SPECIAL

THE EVALUATION OF APPLE'S SERIES

MISSION MANGAL

WHAT CAN VOICE ASSISTANTS DO ?

THE BLOCK CHAIN

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EVENT REPORT 2015-16

S.N	Title of Activity	Organizer/Resource person	Date	No. of Beneficiaries /Participants
1	E-talks	IEEE Coordinators	15/07/2015	30
2	Guest lecture on "FPGA Architecture and Applications"	Dr. Kishor Sarawdekar Associate Prof. IIT (BHU) Varanasi	27/07/2015	50
3	Words-chatz	IEEE Coordinators	05/07/2015	
4	Clash of Technovators (Project Competition)	IEEE Coordinators	Though out Semester	24
5	The Ultimate Talk (Public Speaking Competition)	IEEE Coordinators	16/09/2015	32
6	Face to Face	IEEE Coordinators	25/09/2015	18

7	Workshop on "Advances in Image Processing using MATLAB for Research & Development"	The Mathworks Team	06/10./2015	96
8	IEEE Paper Presentation in Pursuit	IEEE Coordinators	Pursuit Date	24
9	Workshop on "Embedded Systems and IoT Applications"	Prof. P. R. Wankhede	13/06/2016 To 26/06/2016	21

THE EVOLUTION OF APPLE'S SIRI

People have wanted to talk to computers almost from the moment the first computer was invented. Science fiction is full of computers that can hold a conversation, from HAL 9000 and the Starship Enterprise's computer to Marvin the Paranoid Android and KITT the car. Just a few decades ago, the idea of holding meaningful conversation with a computer seemed futuristic, but the technology to make voice interfaces useful and widely available is already here. Several consumer-level products developed in the last few years have brought inexpensive voice assistants into everyday use, and more features and platforms are being added all the time. Users can do everything from asking simple informational questions to playing music and dialing their phone or turning lights on and off via voice control.
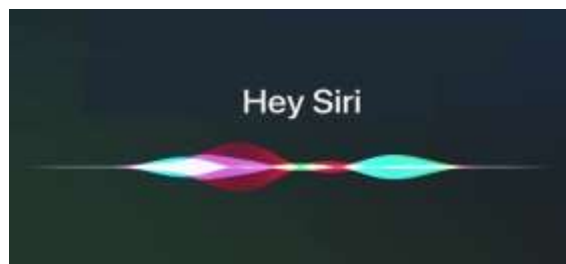
This column will explore the basic workings and common features of today's voice assistants. It will also discuss some of the privacy and security issues inherent with voice assistants and potential future uses for these devices.

What Can Voice Assistants Do?

Although each currently available voice assistant has unique features, they share some similarities and are able to perform the following basic tasks: .

1. Send and read text messages, make phone calls, and send and read email messages; .

2. Answer basic informational queries ("What time is it? What's the weather forecast? How many ounces are in a cup?");

3 Set timers, alarms and calendar entries;

4. Set reminders, make lists and do basic math calculations;

5. Control media playback from connected services such as Amazon, Google Play, iTunes, Pandora, Netflix and Spotify;

6. Control Internet of Things enabled devices such as thermostats, lights alarms, and locks .

7. Tell jokes and stories.In addition to these tasks, voice assistants can add other features, often called "skills," that expand their abilities by interfacing with other programs via voice commands. Amazon's Alexa has skills for playing Jeopardy, ordering your usual drink from your local Starbucks and summoning an Uber or Lyft using connected account data. Google's Assistant has similar skills but lags behind Amazon in the sheer number of available skills, largely due to being released later. These skills are built by third-party developers, similar to the way apps are developed for smartphones. Google Assistant also integrates with several tools that allow users to create their own skills.

MISSION MANGAL: THE REAL STORY OF ISRO WOMEN BEHIND INDIA'S MISSION TO MARS.

When the universe is your workspace, the sky is the limit, and there's no such thing as a glass ceiling. Here are the ladies behind Mangalyaan

What does it take to make sure your little girl grows up to be a rocket scientist? Start her young. Some 30 years ago, Ritu Karidhal was a little girl, looking up at the stars twinkling in the Lucknow sky, and wondering why the moon changed its shape and size every night.

In her teens, she began following the activities of the Indian Space Research Organisation (ISRO) and the National Aeronautics and Space Administration (NASA) in the newspapers, cutting and collecting clippings. Around the same time, Moumita Dutta was reading about India's first lunar probe, Chandrayaan 1, in the *Anandabazar Patrika* in her hometown of **Kolkata** and thinking, 'How lucky those people are to have the opportunity to be part of this!' Flash forward to 2015, and both women are top ISRO scientists, part of a team that worked on India's acclaimed Mars Orbiter Mission (MOM), aka Mangalyaan.

Unless you've been hiding in a crater, you know that Mangalyaan catapulted India's space program to international stardom. In an astonishing 15 months from the day it was announced (by the then-Prime Minister Manmohan Singh, in a speech on 15 August 2012), the team at ISRO conceptualized, planned and implemented the mission, successfully sending off the autorickshaw-sized satellite out of Earth's orbit and into **Mars**, a journey of 660 million km and 300 days. Armed with five payloads, including a methane sensor and tri-colour Mars Colour Camera, the satellite cost a total of US$70 million only. (For perspective, a similar NASA mission cost US$671 million; and the Sandra Bullock film, *Gravity*, cost US$100 million.) The amazing success of the mission brought worldwide attention and not a small dose of national pride and glory.

THE BLOCKCHAIN: WHAT IT IS AND WHY IT MATTERS?

Chances are that you've heard of bitcoin, the digital currency that many predict will revolutionize payments – or prove to be a massive fraud – depending on what you read. Bitcoin is an application that runs on the Blockchain, which is ultimately a more interesting and profound innovation.

The Blockchain is a secure transaction ledger database that is shared by all parties participating in an established, distributed network of computers. It records and stores every transaction that occurs in the network, essentially eliminating the need for "trusted" third parties such as payment processors.

In 2008, Satoshi Nakamoto, the pseudonymous person or group of people credited with developing bitcoin, released a whitepaper describing the software protocol. Since then, the network has grown and bitcoin
has become a recognized unit of value around the globe. Bitcoin is extremely important because it provides a mechanism for accessing the Blockchain – but it's not the only application that can leverage the platform.

Bitcoin has also been on the receiving end of some bad press, such as around the collapse of the Mt. Gox bitcoin exchange earlier last year. The Mt. Gox story is not necessarily an indictment of bitcoin.
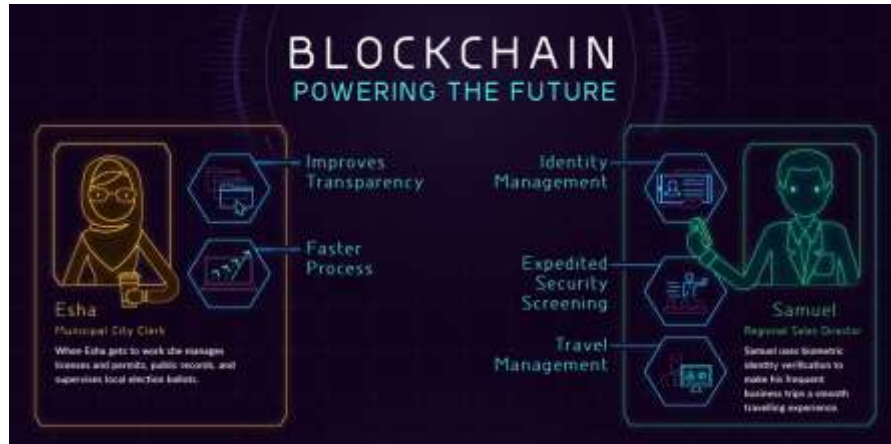
The Blockchain enables the anonymous exchange of digital assets, such as bitcoin, but it is not technically dependent on bitcoin. The elegance of the Blockchain is that it obviates the need for a central authority to verify trust and the transfer of value. It transfers power and control from large entities to the many, enabling safe, fast, cheaper transactions despite the fact that we may not know the entities we are dealing with.

The mechanics of the Blockchain are novel and highly disruptive. As people transact in a Blockchain ecosystem, a public record of all transactions is automatically created. Computers verify each transaction with sophisticated algorithms to confirm the transfer of value and create a historical ledger of all activity. The computers that form the network that are processing the transactions are located throughout the world and importantly are not owned or controlled by any single entity. The process is real-time, and much more secure than relying on a central authority to verify a transaction.