

A pair of hands, one above and one below, are shown holding a small globe of the Earth. The globe is rendered in a red and white color scheme, with the continents of Asia, Australia, and parts of Europe and Africa visible. The hands are positioned as if they are gently cradling the globe. The background is plain white.

THE WORLD IS

GETTING SMALLER

Innovative Speech, Broadband and Business Support solutions  
to promote efficiency and productivity

The logo for nusudara features the word "nusudara" in a bold, black, sans-serif font. Above the letter "u" is a small red icon consisting of three curved lines, resembling a signal or a stylized 'u'. Below the main text, the words "INNOVATION @ WORK" are written in a smaller, red, all-caps, sans-serif font.

**nusudara**  
INNOVATION @ WORK





**nusantara**  
INNOVATION @ WORK

NuSuara is a dynamic ICT communications company with a solid portfolio in speech technologies, broadband connectivity and business support systems



Dato' Ramli Abbas  
Chief Executive Officer



# OVERVIEW

## GLOBAL TECHNOLOGY FOR LOCAL ADVANCEMENT

Welcome to the world of NuSuara, an MSC premier status company with an array of technologies and services to bridge the digital divide and prime society for the information age.

The world is undeniably becoming smaller. As technology advances and the transfer and sharing of information between individuals and corporations become more rapid, the physical borders that divide communities are less apparent.

The urban population relies heavily on technology, while local and international corporations depend on it to stay abreast of the competition. Technology has become a hallmark of efficiency and effectiveness, yet there is a huge divide that exists between the urban and rural communities, where the later are almost oblivious to the advancement that has shaped today's world.

NuSuara was established to bring technological solutions to individuals and corporations alike. Technology as we see it should be accessible to all, regardless of who you are, where you are and what you do. With customers at the core of our business, NuSuara has pioneered advancement in technology to help businesses and the local community.

## THE WORLD'S FIRST, MALAYSIA'S PRIDE AND NUSUARA'S OWN

The only Malaysian company and among a few in Asia to develop its own Automatic Speech Recognition (ASR) engine for local languages and accents.

The only company in the world with a comprehensive Bahasa Malaysia Text-To-Speech (TTS) capability.

Our unique multi-lingual speech solutions customised for the local market - Malaysian and Singapore English, US English, Malay, Thai, Mandarin and Cantonese.



## NUSUARA'S BUSINESS CLUSTERS

### SPEECH AND COMMUNICATIONS SOLUTIONS

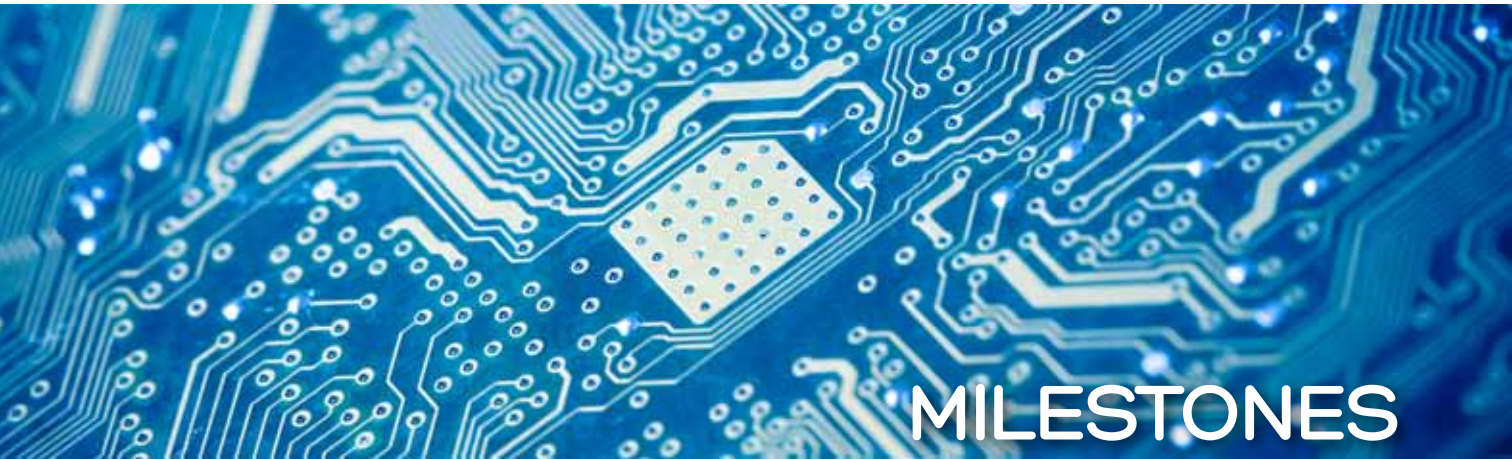
- INTERACTIVE VOICE RESPONSE (IVR)
- AUTOMATIC SPEECH RECOGNISER (ASR)
- SPEECH-ACTIVATED AUTO ATTENDANT
- TEXT-TO-SPEECH (TTS)
- AUTO OUTBOUND DIALER (AOD)
- HELP DESK / CALL CENTRE
- VIRTUAL OFFICE SOLUTION
- 24 / 7 EMERGENCY ALERT SYSTEM

### BROADBAND SOLUTIONS

- COMMUNITY BROADBAND CENTRES (CBC)
- CBC-TO-HOME
- KAMPUNG TANPA WAYAR (KTW)
- WI-FI FOR CAMPUS, HOTELS AND BUILDINGS
- WI-FI 3G OFFLOAD
- INTERNET-BASED TRAINING
- NETWORK MANAGEMENT SYSTEM (NMS) FOR CBC

### BUSINESS SUPPORT SOLUTIONS

- CREDIT MANAGEMENT SYSTEM (CMS)
- BUSINESS MANAGEMENT SYSTEM FOR SMEs (BMS for SMEs)
- CUSTOMER RELATIONSHIP MANAGEMENT (CRM)
- BILLING AND RATING



## MILESTONES

First voice-activated solution for TM Net self-service Interactive Voice Response (IVR)	Implementation of Flight Information Speech System for KLIA / LCCT	CBC project with Celcom  Developed Network Management System (NMS) for CBC	e-Help - a voice-assisted online programme for CBCs in Kadazan, Dusun and Bahasa Malaysia languages	Launched Festive Greetings using Auto Outbound Dialer (AOD)  CBC-to-Home at 37 CBC sites	Kampung Tanpa Wayar (KTW) project for 297 sites
<b>2005</b>	<b>2008</b>	<b>2009</b>	<b>2009</b>	<b>2011</b>	<b>2012</b>



# ABOUT

## NUSUARA TECHNOLOGIES SDN. BHD.

Incorporated in 2002 with a vision to be a leading company in ICT communications specialising in speech recognition technology and customised broadband solutions, NuSuara Technologies is an MSC premier status company backed by the Malaysia Venture Capital (MAVCAP) an investment arm of the Ministry of Finance Malaysia.

NuSuara Technologies is backed by 100 personnel located at its head office in Mid Valley Kuala Lumpur and at 37 Community Broadband Centres (CBC) across Malaysia. Its core area of expertise lies in Speech Solutions, Broadband Solutions and Business Support Systems.

### AUTOMATIC SPEECH RECOGNISER (ASR)

NuSuara's ASR is an http-based speech recognition engine that leverages on speech interface for transactions such as customer self-service option for:

- Call centre and help desk
- Office automation for telephone connection
- Information inquiry using voice
- Applications using the convenience of speech command

### INTERACTIVE VOICE RESPONSE (IVR)

Bahasa Malaysia TTS is a language programme that converts written text into spoken words delivered by a pleasant female voice.

It is easy to use and can conveniently convert text from Microsoft Word, PDF files and other text sources. The application simplifies the learning of Bahasa Malaysia, and is ideal for providing a Bahasa Malaysia speech read-out from any text or script. A demonstration of this technology is available on [www.nusuara.com](http://www.nusuara.com).

### BAHASA MALAYSIA TEXT-TO-SPEECH (TTS)

IVR is a technology that interconnects telephones, computer databases, fax machines and customers in powerful new ways.

NuSuara IVR solutions assist organisations to increase overall productivity while improving communications. With speech recognition technology, NuSuara's IVR solutions give your phone system the intelligence to answer a caller's questions in a variety of installed languages.

## SPEECH PLATFORM IN-HOUSE DEVELOPED COMMUNICATION PLATFORMS





# COMMUNICATIONS & SPEECH SOLUTIONS

## YOUR WORD IS OUR COMMAND

NuSuara Technologies notably holds two US patents for its speech products. It is one amongst a few in Asia to have developed a localised Automatic Speech Recognition (ASR) engine, with voice libraries that include speech recognition for English with Malaysian and Singaporean accents, US English, Bahasa Malaysia, Thai, Cantonese and Mandarin.

It is also the only company in the world with a comprehensive Bahasa Malaysia Text-to-Speech (TTS) technology.

NuSuara Technologies' full suite of communications and speech solutions are geared towards promoting organisations' efficiency and productivity. These solutions have been implemented and are used by corporations that work round the clock, namely Malaysia Airports Holdings, TM, Putrajaya Holdings, KLCC, Unilever, Kao Malaysia, International Multilateral Partnership Against Cyber Threat (IMPACT), Gas Malaysia and Heidelberg amongst many others. These solutions include:

- Interactive Voice Response (IVR)
- Speech-Activated Auto Attendant
- Speech-Activated Information System
- Help Desk Solution
- Virtual Office Portal
- Auto Outbound Dialer (AOD)
- 24-Hour Emergency Alert System
- Multimedia Contact Centre (MCC)
- Virtual Survey
- Virtual Greetings

## RURAL BROADBAND

NuSuara is a turnkey partner for the implementation and operations of the Community Broadband Centres (CBC) programme throughout rural Malaysia.

NuSuara also design and build Community Wi-Fi of up to 3km radius under the MCMC Kampung Tanpa Wayar (KTW) programme.

## CITY WI-FI

In the urban areas, NuSuara has the full suite of solutions to provide its customers with broadband access in hotels, campuses and cities.

NuSuara also collaborates with local mobile operators in the quest to implement Wi-Fi access for in-buildings service and outdoors coverage to enhance the customers' broadband usage experience.

## SUPPORTING PLATFORM

Leveraging on its core competency in customised solutions and system integration, we develop a comprehensive Network Management System to monitor our network operations and equipment around the country.

In addition, NuSuara also offers modules for Finance KPI, Service SLA monitoring, and support ticketing for a complete platform for operations and maintenance.





# BROADBAND SOLUTIONS

## CHARTING THE WAY AHEAD

Businesses rely on it. Friends communicate through it. And you probably won't go a day without connecting to it. The Internet has become a necessity, and has evolved into the most important communications medium of today. Under the Government's Universal Service Provision (USP) programme aimed at narrowing the digital divide between the urban and rural populations, NuSuara Technologies has assisted telecommunication companies implement the nation's National Broadband Initiative (NBI) to make broadband accessible to everyone nationwide.

To date NuSuara Technologies has designed, built and now manages 37 Community Broadband Centres (CBC) throughout Malaysia. Each Wi-Fi enabled CBC located in rural areas, such as FELDA schemes are managed by two local graduates and serves a community of between 5,000 to 10,000 people. The CBC also plays an active role in providing various ICT-based training for rural entrepreneurs, students, senior citizens as well as youths.

To ensure all the equipment and hardware in the CBCs are at all times functional, the Network Management System (NMS) was developed to manage and operate the CBCs, setting the industry's standard and benchmark for others to follow.

In line with ensuring connectivity to all, NuSuara Technologies implemented the "CBC-to-Home" and "Kampung Tanpa Wayar" project in over 297 sites in remote communities in Segamat, Johor, allowing rural folks to acquaint themselves with the World Wide Web in the comforts of their own home. Not leaving the rest of the world behind, NuSuara Technologies has also employed Wi-Fi hotspots in commercial buildings, hotels, campuses and shopping complexes nationwide. And above all, it has undertaken the provision of Wi-Fi connectivity for Sutera Harbour, amidst the peak of Mount Kinabalu.



## PEOPLE

- The fundamental of our solutions starts with people's perception and understanding of their work processes.
- By looking from their perspectives (in terms of knowledge, skill and experience), we are able to identify and define the root challenges before mapping the long-term solutions.

## PROCESS

- We conduct a thorough study to analyse the processes handled by different people to execute the various tasks.
- From the detailed study, we design solutions to maximise efficiency and draw the synergies among people and processes.

## TECHNOLOGY

- Technology serves as the enabler to deliver effectiveness and efficiency.
- We identify the right technology for the specific processes.
- Issues on security, speed, processing complexity, user interface and accessibility are taken into account.

OUR BUSINESS SUPPORT SOLUTIONS LOOK INTO THESE 3 KEY ELEMENTS







## THE BACKBONE OF SUCCESS

Equipped with a highly talented and experienced team of professionals, NuSuara Technologies develops customised Business Support Solutions (BSS) to manage large volumes of data for efficient operations and management. Corporations such as Celcom (in Malaysia, Cambodia and Bangladesh), TimeDotCom, Starhub Singapore and TestraClear in New Zealand have benefited from BSS solutions.

Large corporations with large customer bases can benefit from NuSuara's Credit Management System (CMS), a comprehensive collection management solution to maximise revenue collection and reduce the incidence of bad debts. CMS is an industry-proven solution that integrates billing systems to transform customer profiles, products and account information into CMS data - set to aid account managers and collectors. Empowered by configurable security features, business rules and workflows, user-friendly graphic interface and web-based applications, the CMS equates to an effective and efficient tool to execute the collection processes.

The system includes a Billing and Rating engine that helps analyse telephone transactions and segregates items for the billing and rating processes. Further to this is the Business Management System that enables SMEs to handle tasks such as management of products, customers, inventories, orders and also credit management.



CUSTOMISED SOLUTIONS



PROJECT MANAGEMENT



SYSTEM INTEGRATION

# CORE COMPETENCIES

NuSuar's core competencies in Customised Solutions, System Integration and Project Management provide us the competitive advantage to deliver excellent and measurable results for our customers.

Our staff size of over 100 with twenty five based at our HQ in Mid Valley Kuala Lumpur while the rest are CBC managers located throughout Malaysia.

- More than 98 percent of our team members are diploma holders, graduates or with higher qualifications
- Our technical and R&D team of 13 comprises scientists, engineers, software developers and linguists







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