

# Information Technology for Takaful Operators

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# What to be Discussed?

1. Principles and Features of Takaful Operations.
2. Importance of Effective Information & Communication Technology.
3. Need for Data Analysis in Digital Technology.
4. Opportunities and Benefits of new Technology & Innovation.
5. Focuses of Technology to be Explored for Takaful Operators.
6. Importance of InsurTech/TakafulTech and Digitization.
7. Digital Insurance: Benefits & Importance
8. E-Insurance and Uses of Artificial Intelligence (AI) & Blockchain.
9. E-Marketing & E-Sales for Takaful Operators.
10. Application & Examples of Technology in Insurance/Takaful Business.

# Principles of Takaful Business

- ❑ Takaful is essentially a service industry where expectations of participants are ever increasing toward quality and continuous awareness program to safeguard the interest of policyholders.
- ❑ Takaful is essentially a business of trust between the operators and the participants. This trust can be developed, if operators can build trust and confidence of customers/stakeholders.
- ❑ Customer service is an attitude, a culture and a collective way of providing best service and addressing customer grievances speedily.
- ❑ Honesty and integrity are important hallmarks of Takaful business. Salesmen need to be taught continuously on how to deal with policyholders by keeping constantly in touch with them.
- ❑ Takaful operators need to create a strategic roadmap that set goals and yardsticks for competence building of human resources.

# Features of Takaful

- ❑ Takaful is derived from an Arabic word which means solidarity, whereby a group of participants agree among themselves to support one another jointly against a defined loss.
- ❑ The participants contribute a sum of money as wholly or partially tabarru (donation) into a common fund to assist the members against a defined loss or damage.
- ❑ Takaful is the Islamic counterpart of conventional insurance and exists in both life (or family) and other forms.
- ❑ Islam is not against the concept of insurance itself but against some of the means and methods that are currently used in conventional insurance.
- ❑ Takaful has evolved into a viable alternative to conventional insurance and is able to attract a wide range of customers, Muslim and non-Muslim alike.

# Features of Takaful Supervision

- **Supervisory Objectives** – The principal objectives of insurance supervision are clearly defined.
- **Supervisory Process** – The supervisory authority conducts its functions in a *transparent* and *accountable* manner.
- **Supervisory Cooperation and Information Sharing** – The supervisory authority cooperates and shares information with other relevant supervisors.
- **Market Analysis** – Making use of all available sources, the supervisory authority monitors all factors that may have an impact on insurance markets. It draws conclusions and takes action as appropriate.
- **Reporting to Supervisors and off-site Monitoring** – The supervisory authority receives necessary information to conduct effective off-site monitoring and to evaluate the condition of each insurer as well as the insurance market.
- **On-site Inspection** – The supervisory authority carries out on-site inspections to examine the business of an insurer and its compliance with legislation and supervisory requirements.

# Objectives of Takaful Supervision

- ❑ **Preventive and Corrective Measures** – The supervisory authority takes preventive and corrective measures that are timely, suitable and necessary to achieve the objectives of insurance supervision.
- ❑ **Enforcement or Sanctions** – The supervisory authority enforces corrective action, imposes sanctions based on clear and objectives criteria that are publicly disclosed.
- ❑ **Risk Assessment and Management** –The supervisory authority requires insurers to recognize the range of risks that they face and other manage them effectively.
- ❑ **Liabilities** – The supervisory authority requires insurers to comply with standards for establishing adequate technical provision and other liabilities and making allowance for reinsurance recoverable.
- ❑ **Fraud** – The supervisory authority requires that insurers and intermediaries take the necessary measures to prevent, detect and prevent insurance fraud.

# Importance of Information Technology

- ❑ Information and communication technology has now become an integral part of business processes.
- ❑ Takaful operators need to change their perceptions and understand how IT fits into the Takaful business and in particular implement customer-focused data.
- ❑ Technologies provide new opportunities for additional premiums, enhanced customer experience and selection of risks in a better fashion.
- ❑ Takaful industry is embracing new technology not just to replace manual work by technology-based work but also to understand the customers better and serve them better.
- ❑ Sales process is getting automated by operators. Today's customers are going to be profoundly net-savvy.
- ❑ Social media enables the customer to compare the service qualities of the insurers and operators.
- ❑ The takaful operators all over the world are making little use of the advanced digital technology. They are using technology more as a disruption tool.
- ❑ TO have understood that information technology has the potential to change the way insurance/Takaful business has so far been carried out.

# How to Make IT more Effective

- ❑ TOs need to undertake the following tasks:
  - Data warehouse to provide centralized repositories of data structured in ways that make sense for business development.
  - Analyze all available data/particularly customer-related data to enhance customer satisfaction and customer management strategies.
  - Call center operations be brought together with communication and IT in frontline dealings with customer covering everything, that is, dealing with complaints, providing customer support services and so on.
  - Use data for marketing activities and analyzing customer behavior.
  - Implementation process of ICT solutions should be expedited.
- TOs must carefully consider issues such as system functionality; volume of transactions; data to be collected, stored and analyzed; future product development; time for practical implementations; business relationship with customers and sales people; and, of course, cost involvement.
- They should have a clear view on data required to meet customers' needs and to manage the process. Takaful operator's objective should be to maximize value for the customers at reasonable cost.
- Call centers should be upgraded with new technology as well as with new staff having experience in customer management.



# 5 Modes of Analytics



## Descriptive

Gives an account of what has already occurred over the past days, months and years.



## Real-time

Gives insight into up-to-the-minute data (requires sophisticated data management skills and processes).



## Diagnostic

Looks at why something happened: What went wrong and what went right?



## Predictive

Looks at what might happen in the future based on past results, driving future outcomes.



## Prescriptive

Provides guidance on what to do next.

# Why is Data Analysis Important



## Clear Focus

With data analysis, businesses are able to effectively target customers likely to buy their product or service.



## Solve Problems

With analytics, will have evidence to solve operational costs resulting to efficient internal systems and procedures



## Innovate

An understanding of future trends means businesses are able to design futuristic innovations and solutions.



## Cut Costs

Business with suitable analytics solutions are able to identify and cut avoidable operational costs and other inefficiencies.



## Attract Customers

With analytics, will have evidence to solve operational costs resulting to efficient internal systems and procedures

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# Need for Digital Technology

## ❑ Digital Technology & Importance of Digital Technology:

Digital means using electronic technology to generate, store, and process data in a format that uses discrete values, typically represented by zero and one. Data is transmitted and stored as strings of zeros and ones, each of which is referred to as bit. These bits are grouped together into bytes to represent data such as numbers, letters, images, or sounds.

## ❑ How Digital Technology Works:

Digital technology works by utilizing electronic devices and systems to process, transmit, and store data in this binary format. For example, text, images, and sounds are converted into binary code and then processed by digital devices.

# Opportunities & Benefits of New Technology

- ❑ New technology is bringing about change in the takaful industry, most notably by enabling enhanced data capture and analytics capabilities.
- ❑ New technology is being applied to improve the efficiency and effectiveness of agents and brokers, Policy servicing and claims management.
- ❑ New Tech provide foundational technology that promotes trust, transparency and stability.
- ❑ InsurTech is all about knowing each customer more intimately and then offering those personalized insurance products and services.
- ❑ InsurTech enables the insurers in developing direct contact with customers, often with the help of Artificial Intelligence (AI). InsurTech manifesting itself in cutting-edge technologies like *Internet of Things (IoT)*.

# Opportunities & Benefits of New Technology

- ❑ Blockchain technology first used in Bitcoin is a new type of distributed consensus system that enables transactions to be quickly validated and **securely** maintained through **cryptography**.
- ❑ Blockchain facilitates building a trust and will bring insurance to mass people.
- ❑ Blockchain can potentially eliminate suspicious and duplicate transactions by logging each transaction. Blockchain can properly manage, share and monetize large amounts of data.
- ❑ Blockchain can handle the increase in third-party transactions and claims made through personal digital devices. Blockchain helps reduce administrative costs through automated verification of claims/payments data from third parties.
- ❑ Technology savvy population have an amazing and world class electronic insurance (E-insurance) experience. *Artificial Intelligence, Blockchain, Machine Learning* and *Big Data* are becoming most beneficial to Fintech solutions.

## Opportunities & Benefits of New Technology

There continues to be a growing, evolving range of technology used in insurtech that changes the way insurance is being performed. Here are the following most notable technologies being leveraged.

- ❑ **Artificial Intelligence:** Customers would previously have to interact with representatives to have questions answered; now, interactive discussions with chat bots may allow a customer to receive help without talking to a human.
- ❑ **Machine Learning:** A subset of artificial intelligence is machine learning, the ability to extract historical data and compile predictive models. These models are then used to distribute information and may be set to a feedback loop.

# Opportunities & Benefits of New Technology

- ❑ **Automation:** When insurance clients fill out a document online, that record is automatically stored in a data warehouse or used to automatically compile a policy ready for signature.
- ❑ **Big Data:** Big data collection techniques allow insurers to gather a broader set of data used to analyze the risk profile of a customer to better understand their characteristics and habits.
- ❑ **Block chain:** The fundamental basis for block chain technology is immutable, distributed ledgers. This allows for unalterable record-keeping to ensure security and reliability in information storage.
- ❑ **Internet of Things:** IoT relies on the interaction between physical goods and software. For example, auto insurers now commonly offer devices that gauge vehicle speed, handling, and driving habits that can be used to reward positive driving habits or penalize negative driving habits.

# Opportunities & Benefits of New Technology

## What Is a Chatbot?

- ❑ A chatbot is a computer program that simulates human conversation through voice commands or text chats or both. Chatbot is an artificial intelligence (AI) feature that can be embedded and used through any major messaging application.
- ❑ There are a number of synonyms for chatbot, including "talkbot," "bot," "IM bot," "interactive agent" or "artificial conversation entity."

**Types of Chatbots:** A chatbot works in a couple of ways: set guidelines and machine learning (ML).

- ❑ **Set Guidelines Chatbot:** A chatbot that functions with a set of guidelines in place is limited in its conversation. It can only respond to a set number of requests and vocabulary and is only as intelligent as its programming code.
- ❑ **Machine Learning Chatbot:** A chatbot that functions through machine learning has an artificial neural\_network inspired by the neural nodes of the human brain. The bot is programmed to self-learn as it is introduced to new dialogues and words.

The insurance sector also uses chatbots to make consumers' inquiries and applications for financial services easier.



# Opportunities & Benefits of New Technology

## ❑ Advantages and Disadvantages of Chatbots:

Chatbots are convenient for providing customer service and support 24 hours a day, 7 days a week. They also free up phone lines and are far less expensive over the long run than hiring people to perform support. Chatbots are becoming better at understanding what customers want and providing the help they need.

## ❑ Chatbots:

### ❖ Pros:

- Lower cost than human workers
- Online 24/7
- Can be used as a sales & marketing tool

### ❖ Cons:

- May not understand user queries
- Lacks emotion and is not personalized
- May be expensive/complicated to install and maintain

## General hurdles before the Takaful Operators in Leveraging New Technology

- ❑ High operational cost.
- ❑ Legacy issues with regard to old and complex data.
- ❑ Lack of data security system.
- ❑ Operation of multiple systems and complicated spreadsheets.
- ❑ Possibility of cybercrime/cyber fraud and third-party attack.
- ❑ Changing phase of technological transformation is fast and TOs are not clear where to start and where to stop.
- ❑ While transforming technology, TOs need to ensure existing service is not hampered. There is no stop of service changes and parallel service to existing customers is a challenge.
- ❑ Low penetration and slow phase of business growth keeps them thinking before scaling up investment in technology.
- ❑ Lack of continuous learning and training among employees and stakeholders.
- ❑ Lack of talents and lack of continuity.

# Focuses of Technologies for Takaful Operators

- ❑ Takaful operators need to shift focus on investing in technology very rationally. Consolidation of efforts and collaboration among peers and stakeholders is required to meet this objective.
- ❑ Through internet of things (IOT), customers and takaful operators will be able to constantly share insights with each other simultaneously.
- ❑ Insurance/takaful industry is vulnerable to large-scale disruption caused by technology trends.
- ❑ It is felt that recent changes in technology are likely to prove persistent and that they can be an enabler rather than a major competitive threat to insurance companies and takaful.
- ❑ There are reasons to be hopeful that InsurTech/Fintech will prove to be a positive development for the insurance sector.
- ❑ The regulatory authority can play an important role in shaping the adoption of new technology and integration of InsurTech into the landscape.
- ❑ Successful companies are likely to benefit from a balanced innovation portfolio. Therefore, the takaful sector needs to go forward with moderate application of InsurTech which is now a buzzword in the insurance world.

# Focuses of Technologies for Takaful Operators

- ❑ Some major technological innovations will decide, the degree of success or failure of takaful operators in future. These are the internet, blockchain, big data and advanced analytics.
- ❑ Big Data is the treasure of knowledge that we can bank upon to arrive at suitable products, risk models and customer segments, among numerous other attributes.
- ❑ In the traditional market, customers are routed to agents on the basis of their perceived business value. Today, online social networks provide a larger platform to socialize and exchange information and opinions.
- ❑ Modern technology is playing a key role in servicing customers in the insurance business. Consumers expect service when and where they want it and through the channels they prefer. Sharing informative content on social media will help to better educate consumers in policy retention also.
- ❑ Social Analytics and *Big Data* thus can deliver a concoction of benefits in the long run by generating insights to business intelligence. This paves the way for expansion of the takaful business. Social media considerations should play a significant role in overall business strategy.

## Focuses of Technologies for Takaful Operators

- ❑ The best solution for ensuring efficient regulations is to enable tech-based automated management and record-keeping. This has led to the need for appropriate technology for regulators, which will facilitate regulatory compliances.
- ❑ Appropriate development of *RegTech* can ease *Fintech Operations* and save a lot of money.
- ❑ RegTech is the answer for regulators in interpreting and complying with voluminous regulations, and also help the takaful operators save times and money.
- ❑ Now *RegTech* has the promise of making that process operators to have smooth compliance while reporting regulators, Shariah auditors and the Shariah supervision council/board.
- ❑ Reports will be more transparent and proactive to improve governance and achieve business excellence.
- ❑ RegTech solutions will also help to protect financial health of takaful companies and prevent disruptions of the market agility and integrity.



# Importance of InsurTech/TakafulTech

- ❑ **Insurtech enhances the customer experience:** Instead of having to travel to a branch or speak to a representative, the future of insurtech is moving towards self-serve, online dealings where customers have their choice of engagement channel.
- ❑ **Insurtech promotes efficiency:** Without having to wait for business hours or an available representative, many insurtech companies empower users to quickly access the information they need without being bogged down in processes.
- ❑ **Insurtech emphasizes individuality:** Due to the innovative nature of information gathering and data processing, many new tools are now available to better understand each individual's true needs.
- ❑ **Insurtech improves flexibility:** Instead of needing to lock into long-term arrangements, insurtech is more likely to give individuals specific coverage for a specific need over a specific duration.
- ❑ **Insurtech reduces operating costs:** Now, Insurtech companies can operate remotely with staff engaging with customers around the world.
- ❑ **Insurtech decrease fraud:** Insurtech companies may be able to detect fraudulent activities if an inconsistency in data arises. In addition, big data may also be able to discover potential loopholes that insurers can seek to close to avoid exploitation.

# Importance of InsurTech/TakafulTech

## Applications of Insurtech:

- ❑ **Claims Management:** Large companies can use automation or repetitive workflows to pay out a large number of claims with minimal human intervention.
- ❑ **Underwriting:** The underwriting process entails reviewing an individual's profile, assessing their risk profile, and extending them an insurance package offer that includes their coverage.
- ❑ **Contract Execution:** Smart contracts can be triggered to execute when specific criteria is met. This eliminates the human element for needing to handle the contract, and this allows an unbiased, neutral party (i.e. technology) to evaluate the criteria of a contract and decide the appropriate course of action.
- ❑ **Risk Mitigation:** Big data can be used to gather, analyze, and summarize information. This includes analyzing a customer's historical activity or assessing a broad range of claim types. Based on the information gathered, insurers may be able to detect fraud, protect against unsuitable risk, or better understand where they may be most exposed.

## Benefits of InsurTech/TakafulTech

- ❑ Insurtech is the use of technology innovations designed to make the current insurance model more efficient.
- ❑ By using technology such as data analysis, IoT, and AI, insurtech allows products to be priced more competitively.
- ❑ Insurtech is used to more effectively process claims, evaluate risk, process contracts, or underwrite policies.
- ❑ Insurtech is similar to fintech, as both leverage modern solutions that are revolutionizing each respective traditional industry.
- ❑ There are headwinds for insurtechs, notably regulation issues and a reluctance of established insurers to work with them.
- ❑ Insurtech is premised on the belief that the insurance industry is ripe for innovation and disruption. Insurtech is exploring avenues that large insurance firms have less incentive to exploit, such as offering ultra-customized policies



# Digital Insurance: Benefits & Importance

Digital insurance refers to several technologies that have changed the way insurance service providers operate. Insurance companies that have a technology-first operation model to handle the sales and management of insurance policies.

Most insurance companies have a separate Digital insurance service providers have the following differentiators:

- Customer-first approach to business transactions
- Omni-channel presence so that potential clients can research and understand the brand without waiting to speak to an agent
- Coverage plans for customers who need little coverage

Digital insurance models offer speed, agility, easy accessibility, and a user-friendly interface. This digitalization enables the creation and implementation of newer and better services.

# Digital Insurance: Benefits & Importance

**Benefits of Digital Insurance:** There are several benefits of digital insurance for both insurers and their customers.

- ❑ **It makes insurance more accessible:** In any industry, cost reduction is a key goal, but it must come without sacrificing quality and quantity.
- ❑ **It exceeds modern customer expectations:** Consumers have come to expect convenient, easy-to-use online services. Professionally designed digital insurance exceeds these expectations with personalized experiences through online portals, live chat, self-service application and platform features, and many other services that provide automation and ease.
- ❑ **It improves security and fraud prevention:** By providing excellent insights into patterns and anomalies that may indicate fraudulent activity. This information ultimately helps insurers protect their customers, reduce losses, and build stronger infrastructures.
- ❑ **It improves experiences for employees and companies:** Digital insurance can help improve the employee experience by streamlining processes and reducing the need for manual work. Optimization in product development.

# Digital Insurance: Benefits & Importance

## ❑ Why is Digital Insurance Important?

Insurers and consumers both have reasons to care about digital insurance, such as:

- ❑ **Convenience:** This eliminates the need to visit a physical location or speak to an insurance agent. Likewise, insurers can easily communicate with customers and make internal improvements.
- ❑ **Efficiency:** Administrative and operational costs associated with traditional insurance processes are often reduced with digital insurance platforms.
- ❑ **Personalization:** Digital insurance allows insurers to offer customized insurance products and services. Personalization for policyholders is critical to retention, as it shows customers they are valued and more than just another number or policy.
- ❑ **Inclusivity:** Digital insurance can help increase the availability and affordability of insurance for underserved populations, such as those living in remote areas or with low incomes.

# What & Why AI?

## What is AI?

- ✓ Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems.
- ✓ AI requires specialized hardware and software for writing and training machine learning algorithms. No single programming language is used exclusively in AI.

## Why AI is Important?

- ✓ AI is important for its potential to change how we live, work and play. It has been effectively used in business to automate tasks traditionally done by humans.
- ✓ AI can perform tasks more efficiently and accurately than humans. It is especially useful for repetitive, detail-oriented tasks.
- ✓ The rapidly expanding array of generative AI tools is also becoming important in fields ranging from education to marketing to product design.
- ✓ AI has become central to many of today's largest and most successful companies, including Alphabet, Apple, Microsoft and Meta, which use AI to improve their operations and outpace competitors.

# Advantages of AI

- ✓ AI is a good fit for tasks that involve identifying subtle patterns and relationships in data that might be overlooked by humans.
- ✓ AI systems and automation tools dramatically reduce the time required for data processing.
- ✓ AI systems can enhance user experience by personalizing interactions and content delivery on digital platforms.
- ✓ AI programs do not need to sleep or take breaks.
- ✓ AI can speed up the pace of R&D in fields such as pharmaceuticals and materials science.
- ✓ AI and machine learning are increasingly used to monitor environmental changes, predict future weather events and [manage conservation efforts](#).

# What are the Applications of AI?

AI has entered a wide variety of industry sectors and research areas. The following are several of the most notable examples.

- ✓ AI in Healthcare
- ✓ AI in Business
- ✓ AI in Education
- ✓ AI in Finance & Banking
- ✓ AI in Law
- ✓ AI in Entertainment & Media
- ✓ AI in Journalism
- ✓ AI in Software Development & IT
- ✓ AI in Security
- ✓ AI in Manufacturing
- ✓ AI in Transportation

# E-Marketing & E-Sales

- ✓ ICT is to play an important role in business by establishing relationship with electronic sales and marketing, business intelligence.
- ✓ Customer is the king in any business. In insurance overall customer service, marketing and sales objectives can be achieved by multiple ICT led solutions like:
  - ✓ Instructive voice response(IVR)
  - ✓ Mobile text messaging(MTM)
  - ✓ Electronic marketing (EM) & Electronic sales
- ✓ An IVR system provides pre-recorded voice responses for different situations, access to secured and relevant data, keypad input logics and voice recording feature for feedback and improvement in services.

# E-Marketing & E-Sales

- ✓ Through IVR system, customers can learn about the policy features, terms & conditions and can request for more information. Customers can make inquiries, up-to-date paid up value, about the existing balances in the participants/policyholders fund.
- ✓ Customers respond well to SMS as it is simple to use, easy to understand and accessible from anywhere and everywhere. SMS eliminates the need for making a phone call and waiting on hold.
- ✓ SMS is an effective way of communicating with the agents, employers of agents and executives of the company. SMS technology is used by IT, HR and marketing department who are using mobile as tool for sending company announcements.
- ✓ Right message to right people and at the right time is the most important benefit of E-marketing. It saves a lot of time by identifying the segment of customers and then reaching them by geographic location, age, income, class, gender etc.



# E-Marketing & E-Sales

- ✓ Marketing and advertisement cost in insurance business is huge and a lot of investment is required. Insurance products are intangible and it is not easy to sell these products to customers. E-marketing involves less upfront cost and can save huge expenditures and customers enjoy competitive pricing.
- ✓ Scope of e-marketing is wide. A single mail can reach thousands of customers at a time and save lots of time.
- ✓ It allows the insurance companies to reach customer fast and educate them about market news, new product launch, and tips and ideas for their insurance needs.
- ✓ According to a report, three quarters of insurance executives believe that their own company will be completely transformed by AI within next few years and this will facilitate the industry to reach their prospects with utmost speed and pace at lower cost.

## Applications of Digital Technology in Insurance & Takaful

There are several key tools and applications used within digital insurance and many digital insurance platforms are closely linked to an insurtech ecosystem and marketplace of partner resources and solutions:

- ❑ **Artificial Intelligence (AI) Systems:** The use of AI in P&C insurance encompasses a wide range of areas and is constantly evolving. AI allows systems to automate many of the processes involved in underwriting, claims processing and retention of existing customer's journey.
- ❑ **Machine Learning:** In digital insurance, it can be used to collect and curate large amounts of data to identify patterns and trends that can be used to improve underwriting, risk assessment, pricing. It is a key tool for informing security decisions by combing through extensive data to determine when and where fraud may exist.
- ❑ **Big Data and Analytics:** It's not just about collecting and distributing data and analytics; it's all about targeting the right data and analytics when more and more data sets are created every day. Big data analytics tools can be leveraged in digital insurance for a comprehensive analysis that takes machine learning a step further. By combining trends and patterns with extensive information from a variety of systems, insights turn into real-world examples and scenarios that global insurance companies can use to inform their decisions.
- ❑ **Internet of Things (IoT):** IoT technologies are growing in the P&C insurance industry, particularly using telematics or wearable's in auto insurance. Data about policyholders' behaviors and activities are used to tailor insurance products and pricing to individual needs.

# Examples of Technology

Here are some examples of technology applications:

- ❑ **Mobile Applications:** Mobile applications are software applications that run on smartphones and other mobile devices. Examples of mobile applications include social media apps, gaming apps, and banking apps etc.
- ❑ **Wearable Technology:** Wearable technology includes devices that are worn on the body, such as smart watches and fitness trackers. These devices can track fitness data, monitor health conditions, and provide notifications.
- ❑ **Cloud Computing:** Cloud computing involves the use of remote servers to store, manage, and process data over the internet. Examples of cloud computing applications include online file storage, web-based email, and software-as-a-service (SaaS) applications.
- ❑ **Digital Assistants:** Digital assistants are software applications that use artificial intelligence to provide users with information, perform tasks, and respond to voice commands. Examples of digital assistants include Apple's Siri, Amazon's Alexa, and Google Assistant.
- ❑ **Virtual Reality:** Virtual Reality technology allows users to experience a computer-generated environment that feels like a real-world environment. Examples of virtual reality applications include gaming, education, and training simulations.

# New Technology

Here are five new technologies that are currently gaining significant attention:

- ❑ **Artificial Intelligence (AI)**: AI involves the development of systems that can perform tasks that typically require human intelligence, such as image recognition, language processing, and decision-making.
- ❑ **Internet of Things (IoT)**: IoT involves the integration of various physical devices, vehicles, and other objects with sensors and software, which allows them to connect and exchange data.
- ❑ **Augmented Reality (AR)**: AR technology enables the overlaying of digital information onto the real world.
- ❑ **Block chain**: Block chain is a distributed ledger technology that allows multiple parties to share and access data in a secure and transparent way.
- ❑ **Quantum Computing**: Quantum computing involves the use of quantum mechanics principles to perform computations that are faster and more powerful than traditional computing.

Overall, these five technologies are currently gaining significant attention and have the potential to transform various industries in the future.



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