and qualified pipeline of new age accountants.

2

Accounting applications are using AI

Accountants are working with software to integrate AI and ML capabilities for automating repetitive tasks and interpreting data.

3

Accountants need to take on strategic roles

With the automation of some parts of accounting jobs, the role of accountants is switching from preparing reports to interpreting them.

4

Specialists required to find valuable AI use cases

Successful AI implementation needs core accounting professionals who also understand the complexities of applying AI in business.

RESPONSIBLE AI IS IMPORTANT



Principles of Responsible AI

1. Comprehensive

Clearly defined testing and governance criteria to prevent hacking and misuse

2. Explainable

Clearly defined purpose, rationale, and decision-making process that is understood by the average person

3. Ethical

Processes that eliminate bias in AI and ML systems and solutions and prevent occurrence of any kind of harm

4. Efficient

A requirement that ensures AI systems, products, and solutions run continually, respond quickly, are viable, and sustainable.

REMEMBER

You can't win AI when it comes to these
'wars':

1. Accuracy
2. Efficiency and
3. Productivity.

But there exists a realm of human touch that no machine can replicate yet – an understanding of emotions, personal touches, and the delicate nuances of humanity itself.

CONCLUDING THOUGHTS

As AI continues to advance, it will create new job opportunities that require uniquely human skills. The development and maintenance of AI systems will require skilled professionals with expertise in data science, Machine Learning, and computer programming.

Additionally, AI's integration across various industries will demand individuals who can understand, interpret, and leverage AI-driven insights to make informed decisions and drive innovation.

APPLY WHAT YOU HAVE LEARNT

□ IN THE NEXT ONE WEEK

- Identify the aspect of AI and/or Data Analytics technology that interest you.
- Find out if your organization is using any AI tool already and how your current role may be impacted upon.
- Identify where financial and non-financial data of your organization are kept.
- Use generative AI tools to help develop ideas and content, make more informed decisions, and speed up daily work tasks,

□ WITHIN 3 – 6 MONTHS

- Learn at least one AI skill (free courses are available online)
- Recommend good ones to your organizations and friends.

□ WITHIN 12 MONTHS

- Review results and seek for further areas of use.
- Continuous learning and monitoring the digital landscape.



THANK YOU

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