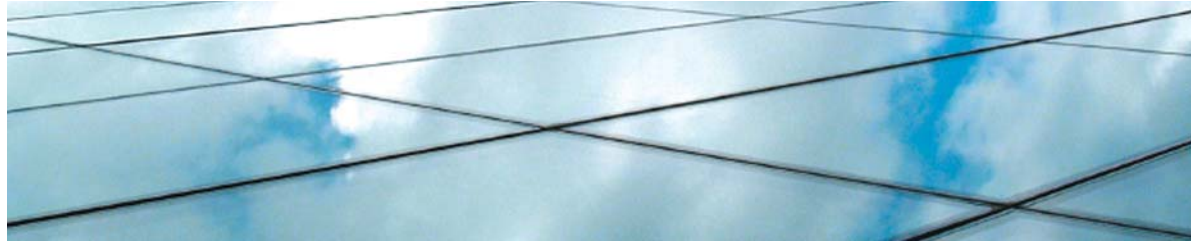


longview

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CASE STUDY



WELCOME

Longhaus are pleased to present a special **Case Study** edition of *Longview*, provided with the permission of outgoing Queensland Transport CIO, Mr. Paul Summergreene. It outlines work done to-date on developing a proof-of-concept approach towards the adoption and integration of emerging corporate social computing technologies into the enterprise environment. This month Paul will take on his new role as Chief Information Officer, Queensland Health. Both Queensland Health and Queensland Transport are listed as MIS Top 100 ICT organisations in Australia. Longhaus worked closely with Queensland Transport over a number of months on projects including ICT financial management framework development, and the technology marketing of the New Queensland Driver's Licence project. We wish Paul all the best in his new role.

Creating a Virtual Built Environment: The Avatar of the Enterprise

THE BUSINESS PROBLEM

It is a truism that people drive the ultimate success of every organisation. Therefore, attracting and retaining top talent is a key goal for any large enterprise. In the buoyant Australian and global economies more work means more workers. Competition for resources can be intense and most industries, including government, are experiencing the challenges inherent in a very tight labour market.

Following a machinery-of-government restructure late in 2006, Queensland Transport CIO Paul Summergreene undertook an internal environmental scan focused on customer relationships, service delivery, products, services, organisational culture, and skills of the newly created Information Management Division (IMD). This review was spearheaded through a change management project tasked to identify the elements necessary to foster a long-term unified labour force and culture. The "individual within the division" was identified as a key driver of the project. In fact, it was subsequently ratified by research as the number one catalyst for future success.

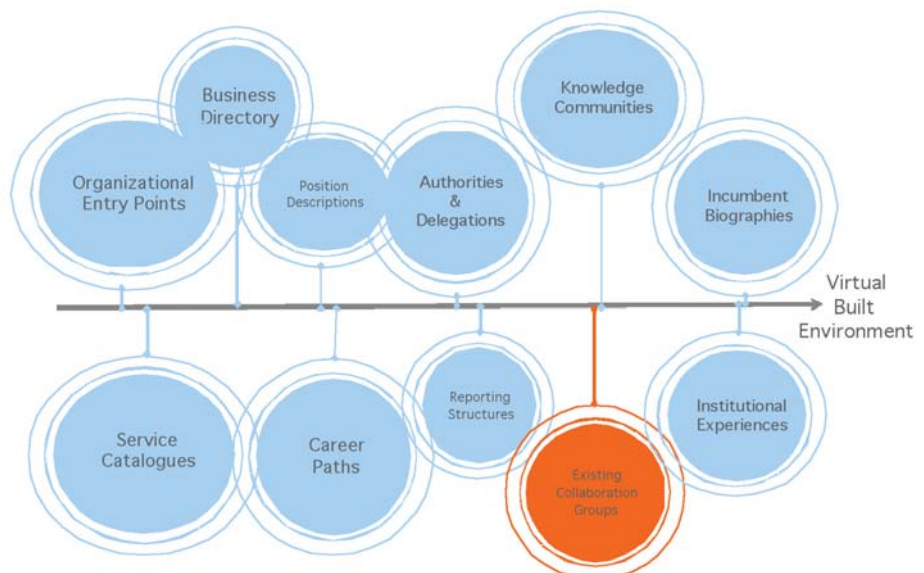
"A quadrupling of staff over a 5-year period in the ICT

division of Queensland Transport, coupled with exponential project growth, led to complexity across both business and culture" said Mr Summergreene.

Longhaus was commissioned to undertake extensive research and analysis including online surveys and focus groups across over 700 staff and customers of the division. This initial research identified a happy, albeit information-starved culture. Staff and customers wanted more communication and better access to information. Yet intriguingly they predominantly wanted it about themselves and each other. They wanted lots of it; but only if it was specific to their careers, and their life inside IMD.

As with many large enterprises, while the information that staff and customers wanted did exist, it was largely inaccessible and lived within fragmented islands of data. Technically speaking, the required approach was a unified, collaborative data hub with a unique presentation layer. Yet it needed to be unlike existing or traditional channels such as databases and intranets that were unpopular, over-populated, and under-utilised.

Figure 1: Traditional transactional delivery: fragmented islands of staff data



See the Queensland Transport VBE demo online:

Visit www.longhaus.com

- ▶ Complimentary
- ▶ Presentations

THE CONCEPT

Forged through decades of government compliance, the organisational view of information within Queensland Transport was process-oriented. Going some way to achieving the desired cultural outcomes uncovered through the environmental scan necessitated that this process-oriented model change to an individual, highly contextual, and information-driven view. As the main benefactor of “the individual within the division”, the business area found to be most affected and capable of providing a successful change platform was Human Resources.

According to project lead and Longhaus Managing Director Peter Carr, “Having invested many weeks in stakeholder engagement, research, data collection and analysis; identifying the drivers for change, the desired outcomes, the affected business processes, and the sought after information, the final challenge became how to roll-out and present a new “data hub” in a way that would be meaningful and embraced by staff as a true change in direction. They had invested a lot and IMD owed them something substantial. The final delivery concept was to create a virtual built environment on which to overlay concise, self-validating, contextual information for staff and eventually customers.”

The virtual built environment allows for the validation and spatial mapping of information required within a corporate environment through the association of four key capabilities: a built environment, interaction, navigation, and collaboration.	
COLLABORATION	Social and information networks are created when two or more parties can openly and freely exchange information. Organisations are increasingly moving to incorporate emerging social technologies into traditional email and instant messaging collaboration environments. These unified communications platforms then integrate into the fabric of the virtual built environment.
NAVIGATION	Natural search occurs when the capability exists to spatially move an avatar through a virtual built environment. The power of spatial search is highlighted through applications such as Google maps.
INTERACTION	Inhabitants of a virtual built environment are known as avatars or residents. They are representative of staff or customers. The avatar personalises the interaction with the information being sought.
BUILT ENVIRONMENT	The built environment is the manmade surroundings that provide the setting for human activity. Virtual built environments provide a powerful online, 3-dimensional representation of the physical workplace.

Table 1: Defining the Virtual Built Environment (VBE)

“Having identified the core business processes impeding the desired information and communication flow we simply set about crafting the existing data in the right context. The actual information required was no more complex than detailed relational career paths throughout the division. But really, the information could have been anything - customer data, approval data, business directory data, or even marketing data.”

Queensland Transport has always been a key player in the physical built environment and as such the choice of a virtual built environment would seem an obvious choice for one of Australia’s largest public sector infrastructure portfolios. The concept of utilising a virtual built environment to deliver information was seen as a positive and deliberate move away from a process view through the analogy of the physical world.

Large and complex organisations also often utilise building or construction analogies as an easy way to deal with the abstraction of information within a physical

environment they already know and understand. It is a key principle of enterprise architecture. As a result, the decision to utilise a virtual built environment as the channel was ultimately not a big call for a seasoned ICT provider like Transport’s Information Management Division.

Life inside the Information Management Division VBE

For IMD, the virtual built environment will become the presentation layer for a traditional hub of data - making navigation and discovery easier and more intuitive. Adopting the approach will allow a completely familiar and social way of interacting with information and provide organisational benefits beyond the capabilities of a traditional environment. The project will become the catalyst for major differences in the treatment of enterprise information. Those differences provided through the interactive context of a virtual built environment are expressed through the following views (see Table 2: Paradigm Shift).

CASE STUDY

PARADIGM SHIFT	
PRE-CHANGE	POST-CHANGE
Process-oriented View	Information-driven View
Transaction	Interaction
Mandated	Choice
Hierarchy	Organic
Rationality	Belief
Certainty	Meaning
Linear	Conceptual
What happens	What it means
One event	Multiple meanings
What is produced	What is expressed
Structured	United
Customer or Staff	Member
Segmentation	Community, Cultures or Tribes

Using these differences as key drivers, the creation of a conceptual virtual built environment will be focused on delivering a platform for personalised information discovery specific to the responsibilities and opportunities for individual employees within the organisation.

Although the ICT industry is strewn with the concepts of “exchange” and “collaboration”, such terms are really actions that occur after an audience has engaged with its content. The VBE approach will help to address this challenge by first getting staff comfortable with their environment before encouraging them to live in it with others.

According to Peter Carr, “Overcoming the challenges of introducing a new information delivery channel - the virtual environment - into government was a trial but the concept was strengthened by the background data collection over the first months of the project. The data provided irrefutable evidence to the project team and its sponsors. To simply roll-out the required information through existing process-oriented channels would fail to deliver the individual context that underpinned the project and staff would not engage. Virtual reality is a super-appealing channel because it provides immediate gratification - like an executive dashboard - for information requirements. But we really pushed the data as the reason to do it.”



Figure 2: Selected overview of conceptual built environment storyboards.

THE ROADMAP

INFORMATION COMPLEXITY, COLLABORATION, AND SOCIAL NETWORKS

As with anything new, the requirement for an early quick win necessitated the pursuit of a senior stakeholder to drive the project outcomes (beyond the original CIO-sponsor). One senior manager prepared to embrace the new concept was Transport's Director of Information Management and Performance, Amanda Chalmers. Her branch will provide the content for the development of an initial stand-alone interactive kiosk.

"What we saw was the opportunity to document and be clear about the functions, roles, and responsibilities of everyone within our branch. It also provides a new channel to promote ourselves within the division and attract new staff. More broadly though, the approach is both fresh and appealing from a departmental perspective in that it promotes visibility and understanding into what is important to staff. From an information management perspective it also provides us with the opportunity to extend development work to promote a single repository,

self-service model for people to access only what they want. It's a great model to deploy one source of truth."

Ultimately the data-rich analysis for the project highlighted a 4-stage roadmap to address all the challenges identified by the environmental scan.

- Stage 1:** Development of a stand-alone interactive kiosk to cement proof-of-concept and usability concerns;
- Stage 2:** Integration of existing collaboration technologies through embedded directories;
- Stage 3:** Integration of social computing concepts enabled by Web 2.0 technologies, such as blogs, wikis, tag-clouds, staff profiling, knowledge groups etc;
- Stage 4:** Selected intranet redevelopment utilising a common virtual built environment to deliver a more personalised, self-validated view of existing information.

TECHNOLOGY

Keeping any project that operates within an ICT environment squarely focused on a business outcome for any length of time is difficult. Having set the business direction and following final agreement on a proof of concept, the solution will move to incorporate technology as a key enabler to the final three stages of the project. Many of those technologies will involve capabilities that fall squarely into the emerging practices of corporate social computing.

By Longhaus definition, corporate social computing seeks to harnesses the information exchange that occurs between communities of interest. It seeks to harness the power of this new information currency, transpose it into organisational culture, and infuse partner networks, and customer groups to engage in activities designed to benefit and enrich the membership of those communities. The ultimate aim is to capture the knowledge of the corporate network and thereby deliver information-based competitive advantage to major companies. Major information technology vendors such as

IBM and Microsoft have developed the technology tools to deliver such capability. Those companies that use it, they say, will devastate competitors where they stand.

As a Lotus Notes environment, Queensland Transport will undoubtedly benefit from the integration of new and existing collaboration technologies including Lotus Connections and the Websphere portal suite. For Microsoft-based organisations, the same opportunities exist through Microsoft's MOSS offerings.

The typical configuration for Lotus Connections is based on the J2EE-development environment, hosted on a WebSphere Application Server. The web services platform is typically coupled with either DB2 or an Oracle RDBMS. The platform's blog component is driven by the Apache Roller 3.0 open source blog server. The Profiles component requires the availability of LDAP or Active Directory services.

For information on Apache Roller Project visit <http://rollerweblogger.org/project/page/about>.

THE FINAL WORD

Working within the parameters of a "virtual built environment" gave the right sense of where the individual, their career paths, and future opportunities intersected across the new division. But it also highlighted an exciting potential for communicating and developing the relationship of the ICT division with other Transport Divisions, and government departments through special whole-of-government projects such as the New Queensland Driver's Licence (NQDL).

According to Paul Summergreene, "While the initial outcomes of the project will not provide a panacea for instant change, they have clearly identified several high impact opportunities for the division and our staff. The virtual built environment concept has also provided us with a platform for internal growth, and importantly, external

service delivery through applying our skills to new and emerging social computing and Web 2.0 technologies." The change project has provided Queensland Transport with the burning platform to develop social networks across the department and drive change as a leader in the adoption of meaningful technology solutions across Queensland and Australian public sector organisations. For an overview of what the user will see through the IMD virtual built environment download a demonstration by visiting www.longhaus.com.

The Queensland Transport change project concept was developed utilising the research and advisory capabilities of Longhaus' *Social Software Strategies* in conjunction with the integrated design concepts of Ivoke.

CASE STUDY

DESIGNING THE CUSTOM VIRTUAL BUILT ENVIRONMENT

The conceptual virtual built environment for this project was developed by experiential design company Ivoke. As Queensland Transport were not seeking a “graphical” design solution Longhaus engaged with Ivoke due to their background in applied industrial design in the real built environment.



Ivoke uses proprietary creative processes to deliver innovation and opportunity by searching for the meaning of a problem within a spatial context. The Ivoke environment was able to:

- ▶ Encourage excitement and enjoyment from experiencing old information in new ways;
- ▶ Describe concepts as visual representations allowing for contextual interpretation by the audience;
- ▶ Develop a GUI that represented the organisation, its structure and objectives;
- ▶ Place the customer at the centre of the problem while retaining relevance with other functions;
- ▶ Give the user the sense that “it’s all about me”;
- ▶ Deliver an environment that provided the opportunity to integrate with existing tools like intranets;
- ▶ Ease access to complex information through personalised search and “open doors”; and
- ▶ Deliver user-based empathy while retaining customer advocacy.

Longhaus’ Social Software Strategies

Social computing will bring with it key changes to customer and staff behaviours, as well as to the current portfolio of traditional corporate business systems. In this new world Enterprise Resource Planning (ERP), Content Management (CMS), and Customer Relationship Management (CRM) are no longer sufficient. Forward-looking enterprises need to assess the key impacts of social software and use this to drive the next major wave of technology investment as they strive to reach an optimised

internet presence, digital distribution channel, or online approach.

Using repeatable research and design principles Longhaus’ *Social Software Strategies* assists organisations implement and integrate fast flowing social and collaborative technology change. The program assesses platforms, users, technologies, vendors, and information before mapping the technical architecture of critical information and service dependencies across the organisation against a structured framework.

For more information about any parts of this case study please contact Kristine at kristine.carr@longhaus.com

