



Satellite: pushing up profits

The scope for satellite in the retail and banking sectors is enormous. In terms of retail, satellite can maximise the big stores' profits and help create profits for farmers or entrepreneurs in small rural communities. In banking, satellite will enable those farmers to manage the money they earn regardless of how remotely located they are, to enabling large retail firms to give their customers access to payments methods wherever they are. These are just examples. There are a plethora of reasons to use satellite within the banking and retail sectors. Helen Jameson finds out more.

The application used most widely in banking and retail is VSAT. Easily installed, cost-effective and deployable anywhere it is an extremely popular choice.

VSAT satellite networks send and receive data at broadband speeds by bouncing high-frequency radio signals off of satellites in geosynchronous orbit above the equator. At the customer premises, a small dish of about one metre and transmitter are installed in an outdoor location and are connected to the LAN. This VSAT "remote" system connects over the satellite link to a VSAT "hub" that uses large, high-power dishes to communicate with one or thousands of remote sites. The hub facility connects to the Internet and private networks via redundant high-speed terrestrial links, relay data over the wireless satellite link to the remote VSATs.

VSAT satellite connectivity has served WAN requirements for over 25 years, ranging from single locations to over 10,000 nodes. Satellite network services are available virtually anywhere, and provide a wireless, physically diverse "last mile" connection path – which is absolutely critical for 100 percent uptime and disaster recovery applications. Satellite networks are also the preferred delivery method for true multicast data distribution, and are available in narrowband or broadband configurations.

Retail

What can satellite do?

- Point-of-Sale applications;
- Credit card transactions;
- Digital signage;
- Staff training;
- Online sales;
- Security and flexibility; and
- Branch expansion.

Managed network services

Managed Network Services provide a comprehensive and reliable solution that includes various different applications necessary for a



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company to operate effectively, end-to-end. Instead of dealing with multiple providers, all applications and services are placed under one umbrella making it easy to manage and very cost-effective. Often based upon multi-year contracts, managed services include provision of network equipment and related installation, maintenance, and ongoing support.

Digital signage

Digital signage is the phrase used to describe electronic displays that are installed in public places. Being digital, there is no need for them to be removed after an offer, event or promotion is over – the content is simply changed. In addition, videos and animations may be displayed that can be adapted to the environment they are in. Digital signage can even be interactive. It is basically an advertising tool that offers Return on Investment (RoI) – something that the traditional static signs do not do.

Retail is an incredibly competitive and dynamic environment with new products being released on a frequent basis. Stores are constantly looking at how they can maximise their sales. A retailer has specific requirements when choosing a method of promotion such as digital signage and they range from being easy to use, secure and reliable, cost-effective, flexible, based on open standards and capable of delivering audio, video and data simultaneously.

Training

Training personnel is of the utmost importance in retail today. The most important part of a business is the people working on the front line and the service they give to customers. If customers are not satisfied with the service they receive, they vote with their feet. They must be highly knowledgeable and must represent the company impeccably. Training new recruits and updating existing employees with further training is a core part of any retail company. The 'traditional' methods of training take employees out of the place of work, often to a different location meaning that accommodation must be paid for plus the hire of facilities. It also stunts the productivity of those employees being trained – not good from an employers' point of view. In today's world, training must be flexible, must be held on-site and must be highly effective.

Satellite solutions enable every branch of a company, no matter how huge the chain is, to participate in standardised training. The



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branches of a retail chain or bank may often be geographically dispersed and some are more remote than others. By using satellite technology, the geographical location of a branch becomes irrelevant as the same training can be delivered across the board in an interactive classroom style.

Banking

How is satellite used?

- Faster transaction processing/data communication;
- Security and reliability;
- Improved corporate communications;
- Fast and easy enterprise-wide deployment;
- Frame backup;
- Point-of-Sale applications;
- Broadband Internet connectivity;
- Multicast delivery; and
- VPN services and management.

Business continuity

Everybody needs a backup plan. This is especially true for banking and business networks where any loss of connectivity could mean millions of dollars lost. In order to avoid any financial catastrophes in the event of a terrestrial outage, financial institutions and other businesses are turning to satellite to ensure connectivity. When an outage occurs, the connectivity shifts seamlessly from terrestrial to satellite with no fuss, no matter where the affected site is. The service must always be reliable and, of course, cost-effective.

Mobile banking

Mobile Banking or M-Banking is growing in popularity. The term is used to describe the banking services available on a mobile device, such as a mobile phone, where the user can access balance checks, transactions and even make payments. After the revolution of Internet banking, financial institutions are always trying to find new ways to make banking services available on the move, 24 hours a day, 7 days a week. The exponential rise in ownership of the mobile phone and other mobile devices mean that there is a ready-made, enormous target market for mobile banking. According to Celent, a financial con-

sultancy, 35 percent of online households will be using mobile banking by 2010. Eventually, mobile banking will allow users to make payments at the physical point of sale (contactless payments). In more remote locations, satellite cellular backhaul can complete the 'last mile' making mobile banking available where cellular infrastructure does not reach.

Mobile banking is having quite an impact in Africa where Kenya's Equity Building Society has been regularly dispatching a fleet of four-wheel drive vehicles to remote parts of the country using GSM satellite backhaul technology. The mobile units work from an existing bank. Account information is continually transferred from the mobile unit to the bank using GSM technology and satellite dishes located in each village.

The mobile banks services around twenty villages and visit each location once or twice per week. The satellite technology helps GSM overcome its geographical limitations. The mobile banks offer goods and services to many small businesses and smallholder farming households.

Banking services include savings and essential borrowing to encourage new and existing businesses. The ability to bank also increases economic activity in poor areas and improves the living standard and opportunities for the poor. The improved financial services encourage investment in infrastructure.

Without exception, every business wants to maximise their ROI. That's what business is all about – making a profit. The flexibility of satellite means that it can be used for a wide variety of different applications and can be managed for a business by the service provider. The cost-effective nature, especially of VSAT technology, means that new stores and branches can be easily set up and managed even in remote areas.

By using a mixture of satellite and terrestrial connectivity there is always backup in times of outages. Always-on connectivity makes the communication between retailers and suppliers much more efficient and also means that they can be accessed at any time. Retailers and banks can slash their operating costs by using satellite in so many ways.

The importance of these networks cannot be underestimated as they have enabled the growth of both the retail and financial service industries and these are the very things that underpin any economy. ●



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