

## **Case Study: Industrial Building Management**

### **The Growth of Industrial Building Management**

Industrial Building Management first began as a husband and wife run business in the late 1980's by David and Sally Olsen. David was the site manager managing numerous large building projects his company acquired whilst Sally was the company's financial manager in charge of payments to suppliers, employees and contractors. A workplace accident in the early 1990's with several layers of scaffolding becoming unstable and collapsing saw David sustain serious injuries and receive a large Work Cover payment upon which he retired and no longer wanted anything to do with the company due to injuries from the building site, leaving his wife still the finance manager but having to hire a new site manager and several other staff due to the increase in projects being won by the company. The aim of Industrial Building Management is to build and develop sustainable buildings integrating green building initiatives into the mainstream design, construction and operation of the buildings.

Sally hired family friend and fellow construction manager Archer Wilson to replace her husband David in his position. Archer had managed several large American building projects for large companies primarily in The United Kingdom and Germany but lacks experience with green building initiatives having only used the materials in a few projects and never having developed or constructed any sustainable buildings. His lack of experience in this area worried Sally which lead her to hire Aaron Wilks in the role of Environmental Materials Advisor whose role was directly to assist Archer with the green initiatives role of his job as well as advise the decision makers within the organisation about the best ways to apply the initiatives, purchasing of environmentally friendly materials and generally assist Archer within his role in regards to environmental materials and decisions regarding the materials. Aaron has had several years experience in developing green buildings and the purchasing of materials for these buildings he graduated from the University of Queensland with a Bachelor of Environmental Protection and Management and while working in the industry completed a Masters of Business Administration.

By 1999 Industrial Building Management had grown from its original base of 30 people (including building contractors) to a staff of 150 (mainly building contractors) which were based on various building locations around the state with 3 site managers and 1 state manager reporting to the central office by telephone, email and video conferencing services.

### **The Growth of Computing at Industrial Building Management**

Both Archer and Sally were aware that managing numerous large scale projects meant their need for well run and maintained computing facilities to maintain a competitive advantage in the highly competitive green building industry. Both agreed that in order to keep and maintain their competitive advantage within the industry they would need to invest in the latest high-tech computers and hardware in order to keep this status and continue to maintain building as their core business.

The computing facilities at Industrial Building Management in the late 1980's reflected their aim to acquire high end technology to remain competitive with David and Sally having their own laptop and desktop machines, an off the shelf server which managed file sharing between computers and a tape

drive to backup modified files. These computers are used by staff in conjunction with both landline and mobile phones to contact staff on various building sites. Communication to the Internet is achieved through a 1200bps modem on the network connecting all computers with the Internet. Sally assists where she can with the managing of the network and technical support as the network has been setup by an external contractor as a one off job.

In the late 1990's when the organisation rapidly increased its employment numbers Industrial Building Management invested in 20 Dell Latitude 9000 laptop computers with an external monitor for staff members who worked in the offices of Industrial Building Management and site managers who travelled from site to site. At the same time new software was being installed across all of the companies machines to better keep track of project expenses, the software used by all site managers and the accounting/finance team. The roll out and installation of the software was going to take approximately four months to install and customise. The server was upgraded to a Dell Optipex 22000 which would automatically backup files stored on the network each night. Dial-up services used within the organisation were upgraded to 1.5mbps ADSL modem which was attached to the network to cope with the large amount of traffic. CISCO IP phones were also implemented on the network allowing staff to make phone calls 'over the internet' reducing the costs of using landlines.

The server, laptops and telecommunications facilities were maintained by a single staff member Brendan O'Mally who is completing a Computer Science Degree at RMIT. The previous use of external maintenance (when required) proved very expensive for the organisation and resulted in considerable down time and further costs associated with the time spent on site by contractors who were not familiar with the system therefore Industrial Building Management decided it would be cheaper in the long term to hire someone part time to manage the systems at their main office. This turned out to be a more time consuming job than expected for Brendan who had staff from the office calling him on his days off when he was at University about general desktop support issues, personal computer enquiries and wanting assistance with the recently installed software packages as they had received no training and Brendan was the only IT support staff member for the organisation.

Since the implementation of the new software 'Trackit' installed for keeping track of project expenses and the lack of support and training associated with the implementation, employees were not using the software. Individual site managers were creating their own end user applications for keeping track of expenses and storing them on privately owned USB and removable hard drives because they were not familiar with the software and had received no training. Each site manager had their own way of keeping track of expenses that did not involve using 'Trackit'. This meant that by using their own hardware on the network opened the network up to possible viruses and Trojans being copied from computer to computer and the financial information the site managers were entering in their end user applications was not being backed up.

Gregory Jones (Site Manager) would not use 'Trackit' due to the lack of training he had received which was the general consensus with all of the site managers including Archer the state manager who didn't believe his team should have to use software they were unfamiliar with. Gregory created a spreadsheet to keep track of all the payments for materials and other purchase for the building site which he kept on a personal USB that he carried around. The spread allowed him to create the

flexibility he wanted in entering and managing data which created ease of use and clarity for him when referring to it. While Charles Morriss another site manager prefers to use a database that he build to manage the sites finances as he build it in an application he is very familiar and has had a lot of experience with and then enter the numbers where he believes they need to go within 'Trackit'. The final site manager Madeline Roberts refuses to use the software not only because there has been no training offered to employees but because she was not consulted over the selection and implementation of the software within Industrial Building Management. Therefore she has also developed her own end user application to manager her sites finances with.

A few months after the implementation of 'Trackit' Sally and her second in charge Bella Murphy audits the software in order to account for the total income and expenditure of Industrial Building Management for the previous three months. While looking through the auditing software Sally and Bella see big gaps in the information that has been entered and wonder why. Bella wonders if it is due to the lack of training provided to site managers on using the software but doesn't want to suggest this to Sally as she was firm when the software was first implemented that if site managers could manage a building site using 'Trackit' would be easy for them and would not require them to have any training. Instead Bella suggests organising a meeting with the site managers and state manager while Sally would rather call them and tell them they need to use the software, Bella talks Sally around and organises a meeting with the site managers to find out why they are not using the software.

Sally and Bella met with Archer, Gregory, Charles and Madeline in order to determine why they were not using the newly implemented and highly rated 'Trackit' system. Archer on behalf of the site managers explained to Sally that they had received no training on how to use the new system did not want to take time out of their extremely busy schedules playing around with the software when they had not received training and may not be performing tasks correctly that they would later have to go back and re-do. Sally explained to the group that she assumed they would have had previous experience with systems similar to the 'Trackit' implementation therefore assuming it would be easy for them to use and the organisation would not need to provide training to the site managers.

## **The Future of Industrial Building Management**

Training was organised by the finance team for site managers in order to learn how to use and apply 'Trackit' to their daily activities and accounting which was spread over two months at times arranged by the teams around projects. As a result of this Industrial Building Managements book auditing went smoothly with records of each sites purchased and received goods which made accounting for finances simpler for the finance team. Brenden O'Mally resigned from the company due to being constantly bombarded by Industrial Building Management employees for technical support on his days off and regarding issues he was not hired to support or resolve. As a result of this the company hired recent TAFE graduate Ben Simmonds full time for network architecture, server and technical support for employees. Since his arrival the Industrial Building Management employees have been a lot happier using new technologies in their role as they have someone to assist them if needed.

Now that all of the site managers are using 'Trackit' the organisation has saved a significant amount of time and money auditing books and finances and can now put the resources into applying for and winning new contracts. Industrial Building Management won several multimillion dollar contracts in

the following years allowing the company to expand into numerous other sites around not only the state but the country.

## Industrial Building Management Team: Member Profiles

**David Olsen (Retired)** is the co-owner of Industrial Building Management with his wife Sally. He has run and managed numerous large building site and projects using sustainable building materials from around the world. He is a brilliant manager and designer who is always willing to listen to colleagues about improvements that can be made and will take on board any reasonable ideas suggested. David is liked by everyone in the work place for his ability to give everyone a fair go and is known for his outgoing personality and supportiveness for members in his organisation.

**Sally Olsen** is the financial manager and co-owner of Industrial Building Management; she has a Bachelor of Accounting and Masters of Marketing from the University of Sydney and believes her qualifications always mean she is right over anyone else that may have a different opinion. She tends to go into a situation without considering other people and their needs simply concerned with what is best for her and her interests at the time but is a caring person at heart; people simply find it hard to deal with her personality. Sally has little time for people who cannot pickup a concept immediately not taking into consideration those people who might need a little longer to understand the concept or idea.

**Archer Wilson** is a close family friend of the Olsens who has managed several large American building projects for companies in the United Kingdom and Germany, he lacks experience with the application of green materials within the projects but makes up for it with enthusiasm and the willingness to learn about them from expert Aaron Wilks. Archer is a very well organised manager who believes listening to his team is an important part of his role therefore organised weekly team meetings with the site managers. He is always willing to take on confrontation in order to receive the results he wants for his team and believes working together is better than working as an individual.

**Aaron Wilks** was hired to directly to assist Archer with the green initiatives role of his job as well as advise the decision makers within the organisation about the best ways to apply the initiatives, purchasing of environmentally friendly materials and generally assist Archer within his role in regards to environmental materials and decisions regarding the materials. Aaron has had several years experience in developing green buildings and the purchasing of materials for these buildings he graduated from the University of Queensland with a Bachelor of Environmental Protection and Management and while working in the industry completed a Masters of Business Administration. Aaron likes both discussing and applying green building initiatives and is always ready to answer any questions or assist in regards to these matters. He is someone who will not take a back seat when it comes to making decisions within his field of expertise and likes to spend time research the application of new innovative technologies.

**Brenden O'Mally** is a hard working IT support officer for Industrial Building Management part time while completing a Computer Science Degree at RMIT. Due to his busy lifestyle and hectic study schedule he will only support the systems outlined in his job description rather than end users and their issues. He is constantly being called by employees on his days off asking for support not only regarding their work information technology issues but those affecting their personal computers as

well. This has resulted in him becoming short tempered and abrupt with staff at Industrial Building Management as he is constantly being asked questions by them that are not in his job description leaving little time to concentrate on the work he is getting paid for.

**Gregory Jones** is a site manager of one of the Industrial Building Management sites, he is very rigid and does not like or accept change lightly. He is an older man with a large amount of experience in the building industry and does not like technology in which he is not familiar with. Gregory likes his strict routine both in the work place and in life. He does not like suggestions from colleagues about how he should be managing his site or staff.

**Charles Morriss** considers himself to be up to date with modern technology and software he is in his mid thirties and has worked in the construction industry since graduating from University with a Bachelor of Construction Management. His employees feel they can come to him with any issues they have as he provides them with good advice and is always happy to listen to any suggestions they have about the site, this make Charlies quite popular among his peers. Being relatively young he enjoys change and the challenges and benefits that it brings.

**Madeline Roberts** is the only female site manager in the Industrial Building Management company, she is a mother of two who enjoys the challenges of working in the construction industry. Madeline dislikes change and will go out of her way to avoid it at all costs, she can be very stubborn when not consulted of any change within her field or area and will take a long time to accept and adopt it which can cause problems with her colleagues and team and they feel the effects of such a strong personality.

**Bella Murphy** is the second in charge within the finance/account team she is a very well rounded woman who enjoys being in touch with colleagues and understanding their needs and how they will result in a more positive and efficient work place. She is very good at understanding organisations and determining the points at which they can improve to become more beneficial for everyone involved. Although Bella does not like to undermine her managers by putting forward her point of view and will often sit back in a situation and let others speak and put their opinions forward.

**Ben Simmonds** is a recent TAFE graduate hired by Industrial Building Management he is a very outgoing young man and likes to assist employees with any technical problems they might be having. He is very patient with those employees who are not as tech-savvy and have difficulty expressing their IT issues. Ben is quite happy to spend time back after work assisting staff with issues that he was unable to help with during the day due to the large amount of employees the Industrial Business Management has.