



**VIDYABHARTI TRUST COLLEGE OF
BUSINESS, COMPUTER-SCIENCE AND RESEARCH**
Department of Computer Application's Newsletter

VOLUME : 1

DECEMBER-2021

ISSUE : 6

digital+
Get to know more about **IT**

Emerging Trends in Technology

To help meet the demands of a technology-enabled consumer base, solution providers must embrace digital transformation to realize their full potential. But, where to begin? These are the top 15 emerging technologies that businesses need to keep an eye on in 2021.

AI

Artificial intelligence is poised as a tool of choice for businesses and solution providers. As is often seen with social media, AI, combined with machine learning, deep learning and neural networks, can be a powerful combination. Businesses can use AI to achieve cost-saving benefits, streamline workflows, improve the customer experience, enable more efficient communications through chatbots, increase customer satisfaction, and provide insight into purchasing behavior.

Additionally, machine learning can analyze large datasets and provide scaled insight. We are currently just scratching the surface of how machine learning and AI can work together to enable businesses. Current applications provide huge growth potential for solution providers who can fully understand the capabilities and functionality of AI to tailor solutions to meet business demands.

Blockchain

Past discussions of blockchain often hinged on cryptocurrency, but the real power lies in the immutability and transparency of a blockchain. Blockchains use distributed ledger technology resulting in a fixed and highly visible record of activity with high potential for business applications.

The blockchain is an information system that holds promise for supply chain management, enabling transparency into the journey of materials from origin to product. Blockchain technology will also allow for better record management, providing a snapshot of any record from its origination. This could be used to verify orders, purchases, returns, receipt of product—you name it.

Smart contracts are another blockchain application that ensures delivery of conditions. Smart contracts release data when both participants have met the criteria of an agreement. They offer endless capabilities for ensuring agreements are carried out and therefore can help position you as a trusted solution provider.

Computer Vision

This field allows computers to derive meaning from visual input, and then take action or make decisions based on that data. Computer vision requires a huge amount of data to train algorithms to understand subtle differences and recognize different visual inputs.

There is significant business potential for computer vision, which could inspect products and processes as part of quality control to analyze for nearly imperceptible differences and imperfections. Business applications include using Google Translate to translate signage to a native language and making sense of traffic signs in self-driving cars.

Customer Data Platforms

If data is the new gold, then customer data platforms are the new banks. Businesses benefit from knowing as much about customers as possible so that they can hyper-personalize experiences and know how best to reach and engage

prospects and customers. But often, knowledge is disparate, located across several systems or platforms with no single unifying source. Customer data platforms bring this information together into a single source to provide a comprehensive picture of consumers and eliminate the potential for unclean data.

Cybersecurity Mesh

Cybersecurity no longer operates as an addendum in the world of information technology. As companies made the move to remote working models during the pandemic, a few pressing issues came to light. Not only is cybersecurity an absolutely critical element of business operations, but traditional approaches are not flexible enough to accommodate for a large-scale remote workforce.

Cybersecurity mesh is a completely different approach to digital security. Cybersecurity mesh allows companies to create security measures based on the identity of a device, rather than proximity to secure connections. It's a distributed approach rather than defining a perimeter based on network reach. In addition, cybersecurity mesh also allows for easy scalability across a distributed workforce.

Digital Health

If COVID-19 left a legacy that will remain, it's digital health. As patients became unable to visit doctor's offices and hospitals, digital health rose to fill the gap. But now that hurting or sick individuals have realized there are opportunities for receiving appropriate healthcare without in-person visitation, they are taking advantage of that opportunity. This fad is certainly here to stay and will likely give rise to associated technologies that leverage innovations such as biometrics to produce smart or connected medical

equipment that will enable continued distanced medical examinations.

Digital Twin

Almost anything is possible with the right coding, and now we can digitally copy a person. The virtual manifestation of a person is a real-time representation of what takes place in the human body. Digital twins are very useful for helping us to predict outcomes and measure performance. There are multiple business and healthcare applications that allow us to perform testing and apply data analytics that was previously difficult and time consuming to realize with living subjects. Advancements such as genome mapping and gene therapy could become more viable in the near future. Additionally, digital twins could finally eliminate the need for clinical trials in humans as we work to manage future medical challenges.

Edge Computing

Edge computing is a decentralized model which places computing nodes closer to the source of interaction. Gartner defines edge computing as a model where “information processing and content collection and delivery are placed closer to the sources, repositories and consumers of this information.” This model optimizes technological interactions and reduces latency at the point of origin to enable more effective and real-time data consumption. Edge computing is quickly becoming the most efficient path for localized interactions.

IoB (Internet of Behaviors)

As the world becomes more digitized, informed business is the key to success and the internet of behaviors or IoB provides greater clarity into consumer behavior. For those

companies wanting to keep a competitive advantage, the IoB is offering opportunities in the form of data collection and analysis regarding consumer interactions, preferences and purchasing behavior.

Similar to the internet of things, IoB provides substantially greater insight into how consumers are participating in the purchasing journey, analyzing data collected from IoT and online sources with a psychological perspective. Ultimately, this technology is designed to help businesses improve the user experience and engage with consumers in a more meaningful way.

Low-Code Technology

Low-code technology is bringing software development to those without a high level of technical knowledge. Traditional software development is a long, arduous process, requiring a high level of programming knowledge and a significant time investment. With low-code technology, software can be developed with a drag-and-drop interface and no extensive backend coding. This allows business users to solve a variety of specific challenges without needing to engage a highly technical resource.

Quantum Computing

Quantum computing offers unique opportunities for predictive analysis that extend beyond the capacity of conventional computing. Quantum computers leverage the principles of superposition and entanglement to process information on an exponential scale. While Google came on the scene in 2017 with a promise of the largest quantum computer, IBM has actually made it possible for businesses to leverage this technology.

Quantum computing offers businesses a powerful tool for predictive analytics and big data analytics. As we encounter new problems, quantum computing will help predict viable solutions.

Robotic Process Automation (RPA)

Robotic process automation is a term that is gaining ground recently. The name is something of a misnomer however, as there are no physical robots involved in these tasks. RPA involves automating tasks using bots that previously required human labor and follow a repetitive pattern to accomplish more of these computer-based tasks with enhanced efficiency. Many businesses are embracing RPA to help achieve more efficient workflows for rule-based tasks.

Spatial Computing

Spatial computing is often what we see when we look at futuristic movies. Rather than interacting with a static computer that sits on your desk, we are now engaging with computing as we move throughout our daily lives. Spatial computing involves virtual reality (VR) and augmented reality (AR), but goes well beyond those categories. Spatial computing involves interacting with digital elements in an intertwined fashion with the real world. Think of smart homes, speaking commands to achieve real-world goals or using smart glasses as you move throughout the world, using digital resources to inform real-world experiences.

Total Experience

These days, emerging technology is all about tying everything together. That's exactly what total experience seeks to do. Total experience involves a unified experience for all people engaging with a business, from the employee down to the customer. It involves using technology to create

an exceptional experience for all people interacting with your company to create high-quality experience for everyone simultaneously.

5G in Everyday Life

The speeds accomplished with 5G greatly outpace those seen with previous networks. 5G networks offer the supporting foundation that businesses can leverage to embrace many upcoming disruptive technologies. But in recent times, 5G technology hasn't gained the momentum that was anticipated. In 2021, it's projected that infrastructure will finally reach a viable point and devices will become affordable enough so we can actually leverage the power of 5G.

Information Technology Trends

Looking toward new top technology trends is reaching a state of necessity. Businesses must innovate if they want to continue reaching new heights in the coming years. Which IT industry trend will make the most impact on your business? You can learn more and connect with like-minded professionals who are interested in implementing emerging technology solutions when you join CompTIA's Emerging Technology Community.

MR. YATIN HASMUKHBHAI PATEL

HOD AND ASST. PROFESSOR

UNKNOWN FACTS ABOUT SNAPCHAT

1. There Are Over 210 Million Active Snapchat Users
2. 73% of U.S. Snapchat Users Are 18-24 Years Old
3. In the U.S. 90% of all 13-24 Year Old Use Snapchat
4. 63% of Snapchat Users Go on the App Every Day
5. Taco Bell Paid \$75,000 for 24 Hours of the Taco Filter/Ad
6. 61% of Snapchat Users Are Female
7. 4 in 10 Snapchat Users Say They Discovered a New Brand Through Posts and Celebrity Endorsements
8. Snapchat Pioneered Vertical Video Ads
9. You Can Follow Rock Star Business Experts on Snapchat
10. Snapchat Co-Created a Cool Geo-Filter with Netflix
11. Snapchat's Swipe-Up Rate is 5x Higher than Normal Social Media Click-Through Rates
12. Snapchat Is the King of Ephemeral Content Marketing
13. Video Ads on Snapchat Create Twice as Much Purchase Intent Than Other Ad Formats
14. 60% of Snap Ads Are Played with Audio (Compared to 15% for Facebook!)
15. Snapchat Users Spend an Average of 25-30 Minutes a Day on Snapchat
16. Snapchat's Original Name Was Picaboo
17. Snapchat Was Created After 34 Failures
18. Snapchat's Creators Had a Major Falling-Out Before the App Was Released
19. Snapchat Downloads Doubled After the Launch of the Toddler & Gender Swap Filters
20. Mark Zuckerberg Tried to Buy Snapchat
21. Snapchat's Mascot Is Called Ghostface Chillah
22. Facebook & Instagram Borrowed Ephemeral Content from Snapchat
23. 2.1 Million Snaps Are Sent per Minute
24. Snapchat Is Valued at \$23.5 Billion

25. 93% of Snapchat Users Have Sent a Photo of a Drink

MANIYA JENIL NARESHBHA

20BCA38

UNKNOWN FACTS ABOUT INTERNET

1. The internet is 9110 days old.
2. If the Internet were weighed, it would weigh about 2 ounces (50 grams). How does one measure the weight of the Internet? Physicist Russel Seitz measured the weight of multiple billions of electrons which make up the data that we send back and forth every day.
3. YouTube uploads 72 hours of video every single minute. Yes, it is mostly people's pets.
4. The current estimate of internet users is roughly 3.26 billion worldwide, or less than half of Earth's population.
5. How often do you use Google to search the internet? Google averages nearly 3 billion searches per day.
6. The number of people in China who use the internet (640 million) is double the population of the whole United States.
7. The phrase "internet surfing" was coined by a librarian named Jean Armour Polly in 1992.
8. One of the inventors of web as we know it, Tim Berners-Lee, was knighted by Queen Elizabeth.
9. Korean rap sensation Psy's song "Gangnam Style" holds the record for YouTube's most viewed video ever. It has been viewed more than 2 billion times since July 15, 2012 (which is exactly 4 years ago today!)
10. 87% of people have not heard the term 'Internet of Things.'
11. It is estimated that by 2020, a quarter of a billion vehicles will have internet connection.
12. China has a treatment camp for people who suffer from internet addiction.
13. The first webcam video is from the University of Cambridge. The subject of the first live video feed? A coffee pot.
14. The majority of internet use is not done by humans, but by malware and internet bots, which account for two-thirds of internet activity.
15. Symbolics.com was the first registered domain.
16. The first spam email that ever went out was from a computer salesman named Gary Thuerk in 1978.
17. Asia accounts for 1.7 billion of the internet's 3.26 billion users.

18. File sharing and media streaming are responsible for more than half of the traffic on the web.
19. ATMs, which date all the way back to 1974, are considered the first major Internet of Things objects.
20. If the internet were measured in horsepower, it takes 50 million horsepower to run the internet today.

CHIRAG DEVENDRABHAI MEHTA

ASST. PROFESSOR

TOP 05 ANDROID APP OF THE MONTH DECEMBER 2021

1. Sharetube
2. Sgallery
3. Crypto
4. Fake GPS Location
5. WiFi Router Master

PATEL REEMA RAKESHBHAI

19BCA97

TOP 05 IOS APP OF THE MONTH DECEMBER 2021

1. CoinMarketCap
2. Geekbench 5
3. Headspace
4. Linc
5. Milkshake

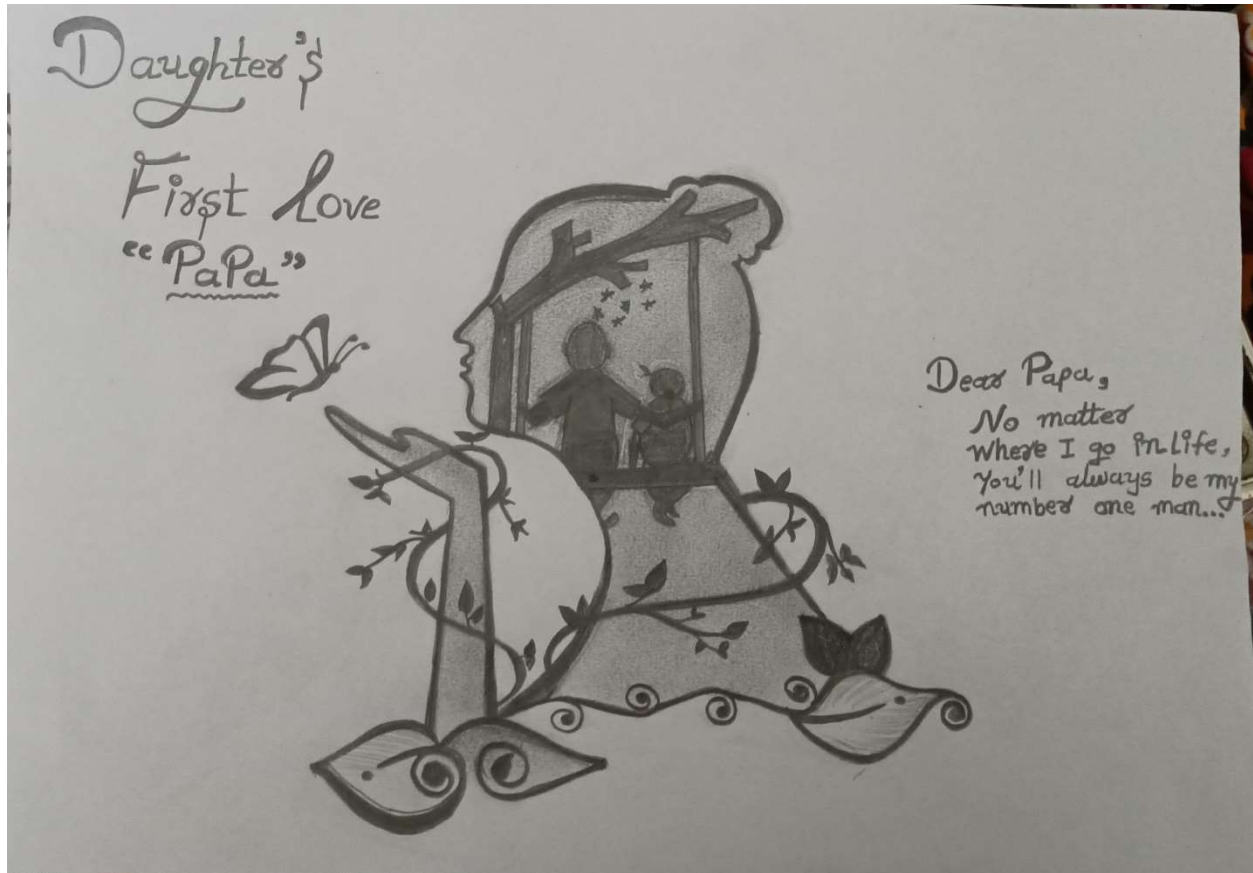
PATEL VRUSHANGI MEHULBHAI

19BCA106



AMRELIYA NIRALI NARESHBHAI

20BCA03



PATEL KHUSHI SHAILESHBHAI

19BCA91