Green company, green field; JDI

A summary of the opportunity that was facing Rob Williams, Director of IT at Liz Earle Beauty Co; a skin care company creating Giga growth.

As part of the management team at Liz Earle Beauty Co., it was no surprise to Director of IT Rob Williams, when they started to discuss moving the business to a new, purpose built building on the Isle of Wight; growth was fierce and plans were ambitious. It was only when he considered the size and complexity of the challenge, that he realised the precise nature of the huge technical opportunity he had been a part of creating.

Undaunted, Rob Williams now confidently reflects on how Liz Earle Beauty Co. closed the entire customer centre at 2000 one Friday evening and re-opened it on the new network, in the new building, at 0900 the following Saturday morning, with no lost calls or service interruption. This is a case study in informed choice, essential infrastructure planning and IT management excellence which illustrates how best to approach the selection of a network cabling infrastructure, built to last and fit for purpose.

Liz Earle Naturally Active Skincare was formed in 1995 by former beauty writer and broadcaster Liz Earle and beauty industry marketing expert Kim Buckland. Despite having worked in the beauty industry for more than a decade, Liz had yet to discover high quality skincare with active botanical ingredients that really worked for all types of skin, even sensitive skin. It was her great friend Kim who suggested combining Liz's vast research knowledge with her marketing skills to create their own range.

Setting out to develop a product range that was a fuss-free pampering daily treat, dependable, affordable and above all that gave outstanding results, they were determined to use the best possible naturally active ingredients inspiring the name Naturally Active Skincare; the company's brand.

Today from their base on the Isle of Wight, Liz Earle Beauty Co. employs over 300 people and is expanding rapidly, both at home and internationally with customers in 83 countries worldwide. It is hard not to notice the strength and dominating presence of the cultural values at Liz Earle Beauty Co., known as the 'Precious Recipe' which sets out a high value approach in all things, including people, attitudes, quality and, communication.

Rob Williams, Director of IT at Liz Earle Beauty Co. recalls conversations with management colleagues about the need for a new building, some twelve months before it was agreed and in his mind, this is when the infrastructure cabling project started. The Liz Earle Beauty Co. culture has firmly spread itself into the IT function. Rob Williams says, "As a function, we keep harvesting skills and knowledge; it's what we do." The result of this was an increasing awareness of the cabling technologies - ratified and under review - and the many and varied options,
their applications and benefits; all vital should the project come to fruition and a timely heads up on the complexities that cabling a new building would involve. During this period running up to the decision, the company continued to grow and open new sales channels.

It was becoming clearer, that the possible move to the new building would need a network that could not only deal with growth, but many (as yet unidentified) demands for network presence. And so the project for what was to be named The Green House came into being. Liz Earle Beauty Co. needed to move fast on many fronts as the new building was to be very special - with significant environmental aspirations. There were already plans to use the rain water for flushing, thermal cores below ground to provide heating and these were certain to set the scene for what would be deemed acceptable from the IT planning and implementation process.

Faced with the reality of this new challenge Rob Williams remembers reading, "That around ninety per cent of the available budget in such projects went on active equipment such as network storage, VoIP, laptops etc, and only a maximum of ten on the unseen network cabling." He adds, "The danger at this point was that we would allocate a similar proportion of our decision making time and planning to designing and acquiring our network cabling; this would have been a complete disaster, as computer equipment and even active equipment will be disposed of in a couple of years, but the network cabling is expected to last for at least ten, and nothing like as easy to replace."

The period of knowledge harvesting was now about to pay off; the scene was set for a critical business decision that could quite literally support or cripple the future performance of the business. Rob Williams says, "It was at this point that we realised that our task was not to select a supplier, but rather to identify an infrastructure partner who could take us forward for the long term." However and unusually, this was not to be a search for a partner who could deliver the design and installation services, but a more complex mix where the partner was closely aligned to a credible manufacturer, creating a powerful tripartite force.

During a period of critical evaluation, it was realised that the company chosen for the electrical installations had a sister company specialising in data cabling; SEC DataCom. Business development manager of SEC DataCom, Merrick Chivers explains "We were brought in to Liz Earle Beauty Co. by our electrical counterparts who had already established a proven track record of consistent quality work. Having taken time to understand the scope of the data requirement we then, in turn, recommended leading manufacturer Siemon as the company with the best technology and proven system to serve what was required." After these introductions a period of thorough evaluation followed - including case study review, reference visits, technology briefings and other scrutiny. Only once this evaluation was successfully completed were SEC DataCom, backed by cabling manufacturer Siemon, selected to design and install the data network for The Green House. Rob Williams thinks back and says, "There was not one occasion when either SEC DataCom or Siemon, failed to deliver what we asked for."

Thinking and planning so far ahead is not that common in IT, and this is understandable as many purchases only see short operational lives and therefore the impact of a bad choice, can be easily finessed away. Once again though we see the Liz Earle Beauty Co. culture driving through and Rob Williams explains, "As a business, we operate a five year planning cycle; this distils into 100 day plans covering the full operational gambit, from the car park to technology. Without this acute understanding of business demands, the cabling choice would have been grounded in either guess work, or overkill, compounded with unnecessary expenditure just in case, and a very uncertain future."

With plans for the company to move into new markets, business enabling technologies such as streaming media, video conferencing, virtualisation and IP telephony, were either already being tested on the network, or seen as an inevitable acquisition for the future. The bottom line analysis showed that the Liz Earle Beauty Co. network of the future would transport a lot of data and some of it - for example from the graphics team - was starting to see the transmission of huge single files (Giga Bytes) . It was clear that the business would need high level data and telephony services for its call centre, storage for the huge volumes of data being generated and future capacity for the unknown, as required.

Considering network options Rob Williams remembers, "It would have been the easiest thing in the world to install a new Cat 5e cabling system as at the time there were no commercially available equipment to fully capitalize on the performance of 10Gb/s cabling, as there were no PC NICs and only a few server NICs. 10Gb/s looked like a technology that wasn't quite mainstream." However, the IT team chose to look beyond what, on the surface, seemed a simple choice, realising that this decision was too big to leave to chance. Both SEC DataCom and Siemon offered information on the pace of network speed advancements including the growing adoption of 10Gb/s and provided recommendations on network future-proofing. From this information it was clear; the only answer was to install a 10Gb/s Cat 6A network. Initially it would operate at 1Gb/s but would obviously be ready for 10Gb/s as the need arose.

The decision to install an end to end (floor box to cabinet) 10 Gb/s network has already been vindicated and Rob Williams confidently asserts that he would already be struggling with a Cat 5e solution. He concludes, "10 Gb/s was such an obvious choice. You simply cannot come along later and disrupt the business with yet another major change."

Graeme Stoker, marketing manager EMEA at Siemon explains why for a moment they made the decision a little bit more complex. "Siemon has a solid reputation as a shielded cabling systems supplier and has added 10Gb/s to this. We are strong believers that shielded systems offer superior benefits to unshielded (UTP) cabling systems once you move to 10Gb/s. We firmly maintain that it is the most cost effective way in which to install Category 6A and we also believe that it's greener" Saying this Stoker underlines the savings that can be made during cable manufacture and installation when using shielded cable. "The unshielded cable is a larger, wider, tighter twist to meet the requirements of Alien Crosstalk (ANEXT), which is not an issue for shielded cables. Smaller cable diameters reduce the use of cable jacket materials vs. UTP - UTP's use of pair spacing to defeat ANEXT requires more pair separation and therefore more material. Smaller cable also maximizes pathway space to increase airflow for energy efficient cooling - equipment cooling among the most significant power consumers in the computer room. Finally smaller cable reduces the need for cable tray and conduit to support larger UTP cables requiring larger pathways and increased rack space, physical separation and presenting other installation challenges." Additionally, testing of a Cat 6A UTP solution in contrast to the shielded option can be a costly undertaking, with tests needed for Alien Crosstalk. No such testing for the shielded option is necessary as this performance is designed in.

While many user organisations perceive 10Gb/s as new, manufacturers like Siemon have in fact been selling shielded 10Gb/s capable product since 1999 (their Category 7 TERA product), so they have acquired high end shielded expertise over a comparatively long period of time. Additionally, some companies only promote 10Gb/s for the more arterial applications such as inter-cabinet links in the data centre. In contrast, Siemon's system is seen as a complete end-to-end solution, or as Stoker puts it, "from the desktop to the frame."

Getting the final word, Rob Williams of Liz Earle Beauty Co. opines, "Active investment is easy when you remember that your cabling infrastructure will have to last for ten to fifteen years. How does anyone know what services will traverse the network then? Siemon know their stuff and SEC DataCom know how to deliver it into a business setting."

About Siemon

Established in 1903, Siemon is an industry leader specialising in the manufacture and innovation of high quality, high-performance network cabling solutions. With global offices and partners throughout the world, Siemon offers the most comprehensive suite of copper (unshielded and shielded twisted-pair) and fibre cabling systems available and is one of only three network cabling infrastructure companies worldwide with true global partnership capabilities. With over 400 active patents specific to structured cabling, Siemon Labs invests heavily in R&D and development of industry standards, underlining the company's long-term commitment to its customers and the industry.
About Liz Earle

Liz Earle Naturally Active Skincare was formed in 1995 by former beauty writer and broadcaster Liz Earle and beauty industry marketing expert Kim Buckland. The products are designed to be a fuss-free pampering daily treat, dependable, affordable and above all to give outstanding results by using the best possible naturally active ingredients. Liz and Kim set down clear principles from the outset that included a genuine commitment to quality and service for their customers, from the integrity of the ingredients and the friendly voice on the phone, to the way each individual product is beautifully hand tissue-wrapped and the in-depth advice their customer care team provide. Liz Earle Naturally Active Skincare is one of the best-kept British beauty secrets - a modern, multi-channel beauty company unlike any other and is the largest independent beauty brand in the UK. www.lizearle.com

About SEC Datacom

SSE Contracting Ltd is a wholly owned subsidiary of SSE, one of the UK's largest utilities companies. Since privatisation in 1991, SSE Contracting has grown year on year and now services customer's nationwide from locations throughout the UK. In the financial year ending 31st March 2008, revenues exceeded £380 million. SSE Datacom is the specialist Systems Integration business of SSE Contracting Ltd. With significant experience, resources and infrastructure, solutions are provided in the key areas of Data, Voice, Fibre, Networking and Power. Since 1991, SSE Datacom has been providing the specialist resources to build communications infrastructures. Skills from the electrical contracting business have been matched with the IT expertise from a company with its own extensive corporate networks, to offer total capability in this field. Significant growth has lead to SSE Datacom becoming a major System Integrator with locations nationally. www.ssedatacom.com