

TELECOM BUZZ!!!

"expanding telecom world horizon"



LBS : The Next BIG
Market Driver

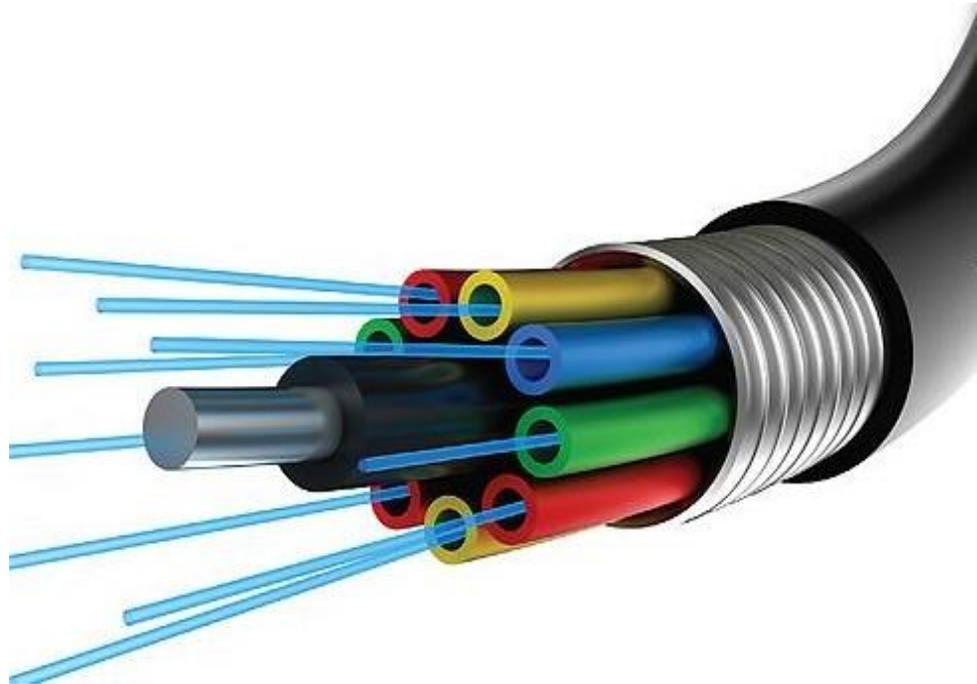


India added 9.47
Million new
subscribers in Dec,
2011



Ericsson buys Wi-Fi
Firm BelAir Networks

GPON: Connecting Homes with Fiber



From the Editor

It all began with a dial-up modem which then graduated to a cable infrastructure. DSL came along after cable, to which you can connect up with a low cost and perhaps low bandwidth. But what's the next big technology for connecting the unconnected data hungry world to the internet? The technologies for providing broadband services are evolving continuously. Though the wireline broadband segment is facing issues of inadequate last mile access and substitution by wireless technologies, it has not lost its relevance due to superior quality of services. One such emerging technology in this sector has been Fiber-to-Home (FTTH) also called Fiber-to-Building (FTTB). In the past, telecom networks had a high-speed backbone technology but with lower speed cables. FTTH has replaced these low speed cables and allows for much faster delivery speed, essential for "triple-play" deliveries i.e. voice, video and data on a single optical fiber. But as always, technological innovation comes up with a dilemma. Copper or Fiber? ADSL or VDSL? PON or GPON?. Fortunately this dilemma will be resolved as you'll turn the pages of this issue.

I hope the contents and topics covered further are interesting and value adding. Your suggestions on the contents of this issue are always welcome.

Upcoming Openings

- Freelance Trainers; Telecom & ICT – India & Abroad (5+ years of relevant experience)
- 3G Optimization Expert– NSN Kenya & South Africa (5+ years of relevant experience on Ericsson/NSN systems)
- 2G Optimization Expert – NSN Kenya & South Africa (5+ years of relevant experience)
- 3G Optimization Expert– NSN Tanzania (5+ years of relevant experience on Huawei Systems)
- 2G Optimization Expert – NSN Zambia (5+ years of relevant experience on Ericsson Systems)

Mail your resumes to hr.india@mcpsinc.com

Highlights, February 2012

- MobileComm expands its services to Assam and North East circles by deploying resources for RF and TX activities on Aircel Project.
- MobileComm augments its inventory as an endeavor to fulfill its customer commitments by adding another set delivery from ASCOM
- MobileComm has been registered with Ericsson in the ARP domain and has deployed resources in the UPW and UPE & Punjab circles for Bharti project.
- MobileComm reveals significant progress in self- paced e-learning programs.
- MobileComm continues its focus on Africa. It has signed a contract with NSN to deploy 4 Senior Optimization leads at Centurion, South Africa.

GPON: Empowering Fiber-to-Home

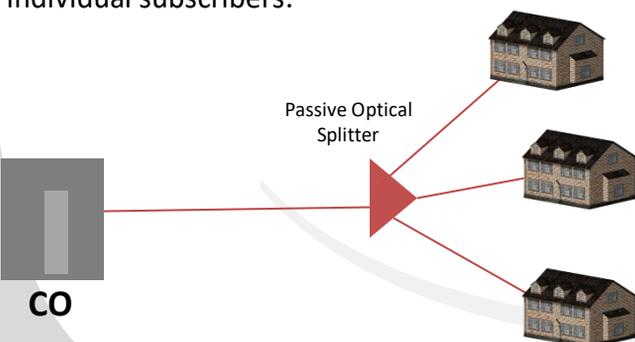
Introduction: The Need for Fiber

The way people use the internet today creates a great demand for very high bandwidth. New services like IP Television (IPTV), Video on Demand (VOD) etc. over Internet together along with high speed internet access are confronting the demand of higher bandwidth among consumers. Web 2.0 based communities & hosted services such as social networking foster interactivity, collaboration and data-sharing thus generating a need for capacity. Even though today's well deployed XDSL solutions can satisfy bandwidth demand but are limited to the restriction regarding distance. Hereby, the suitable solution for high bandwidth demand with a long reach can be met by bringing optical fiber to every home.

PON: A key provider of FTTH

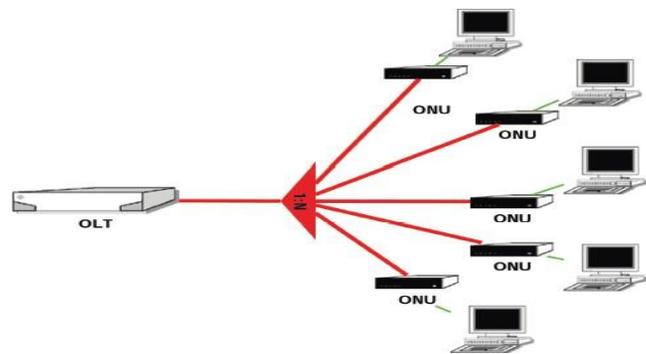
Today, majority of broadband connectivity is offered through Digital Subscriber Line (DSL), Cable Modem and to limited extent with wireless technology. FTTH or Fiber to Home is one such emerging technology in this sector that brings fiber optics directly to homes/buildings offering "Triple Play" Services (Data, Voice and video) over a single fiber.

Passive Optical Networking or PON is an access network based on Optical Fiber to provide virtually unlimited bandwidth to the subscriber. It is a single, shared optical fiber that uses a passive optical splitter to divide the signal towards individual subscribers.



PON Architecture

The elements of a PON are i) Optical Line Terminal (OLT) ii) Passive Optical Splitter iii) Optical Network Unit (ONU)



The **Optical Line Terminal (OLT)** is the main element of the network and works as an interface between core network and PON network.

Optical Splitter is a passive device with single input and multiple outputs. It is used to connect an optical port of OLT with multiple subscribers.

Optical Network Units (ONUs) serves as an interface to the network and are deployed at customer end. It connects with the OLT via Optical Splitter.

PON Standards:

There are three standards with respect to PON:
BPON: Broadband Passive Optical Network (BPON) was the first PON based technology developed for FTTH deployment. It is governed by ITU and standardized as ITU-T G.983. BPON did not gain much popularity due to lack of bandwidth and widespread use of Ethernet Protocol.

EPON: Ethernet Passive Optical Network (EPON) was adopted by IEEE and is designated as IEEE 802.3ah. EPON is based on Ethernet and provides Simple, easy to manage connectivity. It offers 1.25 Gbps bandwidth and 16 ONUs at a range of 20km can be connected with a single port of OLT.

GPON: The progress in the technology and the need for larger bandwidths forced the ITU group to look for better technology. GPON standardization was initiated in the year 2001 and offers Ethernet Traffic at the edge of network with possible triple play voice, data and video services on the same PON.

GPON is a fully optical architecture option that offers the best of all worlds.

Why GPON???

Technological innovation often presents an intractable dilemma: too many choices. The telecom access network has faced just such a dilemma over the past several years: Copper or fiber? ADSL2+ or VDSL2? Fiber-to-the-node or -curb or -premises (FTTN, FTTC, FTTP)? Passive optical networking (PON) or point-to-point Ethernet? GPON or EPON? Fortunately, this dilemma is being resolved. With increasing bandwidth and larger area of coverage, GPON is viewed as the optimal technology for building access networks.

The case for gigabit passive optical networking (GPON) is a simple one: in order to remain competitive, service providers need more capacity to carry bandwidth-intensive applications; fiber is the ultimate carrier of bandwidth, and GPON is one of the most cost-effective ways for a provider to deploy fiber.

Key Drivers

- IPTV
- Video on Demand
- Video Telephony
- Audio on Demand
- Gaming, etc.
- High speed Internet Access with bandwidth 256 kbps-100Mbps

Worldwide deployment of GPON

With their FTTH deployments ramping up, Canada and Malaysia have joined the list of economies

where at least one percent of households are connected to all-fiber networks, according to the global fiber to the home councils.

South Korea continue to lead in market penetration with FTTH/B reaching 58 percent of households in the country, followed by the United Arab Emirates at 56 percent, Hong Kong at 45 percent, Japan at 42 percent and Taiwan at 29 percent.

The top economies in terms of the number of FTTH/B connections are Japan (22.2 million), China (16.9 million), South Korea (10.4 million), the United States (9.6 million) and Russia (4.5 million).

MobileComm Optical Fiber Solutions

Advantage MobileComm Technologies has a wide experience in implementing major Optical Fiber Cable projects with in time line for various network operators. We offers services like- Route Survey and design; Preparation of BOQ; Trenching, ducting and backfilling; Aerial Cabling; Horizontal Directional Drilling; Cable blowing / pulling; Duct integrity test; Optical Fiber Cable blowing; Fusion Splicing ;Fiber Termination; End to End Link Testing.

For more information visit: www.mcpsinc.com

FTTH Facts

- Number of North American fiber-to-the-home connections (as of March 2011): 7.1 million
- Number of homes passed: 20.9 million FTTH household market penetration in North America: 6.6 percent
- Estimated number of North American providers of FTTH services: More than 770
- Proportion of small independent telecoms that say they will likely upgrade to or expand FTTH service in the next few years: Approximately 75 percent
- Rank of US among world's G-20 nations in terms of FTTH penetration: Third (After South Korea and Japan)



LBS: The Next BIG Market Driver

Like the name implies, Location based Services (LBS) are services that utilize location as a key ingredient of providing relevant information to users. It is because million of consumers carry mobile phones everywhere that LBS can reach virtually anybody, at anytime and anywhere, and today millions of these consumers are already using LBS.

A number of different factors are driving market growth including GPS and smartphone adoption, the success of new business models, continued growth of mobile advertising and the wider coverage and higher speeds of mobile networks. Some examples where LBS applications are used:

- consumers obtain a list of nearby pharmacies
- Friends learn the show times of the movies played at nearby theaters.

Major Players

Some of the major players offering LBS technology in India are Polaris Wireless, Ericsson Technology, CommScope and Creativity Software wherein different players use different technologies for LBS. For e.g. Creativity Software uses predictive matching whereas CommScope uses multiple technologies.

Telecom Operators including Idea Cellular, Rcom, Tata Teleservices, Videocon and Vodafone have even invited quotes for LBS.

Implementation in India

Indian mobile market, having one of the largest wireless networks in the world with around 900 million subscribers has the optimum potential for the location-based services. The areas where LBS has largely affect the usage of technology are to provide information services, navigation, city sightseeing, public services, location based charging services, call routing, asset management, traffic monitoring, and advertisements.

LBS Market

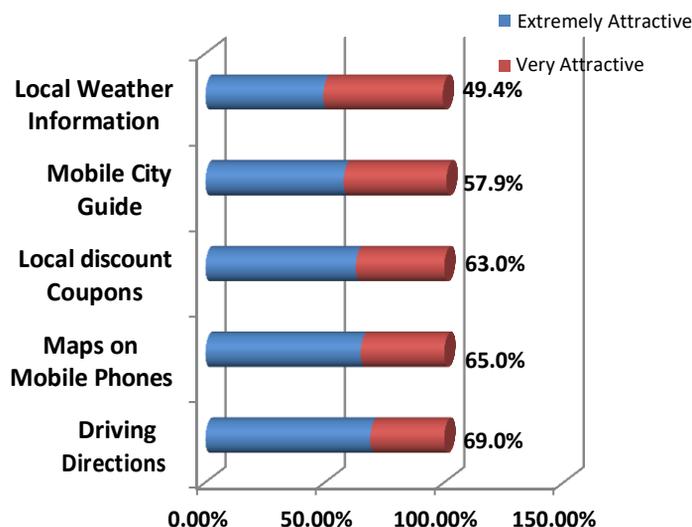
According to the survey conducted by Pyramid Research – The location based services market is enjoying strong growth.

Revenue from global market for Location based services is expected to reach US\$10.3bn in 2015, up from \$2.8bn in 2010.

Although operators are continuing to lose control over location information with the growth of GPS, this is creating important growth opportunities too. In 2008 operators gained around 80% of all location-based service revenue. This has fallen to around half, but the total market has grown more than five fold.

Navigation applications are the largest location-based service revenue generators. Competition is intensifying among operators, handset vendors and operating system developers to capture users.

Top 5 LBS Applications



(Respondents Rate the Applications' Attractiveness to Them)



Key developments Across India

■ Government won't auction all 2G airwaves at one go

The government is unlikely to auction all 2G mobile spectrum that will be available with it in one shot, fearing that such a move would almost certainly lead to supply exceeding demand, depress prices and yield less to the exchequer. The department of telecom (DoT) arrived at this conclusion after results of an audit revealed it would have 923.80 MHz of bandwidth whereas peak requirement would not exceed 725 MHz. Sibal said the government was committed to carry out two auctions - of 2G spectrum and of 4G bandwidth in the 700 MHz band - before March next year.

■ Idea expands managed service agreement with Ericsson

Networking gear maker Ericsson said it has signed an agreement with Idea Cellular to provide managed services in five Indian telecom circles. The circles include Mumbai, Jammu and Kashmir, Himachal Pradesh, North East, and Assam. Under the three-year agreement, Ericsson will be responsible for managing network and field operations, maintenance activities for 2G and 3G sites, network design and planning, network performance improvement, and programme management for infrastructure.

■ Samsung aims to double smartphone sales in 2012

Samsung, the world's second-largest handset maker, said it aims to double sales of smartphones and tablet computers this year with a wider range of Galaxy-branded devices, intensifying competition with Apple Inc. Samsung topped global smartphone sales rankings last year, more than quadrupling smartphone sales to 97.4 million from 2010, according to data from Strategy Analytics. Apple finished a close second, with sales of 93 million smartphones.

Key developments Across Globe

■ Ericsson buys Wi-Fi firm BelAir Networks

Swedish gear maker Ericsson has signed a deal to buy the Canadian Wi-Fi company BelAir Networks. Ericsson said Tuesday it expects to close the acquisition during the first half of 2012, subject to customary conditions. The value of the deal wasn't disclosed. BelAir Networks is based in Ottawa and has around 120 employees, who will now join Ericsson. The Swedish company said the acquisition will give it a strong Wi-Fi portfolio, technological expertise, intellectual property rights and established customer contracts and relationships.

■ US rollout of LTE phone network accelerates

The announcement this week that Deutsche Telekom's T-Mobile USA unit plans to launch LTE services in most of the 50 largest metropolitan markets over the next two years means that all four leading US mobile operators will have commercial LTE networks up and running by the end of 2013, several years ahead of earlier expectations. This rapid shift to LTE in the US primarily reflects the accelerating adoption of smartphones and the emergence of the mobile internet as a real alternative to desktop internet access.

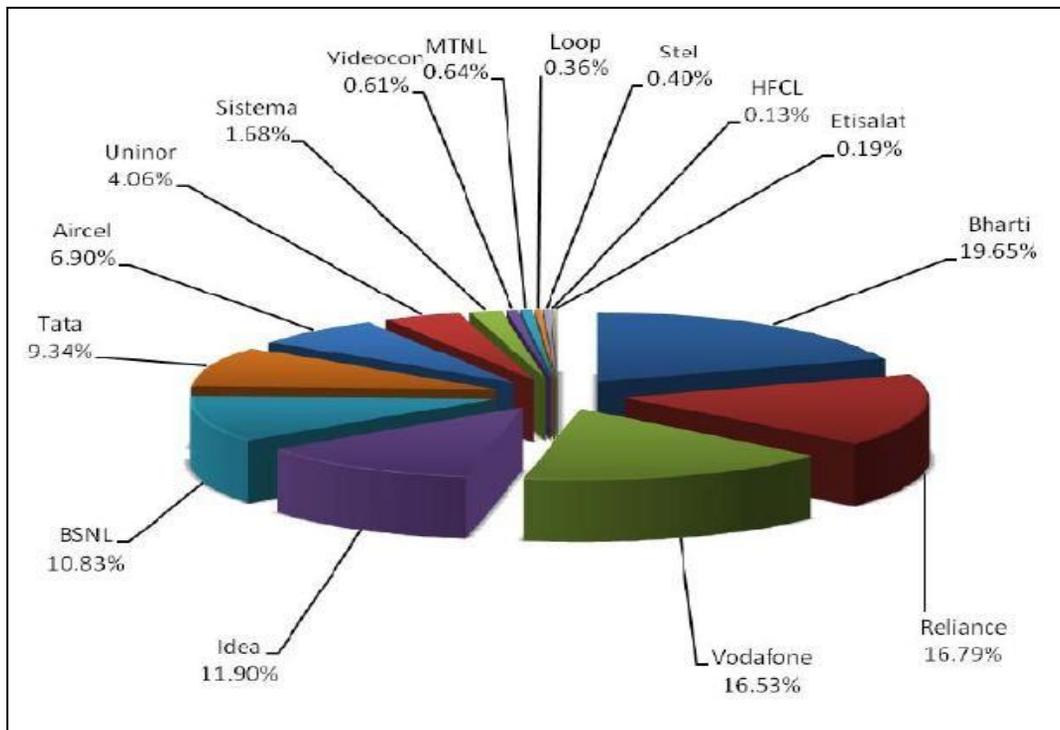
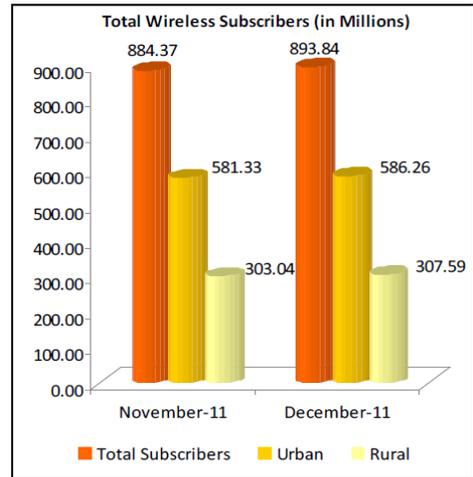
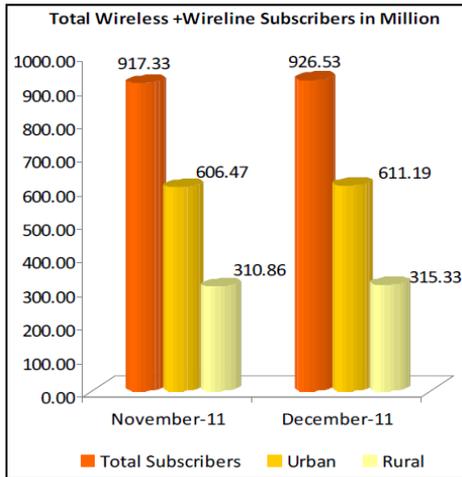
■ New Smartphone Platform From Qualcomm, Mozilla & Telefonica

Low-cost smartphones that can run on a neutral, open platform – unlike the self-contained operating systems of Apple and Android – will be created this year under a partnership between Spain's Telefónica and Mozilla. The two companies have agreed to work together to create a mobile platform that will deliver the first devices that can run on the web



Indian Mobile Subscriber base reaches 893.84 Million in Dec,2011

9.47 Million new mobile subscribers were added in December 2011 taking the total tally to 893.84 million as on December 2011. December also registered the highest growth rate since March last year.



Broadband subscription stands at 13.30 million

Total Broadband subscriber base has increased from 13.13 million at the end of November 2011 to 13.30 million at the end of December 2011, there by showing a monthly growth of 1.30%. Yearly growth in broadband subscribers is 21.88% during the last one year (Dec. 2010 to Dec. 2011).



MobileComm bridges industry-academia gap of young graduates

“May the seeds of today be the fruits of tomorrow”

You wouldn't run a marathon without first going through a training session. Similarly, earning a college degree and making a career out of it takes all that and more.

After working for years to better prepare the young graduates, MobileComm rolled out its orientation workshop at Lovely Professional University allowing the graduates to learn and experience the demands of telecom industry.

Getting Oriented:

The main intent behind this workshop was to highlight the opportunities, growth and profiles in the Telecom industry. Around 250 EEE and E&C graduates were mass educated to further understand and explore the opportunities in wireless communication. Apart from students, senior lecturers, professors and TPOs even shown keen interest in the upcoming industrial requirements and knowledge sharing workshop.



WORKSHOP ON '3G OPTIMIZATION STRATEGIES & PATH TO LTE' 22nd March 2012, Mumbai, India

Overwhelmed and inspired with the success of previous '3G Optimization & Path to LTE' event at Gurgaon, India, MobileComm is filled with enthusiasm to organize the next edition of its highly focused workshop scheduled on 22nd March 2012 at Mumbai, India. Organized by one of the India's key industry player in wireless services, this workshop is one of the only event that will help you to stay on the cutting edge of Next Generation Technologies. With some of the most engaging presenters from the mobile industry it will leave you inspired, energized and awed.

Who Should Attend?

This Workshop is designed to benefit a wide range of professionals involved in Network Planning, Network Optimization, Strategy Determination and Deployment.



Learning Objectives:

The delegate will be able to understand:

- 3G Technology Overview.
- Network Architecture, Interfaces, Components and basic operations of 3G.
- Identify Capacity Optimization and Performance Monitoring in 3G.
- Define Air Interface and Neighbor Optimization.
- Evolution of today's wireless network from 3G to 4G networks.
- Understand What is LTE.
- Understand LTE Network Architecture.
- Identify the key features of LTE-Air Interface.
- Backhaul Challenges for 3G/4G Networks
- Backhaul Solutions & Strategies.

Participant's Impression About our past Events:

"This is a very good attempt at providing a training on upcoming technologies. If possible, the session should be kept for 2 days"

"The workshop was very useful for business operations. The skills learnt will help me to take strategic business decisions in future. Excellent workshop."

Participation to the Workshop is **FREE of Charge**. Last date of sending the Registration is **13th March**.

To Register, visit <http://www.mcpsinc.com/contact-us>

For more information contact Ms. Anu Malhotra @ 0124-4682632.

Movers & Shakers for the Month

No matter what size the organization is and how much we expect to grow in the coming years, having good employees who carry caliber, dedication, passion and professionalism is essential for the success. The achievers of MobileComm come alive in this section.

Appreciation for our VODAFONE-3G-MH&G Team: Team members include:

- Mohit Kapoor
- Anant Kumar,
- Chinmay Panda
- Arun Kumar

This is to appreciate all the efforts and contribution that Mohit Kapoor and his team has extended to us during our 3G Pune P3 exam. This was a very prestigious test and very proud to say that we have passed with flying colors in Pune.

Mohit Kapoor and team from MobileComm has been an integral part of this success story and we highly appreciate their handwork, dedication and honesty. They have given us their best in very difficult situations, Saturday and Sunday included. Hope the team continues with the goodwill they have earned. Requesting senior management of MobileComm to continue with the good support provided to Mohit & team.

- Vinod Kolambekar (Nokia Siemens Network, Pune)

Success Is 99% Failure: The Story of Soichiro Honda

What is a true winner? We may be very familiar of Honda Motors. They're everywhere, from cars to motorcycles. But do you know the real story of how challenging it was for Mr. Soichiro Honda to establish Honda Motors?

Like most other countries, Japan was hit badly by the Great Depression of the 1930s. In 1938, Soichiro Honda was still in school, when he started a little workshop, developing the concept of the piston ring. His plan was to sell the idea to Toyota. He labored night and day, even slept in the workshop, always believing he could perfect his design and produce a worthy product. He was married by now, and pawned his wife's jewelry for working capital.

Finally, came the day he completed his piston ring and was able to take a working sample to Toyota, only to be told that the rings did not meet their standards! Soichiro went back to school and suffered ridicule when the engineers laughed at his design. He refused to give up. Rather than focusing on his failure, he continued working towards his goal. Then, after two more years of struggle and redesign, he won a contract with Toyota.

By now, the Japanese government was gearing up for war! With the contract in hand, Soichiro Honda needed to build a factory to supply Toyota, but building materials were in short supply. Still he would not quit! He invented a new concrete-making process that enabled him to build the factory.

With the factory now built, he was ready for production, but the factory was bombed twice and steel became unavailable, too. Was this the end of the road for Honda? No!

He started collecting surplus gasoline cans discarded by US fighters – "Gifts from President Truman," he called them, which became the new raw materials for his rebuilt manufacturing process. Finally, an earthquake destroyed the factory. After the war, an extreme gasoline

shortage forced people to walk or use bicycles. Honda built a tiny engine and attached it to his bicycle. His neighbors wanted one, and although he tried, materials could not be found and he was unable to supply the demand. Was he ready to give up now? No! Soichiro Honda wrote to 18,000 bicycles shop owners and, in an inspiring letter, asked them to help him revitalize Japan. 5,000 responded and advanced him what little money they could to build his tiny bicycle engines. Unfortunately, the first models were too bulky to work well, so he continued to develop and adapt, until finally, the small engine 'The Super Cub' became a reality and was a success. With success in Japan, Honda began exporting his bicycle engines to Europe and America.



End of story? No! In the 1970s there was another gas shortage, this time in America and automotive fashion turned to small cars. Honda was quick to pick up on the trend. Experts now in small engine design, the company started making tiny cars, smaller than anyone had seen before, and rode another wave of success. Today, Honda Corporation employs over 100,000 people in the USA and Japan, and is one of the world's largest automobile companies. Honda succeeded because one man made a truly committed decision, acted upon it, and made adjustments on a continuous basis. Failure was simply not considered a possibility.



Advertise with us

Doing business without advertising is like winking at a girl in the dark. You know what you're doing but nobody else does. It was an American advertising consultant who said that. But there is some truth in it. Advertising – if you get it right – can work. And sometimes it can work wonders. If you would like to advertise your business in Business Update or online, we'd be happy to provide you with a media pack.

Email at: india.sales@mcpsinc.com

News

Business is not boring. We know that, as do you. So if you have a business story that might be worth sharing with our readers, do get in touch. You can contact us on +91-124-4682626 or email : newsletters@mcpsinc.com . For More Information Visit: <http://www.mcpsinc.com>

OUR GLOBAL PRESENCE

MobileComm Professionals, Inc.

465 W President George Bush Hwy,
Suite 200
Richardson, TX, 75080
Tel: (214) 575-4500
Fax: (214) 575-4502

MobileComm Technologies Canada Inc

151 Checkerberry Cres., Brampton
Ontario, Canada – L6R 2S6
Tel: +1 (647) 407-7705

MobileComm do Brasil S/A

Av. Barão Homem de Melo,
4500 – Cj. 318 Estoril, Belo Horizonte,
MG, CEP: 30450-250
Belo Horizonte : +55(31) 3515-5333
São Paulo: +55(11) 3014-2333

MobileComm Technologies (I) Pvt. Ltd.

774, Udyog Vihar Phase 5
Gurgaon, 122016, Haryana, India
Tel: +91 124 4682630 4682631
Fax: + 91 124 4262757

MobileComm Technologies LLC (ME)

PO Box 1058 PC-112 Ruwi,
Sultanate of OMAN
Tel: +968-24590507/24593427

MobileComm Technologies Africa

F10, Kirunje Appartments
Mapaka Road, WestLands, Nairobi
Tel : +254-736882476

