

Digiweb Wireless – Business Review Document

Group 5

The Organisation Structure

Digiweb Wireless is an Irish internet service provider, which was established in 1997. Their wireless Internet Service emerged from a joint project carried out between the company and the Department of Communications, Marine and Natural Resources called Louth WLAN. The idea of the WLAN was to test new wireless networking technology to find out if it could become a viable option for providing broadband access to rural areas. The trial was a success and Digiweb Wireless now provide cost-effective wireless broadband access to the business, educational and public sectors in the North East along with many other parts of the country. Digiweb Wireless has experienced steady expansion in recent years, due to its rapid response to market demand. It currently serves many towns and cities across the country, but has also become widely recognised as a leading provider of broadband to more rural areas. Business Manager Declan Campbell tells us that, "Digiweb Wirelesses typical customers are outside an area where there is standard broadband availability"⁽¹⁾

The Managing Director of the Dundalk-based company, Digiweb Wireless, is Mr. Colm Piercy.

He has been involved in government reports on the provision of broadband infrastructure and has advised sub-committees using his own knowledge of wireless broadband technology and experience in the market. He explains in one report, "The most important point to emphasise is that wireless delivers the most cost-effective, flexible and rapid deployment of any broadband technology."⁽²⁾ Other members of the Digiweb

Wireless team include, The Key Account Manager – Sarah-Jane Travers, Hugh Logue - Projects Manager, Declan Campbell - Business Development Manager and Nicola McEvoy - Product Manager. The company currently employs thirty members of staff, which is expected to rise to about sixty within the next two years.

In the recent past, the company has doubled its turnover annually and has gained and retained profitability. This track record could not have been achieved without the abilities and skills of the individual members and their effective co-operation as a team. These skills include, a comprehension of (experience with) the technology involved, a perception of the market involved and its direction, a grasp of accounting and financial matters, and a wisdom of advertising and marketing.

Digiweb Wireless had the vision to see that broadband was a product that people wanted, and although it couldn't be provided through more conventional means such as DSL, people were willing to pay to gain access to broadband internet access through other methods.

The Vision

Digiweb Wireless arose at a time when broadband was not something that most people knew about. The government had as yet not fully realised the importance of it, and the major telecoms providers such as Eircom were not interested in upgrading their exchanges and lines to allow for DSL. Digiweb Wireless was also blessed by their geographical location. The major innovators in the company were all based around county Louth, an area that would always be a problem for technologies such as DSL to succeed.

Although there is a relatively high population in the county, it is widely dispersed, therefore ensuring that many dwelling are located far from their telephone exchange. DSL would always therefore be a problem in the county and Digiweb Wireless could be guaranteed that their product would not be under competition from DSL providers. County Louth is also topographically well suited to a product such as wireless broadband. With their initial high site, Digiweb Wireless coverage for a large proportion of the county. This ensured that they would have a large customer base with a single initial investment in a high site.

Digiweb Wireless had the initial vision to see that their wireless broadband product would succeed. They had the vision to see that although broadband internet access was a technology that was being largely ignored, there would in fact be a demand for it. They also had the vision to see that Louth as a location was ideal in ensuring them both a large customer base and protection from competitors offering rival DSL products.

The Operational Strategy

Of all the operational and organisational challenges that would have faced Digiweb Wireless as they tried to bring their broadband internet product to the market, the biggest would have been education of their customer base. When Digiweb Wireless began, very few of their potential customers would have had a deep understanding of the benefits that broadband internet access can provide. It was in a large part up to Digiweb Wireless to educate their customers as well as make them aware that the service would be available in their area. Such a view is shared by Colm Piercy, managing director of Digiweb, a firm that provides both wireless and satellite broadband services. 'People don't immediately appreciate what broadband is about or why they should bother with it,' he

says. 'It's only when they get their hands on it that it clicks with them. Once they have the experience they realise how much it changes the way they work.'

There is also a large organisational and operational challenge in the actual installation of the equipment. Each customer site must be tested to ensure that they have adequate line of sight to the Digiweb Wireless mast, and that they can receive a good signal. This ensures that before Digiweb Wireless can install the service, they must send out crews to perform site tests.

The Key Technologies

The core computing and information technology service of Digiweb Wireless Broadband is providing wireless broadband. They deliver fast flat-rate internet access to homes and businesses. The benefits of this service given on their website⁽³⁾ include cutting internet costs, always having a high speed connection, being able to connect multiple computers, receiving your emails immediately, having a fixed monthly fee, freeing you phone lines, spending as much time online as you need without worrying about extra costs and no frustrating dialups or disconnects.

This technology is license free. Therefore the company can put up an access point anywhere without the need to apply for a licence. These access points are used to connect customers around it to the internet. These wireless access points also cover roughly five times the area of DSL. Wireless broadband is therefore easily available and is not too expensive. The cheapest price for Digiweb Wireless is €39 per month for a download speed of 512Kb, an upload speed of 128Kb, an 8GB traffic quota and 10 email addresses.

The most expensive package €145 per month for a download speed of 2Mb an upload speed of 512Kb, no limit on your traffic quota and 100 email addresses.

In contrast to DSL, which is using lines that have been both designed for other purposes and in many cases will have been layed over 20 years ago, Digiweb Wireless use technology that was specifically designed for the transport of broadband data streams. Digiweb Wireless buy bandwidth off larger telecommunications companies who are not interested in providing broadband internet connections to small personal users. They buy it in bulk and then sell it on to homes and businesses.

Other products that Digiweb Wireless use to support this wireless service include software and hardware security products. Anti-virus and firewall protection, as well as content filtering software are used by Digiweb Wireless to ensure that their network remains secure from the many threats that exist on the internet. They also use security products to protect the information of their clients as it is transported across the wireless medium.

In Ireland most broadband internet suppliers are using DSL (Digital Subscriber Line) to provide their service to their customers. Because DSL uses the national telephone grid there are technological limitations which mean that their service is only available to people living within a relatively small geographical area, typically within 5km of a DSL enabled telephone exchange. This means that people living in more rural areas or further than 5km from their exchange cannot avail of the service. Also as DSL is expensive to rollout telecommunications companies are not prepared to set up the service at exchanges where the number of people within the coverage area is low. For this reason DSL is only

presently available in larger towns and cities around the country. Digiweb Wireless on the other hand do not have this problem, the technology which they are using is designed exclusively to provide high-speed network connections. It does not have to rely on the aging telephone network since it uses radio waves as its means of transport. Also it is much easier for Digiweb Wireless to cover larger rural areas as they only need to setup a new access point whereas a DSL provider is limited by the number and location of telephone exchanges around the country.

The Competitive Environment

Digiweb Wireless have a clear advantage as their service is available to both people living in larger urban centres and also to people living in more rural areas but within the coverage area of their base stations. The introduction of broadband is recent in Ireland and competition hasn't been a major issue for Digiweb Wireless. In future years, it is easy to see wireless broadband becoming more popular especially in semi-rural areas where existing broadband technologies such as Cable and DSL are unavailable.

WiMAX₍₄₎ is a new broadband technology currently being developed. WiMAX aims to provide high-speed broadband of up to 75 Mb/sec and has the potential to transmit as far as 30 miles. This service has very high potential for profit. Users of this service can be connected to the internet all the time from laptops and mobile phones without the need of cables or external antennae. Due to the nature of this service, it will allow new customers to be able to access the service easily, without the need for expensive setup and installation fees that other broadband services require. Businesses and metropolitan areas as well as rural areas will benefit largely from this service. For example, supplying an employee with a laptop and access to the WiMAX network will allow the employee to

travel with full access to the business' network and the internet. Digiweb Wireless have already been awarded (in early 2004) 16 licenses to deploy this technology across the country, which is the most licenses supplied to any one ISP. Digiweb Wireless plan to have this WiMAX network ready by early 2005 and they plan to have this network service over 50% of Ireland.

As demand rises, Digiweb Wireless will be faced with competition from existing as well as new ISPs (Internet Service Providers) that wish to supply a similar service to potential customers. To face this threat, Digiweb Wireless will have to consider and evaluate their existing service. They may have to augment the service and lower prices to compete against other ISPs to entice new customers and to keep existing customers. Digiweb Wireless have already set about dealing with this potential threat. Their early investment in this new WiMAX technology before other competition grows ensures they will be forefront in distributing this service before others. Digiweb Wireless are not the only provider of wireless broadband internet access in Ireland, but they do have an advantage as they were the first to setup such a service in the North East. They still remain the only provider of reasonably priced broadband access in many rural parts of this area. Digiweb Wireless have expanded their coverage quite substantially in the past few months with new access points in Cork, Navan and Waterford and planned expansion into Carlow, Kilkenny, Midleton and Portlaoise to name but a few. Digiweb Wireless can maintain an advantage over competition from new companies trying to break into the market as they have the experience and expertise gained over the past few years of being in operation in the North East. As an established company with a good track record they are a safe bet for companies and home internet users when choosing a service provider.

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