**Technical skills for 2022**

Dr Imran Batada

Monday, Jan 03, 2022

Today’s world is significantly changing from time to time due to the advancement of technologies. The market has reflected the kind of community we are living in. We are now entering the robotic world that has impacted the human workforce. This means most humans will work remotely while robots perform their tasks.

The skills gap for demanding technical skills in companies is growing and has led to the emergence of technologist specialties. The Covid-19 pandemic has further increased the skills gap and accelerated digitalisation in all sectors. This article discusses the top 10 technical skills that people need to learn to remain relevant in technical job markets in 2022.

The first technical skill is based on data science. Data is the new oil in this technology era. Do people know why Facebook, Amazon and Google emerged as the most powerful companies in the world? It is due to the amount of data they contain and their ability to analyse and interpret data. There is a high demand for data science jobs in all sectors such as finance, health, e-commerce, and logistics.

The other important skill is artificial intelligence (AI) and machine learning (ML). AI is ranked as the fastest-growing profession according to LinkedIn. When the amount of data increases, AI applications become deeper and broader. AI has become a great approach to problem-solving. Large companies such as Amazon use AI to forecast their demand. For instance, machine learning uses algorithms that can help a company; estimate the number of products needed, customer costs and reduce storage costs. Applications for AI include self-driving cars, surgical robots, virtual reality, augmented reality, facial recognition software, and many more. Most industries are adopting to use AI/ML technologies in the upcoming phase of digital transformation.

UI/UX design is another skill that is in high demand due to an increase of new apps and websites that demand user experience designers. Most companies nowadays compete for customers’ attention and for that they come up with a great design. The designs tend to capture customers’ attention to spend more time with them and use their websites regularly. UX designers design digital services and products that make their target users’ lives easier and more convenient when using their products or services.

Blockchain is a technology that is growing and covers cryptocurrencies such as bitcoins and many others. It has a decentralised system where data is stored, and it serves as a database. One of the main advantages of this technology is that data is well secured and immutable. Most companies in the finance, healthcare, and government sectors use this blockchain technology. This is because of its high degree of privacy with sensitive data. Companies that have decided to use blockchain technology need to have employees who have a deep knowledge of cryptography, data structure, and blockchain.

If people want leverage in the technical world, they might need to equip themselves with the skills of the Internet of Things (IoT). This comprises interrelated computing devices, digital machines, animals or people with certain unique identifiers. This allows an easy transfer of data over a network without any human intervention. In the IoT, there are web-enabled smart devices that use processors, sensors and communication hardware. They share information to perform the right functions. It is found in connected appliances, farming equipment, health monitors, factory equipment, wireless trackers, wireless internet, logistic tracking, and many more appliances. Many people are adapting to the IoT to make it easier for devices to communicate.

Another important field is cloud computing that enables most companies to upload data on the cloud and secure it. There is a high demand for workers such as software engineers and cloud architects who have vast experience in cloud computing and Amazon Web Services (AWS). If people want to fit in this field, they should try to learn the following: data migration, web services, and APIs, IT and data security. It also includes business intelligence and analytics. Most companies are looking for ways to be ahead of their competitors and achieve their goals using their data. Companies will hire tech professionals who can turn their data into knowledge to understand the trends of their sector.

Cybersecurity; one of the biggest threats companies face in this digital world is cyberattacks. Today, companies hire experts who can protect their company data and network from being hacked by hackers. IT security specialists are in high demand to provide the best security solutions to the company and also train their staff.

Digital marketing is another technical skill that people can acquire in 2022. There are many opportunities in the digital space, and if people explore this well, they will find a gap they can easily fill. In digital marketing, there is social media marketing, social media advertising, content marketing, search engine optimisation and many other fields. The point is that people are marketing products and services online. Today, almost everyone owns a phone or laptop, so more people opt to use the phone to make purchases and order without having to physically go to a shop.

If people want to thrive in the technical world, they need to learn more about digital marketing. They can then use visually appealing images, graphics, websites, infographics and other media in their digital marketing strategies. That’s why we commonly observe large companies utilising their social media pages well to ensure they reach a large audience.

Another great skill people can acquire is video editing. When people know how to edit videos, they can even use them for their digital marketing strategies and in other ventures. Additionally, people need to know how to create eCommerce sites. A majority of people opt to buy and sell online. Many business owners would be in search of skilled people who know how to create an online store for them. Hence, general website design and development skills will help people in this regard. All these skills are vital and go hand in hand.

Knowledge of Amazon use can help people better run their eCommerce businesses. Ideally, one can also become a virtual assistant and help manage online stores. Take the example of Amazon and eBay: people purchase items from the two online stores from anywhere in the world. This makes it easier for customers to access items that they can’t get in their region. This allows an easy flow of items globally.

If people picture themselves working in any specialised field mentioned above in the future, they should equip themselves with relevant skills and be an expert in the field they have chosen, and their skills will be in high demand in the job market. These skills will continue growing as time goes by. Universities and colleges should also provide practical technical training to their students to ensure they are moving with the current trends and technologies. All these skills are important now and even more in the upcoming years.

The writer is CTO & director, Centre of Information

Technology at IoBM. He tweets @imranbatada and can be reached at: Imran.batada@gmail.com

Web: https://imranbatada.com