Business to Employee (B2E) E-Business Model: a Service to Employees or Organisational Management?

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Abstract  
This paper is a discussion of the B2E e-business model from the perspectives of employee services and organisational management. It includes literature to support B2E as employee services and organisational management with benefits to both. Intranets and portals are technologies supporting the implementation of the B2E e-business model which are also discussed. A case study is included to understand the application of the B2E model in a large organisation. Case study analysis indicates that the B2E e-business model is a service to the employees, however, these services are to support organisational efficiencies.

Key Words  
B2E e-business model, intranets, employee services, organisational management

Introduction  
Three important e-business models are business to consumer (B2C), business to business (B2B) and business to employee (B2E). The first two models have received substantial academic and business attention while the business to employee (B2E) is least researched and published. Business to Employee (B2E) is an e-business model in which an organisation delivers services, information, or products to its employees. It enables management to reach out to employees electronically as they streamline time and labour intensive organisational processes. A comprehensive B2E program has three components: online business processes, online people management and online services to the workplace community Hansen and Deimler (2001). B2E systems are implemented
on the Intranets which emulate the Internet protocols of hypertext technology, links and browsers (Singh, 2002). Turban et al (2004) suggested that B2E e-business model increases employee productivity by emulating B2C and B2B e-business models where employees are treated as customers. As a result, organisations have satisfied employees and management reach out to employees electronically.

Therefore is B2E e-business a service to the employees, or organisational management? This paper discusses the B2E business model with a case study illustrating its application in a large organisation. The next sections of the paper include a review of literature, the case study, case study analysis, and a discussion of the B2E e-business model.

**Literature Review**

Large organisations are now dealing with their employees electronically using the Intranet technology. The Intranet combined with other technologies supports the B2E e-business model. Three important components of the B2E e-business model according to Hansen and Deimler (2001) are online business processes, online people management and online services to the workplace community. Turban et al (2006) on the other hand describe the B2E e-business model as intrabusiness e-commerce in which an organisation delivers products or services to its employees. E-business models aim to use and leverage the unique qualities of the Internet and the World Wide Web to conduct business (Singh, 2004). The business to employee (B2E) e-business model lets companies satisfy employees’ needs while streamlining business processes. Application of the Intranets for organisational and people management also reduces organisational hierarchies as it enables employees to interact more along the lines of work than along the lines of command (Singh). It is an e-business model that creates value for organisations by re-engineering processes to serve employees via Intranets and associated technologies.

Although the above literature discussion indicates B2E to be organisation and employee management, re-engineered processes the services to employees (Turban, 2006) include:

- Communicating with remote employees electronically;
- Providing training and education via intranets;
- Enabling employees desktop purchasing supplies from electronic catalogues;
- Use of corporate intranet for the purchase of discounted insurance, travel packages and tickets to events;
- Providing electronic tools to employees for communication, collaboration and information discovery;
- Offering corporate stores on the intranet that sell the companies’ products to their own employees, usually at a discount with payment deducted from payroll;
- Information dissemination online enabling employees to manage their fringe benefits where relevant.

Business to employees (B2E) services thus include electronic communication, online education, e-procurement, easy access to information, easier collaboration, purchase of company products and company sponsored products such as insurance, holidays and travel.

**Technologies for B2E E-Business Model**

Technological advancements are the underlying foundation upon which electronic business has been developed. The B2E e-business model is developed on the Intranet using the Internet philosophy of hypertext technology protocol, links, browser and integrated processes (Singh, 2002). An Intranet is an intra-organisational information technology (IT) network that supports communication and information dissemination within the organisation (Clark and Preece, 2005). It enhances organisational productivity by facilitating internal communication electronically, allowing collaborative processing and permitting group communications, and providing transparency to information (Hansen and Deimler (2001). This is further supported by Wachter and Gupta (1997), who suggest that Intranets act as
conduits of within organisation communication, enhancing collaboration and productivity. Intranets are configured in such a way as to be shielded from the outside world. It is secured behind a company’s firewall (Singh, 2004). Intranets are also used for internal marketing communications and may include staff phone directories, staff procedures or quality manuals, information agents such as product specifications, competitor information, factory schedules, stocking levels, staff bulletin or newsletter and training courses (Singh, 2002). Product catalogues, statements of company policies, customer and employee directories, company newsletters, annual reports, electronic databases and any other information from employees or the management can also be placed on the Intranet (Farhoomand and Lovelock, 2001). Organisational intranet configurations are influenced by social, economic and political contexts and actions, orientations and concerns of actors most directly and locally involved (Turban et al, 2006). For an organisation the Intranet also acts as a publication medium which can be readily accessed and searched, and operates as a medium of discussion and record. Major functions of the Intranet identified by (Farhoomand and Lovelock, 2001) include information dissemination within the organisation and facilitation of communication and collaboration among the organisation’s employees, suppliers, customers and business partners.

Although Intranets support the B2E e-business model implementation, they are usually combined with enterprise portals for business to employee communication and interactions. A corporate portal as described by Kounidis (2000) is a personalised, single point of access through a Web browser to critical business information both inside and outside the organisation. Corporate portals give employees, business partners and customers a focal point for interaction with the firm (Turban et al, 2006). There are different types of portals, however, in this paper we focus on employee portals which according to Turban et al (p 309) ‘are used for training, dissemination of company news and information, discussion groups, and access to relevant organisational information’. Portal technology within organisations grew with the proliferation of Intranets (Hawking and Stein, 2007). An enterprise portal gives employees one place from which to obtain not only information, but also services. Security mechanisms and screening rules to control access of information by authentication is an essential requirement for security of information. The B2E e-business model is Intranet and portal dependent based on Internet protocols.

**Benefits of B2E E-Business Model**

The wide adoption of the B2E e-business by organisations is due to the benefits achieved from its application. The following benefits of B2E have been identified by Farhoomand and Lovelock (2001):

- Employees are able to make informed decisions with up to date information and are able to make better responses to organisational issues;
- Time saved from searching relevant information enables an employee to spend that time on other activities enhancing productivity;
- Team project management is enhanced with easy access to research data, designs and work schedules;
- Project teams that are global, remote or virtual can be formed economically being able to capitalise on the expertise of employees at different branches of the company for better outcomes;
- Teleconferences over the Intranet incorporating text, video and audio are easily managed for companies that have branches in different locations;
- Information on the Intranet helps organisations reduce costs of printing, photocopying and distribution.

Dube et al, (2005) explain that with easy access to relevant information, services and products B2E e-business systems help organisations develop productive employees who can cope in today’s fast pace environment. Major benefits of B2E according to Lai (2001) include data
access, cost savings, communications and management, however, their contribution regarding productivity and collaboration has not been addressed.

B2E benefits according to Rahim and Singh (2006) have been categorised into employee benefits and organisational benefits. Employee benefits include IT-enabled systems (intranet based corporate portal, employee portals, ESS) supporting information dissemination, staff bulletin or newsletter, training courses or other specific information. Employees are able to access organisational information from any geographic location and work remotely, have more time for other activities, work in teams and become more productive. Organisational benefits according to Rahim and Singh include tremendous cost reduction, better decisions and improved business processes. This is supported by Dafoulas et al., (2002) who suggest that many organisations implement B2E for reducing general and administrative costs. Farhoomand and Lovelock (2001) suggest that from B2E improved organisational decisions are achieved and J. H. Huang (2004) suggest that improved business processes between employees and organisations are also achieved.

From the above literature two important applications of B2E emerge: organisational management (Hansen and Deimler, 2001) and services to employees (Turban et al, 2006), with benefits to both organisations and employees (Rahim and Singh, 2006). B2E is also recognised for enhanced communication in the organisation and improved organisation performance (Lai, 2001), and improved business processes (Farhoomand and Lovelock, 2001) and J. H. Huang (2004). Therefore is B2E e-business model referred a service to employees as referred to by some or organisational management as purported by others?

Case Study
This organisation is a large Australian university electronically managing its employees made up of academics and administrative staff. It is dual sector education provider with University and College (TAFE). Number of employees at this organisation is 3,345, made up of 88 executives, 1,147 academics, 1,576 general staff and 534 staff from the TAFE section. The Intranet and the B2E system were implemented in a phased form since the year 2000. Technologies integrated with the Intranet at the organisation are a portal, an academic management system, a student enrolment system, an employee support system and two enterprise resource planning systems to support organisational work. Employees access the Intranet via a staff login. Relevant and frequently used information is available online, access to which is via a staff login. For all new information the management sends emails to employees alerting them to new information on the web site (portal). The web enables quick searches, allows password access to databases for relevant information, provides links to government regulations and policies, allows employee access to project related software and links to all information relevant to employee

Research Method
To address the above question a case study of a large Australian organisation that implemented the Intranet for employee service and organisational effectiveness was undertaken. A case study is an empirical enquiry that investigates a contemporary phenomenon within its real life context, when the boundaries between phenomenon and context are not clearly evident (Yin, 2003). In this research the case study allowed exploration of the B2E e-business model and an attempt to understand its application and impact in an organisation. The organisation is large with a large number of units and groups of employees including senior management, academics and administrative staff. Sources of evidence were obtained from documents, organisation web site, direct observations, archival records, web site analysis and interviews with employees and management. Analysis of case study is qualitative and interpretive based on a comparison of issues from the case study findings and literature review.
functions. The Intranet also includes information on policies and strategies of the organisation, research and academic programs, news, calendar, timetables, minutes of important meetings, job advertisements, promotion criteria, training, software downloads, information technology service request, library access, people information (who is who), salary slips, leave balances, leave applications and approvals, and other relevant information. The Employee Support Systems is developed on SAP system and integrated to the University Intranet.

The B2E e-business model gives employees 24*7 access to information, allows them to pick up training at their own convenience, conveniently manage projects from their desk tops, collaborate with other employees on projects, and work efficiently. The organisation has integrated and improved administrative processes, and supports transparency of information and enhanced knowledge sharing. Some departments have also implemented desk top purchasing of stationery, catering and some other basic requirements. It has also promoted networking for activities within the organisation such as research, teaching and learning, study abroad and other assignments. Placing information online also meant data cleaning and updating information. Integrating business processes meant business re-engineering. The B2E e-business system allows staff input encouraging staff participation in university activities, transparency and expects employees manage their own information.

As with most technologies the challenges the organisation faced with B2E system were the high costs of implementation and integration with disparate systems and databases. Managing the change from paper based administration to electronic management of documents, policies and procedures was an enormous task. Changing the culture from paper based communications to electronic information, requests, approvals, use of passwords electronic filing of information and independent information access required a major effort. Other challenges faced by the organisation with B2E e-business system were high turnover of skilled staff for regular information updates and information overload at times for the employees.

The success factors included the size of organisation with the ability to pay for the costs of all electronic processes and a large information technology department within the university. The nature of work at this organisation requires it to have an IT department to support the IT services for all faculties and administration. Being a University the organisation also provides IT education requiring it to have high level IT expertise amongst its staff. All employees are educated users. The qualification levels for administrative and support staff range from specialist college education to postgraduate qualifications. For academic staff at universities generally accepted level of qualification is a PhD. The senior management are people who have moved up in rank from academic positions. The B2E interaction entails communication, information and service exchange between the employer and employee where users and respondents are known, legally bound and related to work within the organisation, holding a hundred percent trust. All employees at this organisation have access to technology, either a desk top computer or a lap top as well as remote access to the intranet. This enables 24* 7 information access to all employees. For effective and continued use of the academic management system, the online enrolment system, the employee support system and other administrative, management, teaching and research tools the Intranet included online training programs which employees could complete either formally during work hours, informally after work hours or as many times as they needed to for proficiency in usability. Being a university the organisation provides IT education with experts and highly regarded academics who help detect flaws and provide useful feedback for improvements. It also supports knowledge sharing and management within the system.

Analysis
The case study analysis is based on employee services and organisational management issues based on Turban et al’s (2006) description of B2E services and Hansen and Deimler’s (2001) description of organisational management. It also includes employee and organisational benefits to further establish the significance of B2E to the organisation. From the case study the following issues were highlighted.

**Table One B2E Services to Employees**

<table>
<thead>
<tr>
<th>B2E Services - Literature Findings</th>
<th>B2E Services – Case Study</th>
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<tbody>
<tr>
<td>Remote employee communication</td>
<td>Remote access of Intranet, email and other University information</td>
</tr>
<tr>
<td>Training and education</td>
<td>Online education programs for some administrative and academic tasks</td>
</tr>
<tr>
<td>E-procurement of office supplies</td>
<td>Purchase of stationery and other office supplies from desktop</td>
</tr>
<tr>
<td>Discounted insurance, travel, tickets to events</td>
<td>N/A</td>
</tr>
<tr>
<td>Collaboration and knowledge discovery</td>
<td>Networking and collaborative research teams</td>
</tr>
<tr>
<td>Selling company product to employees</td>
<td>N/A</td>
</tr>
<tr>
<td>Information dissemination</td>
<td>All organisational information available electronically and email alerts about new information and policies</td>
</tr>
</tbody>
</table>

From Table One it is obvious that this organisation provides services to employees that are work related. Additional services supporting employees outside work such as tickets to events, travel and cheap insurance are not available. Thus it is inferred that the B2E services at this large organisation is to support employee duties in relation to their responsibilities at work. Although B2E entails more services to employees, this organisation did not include them in the model.
Data in column two of Table Two indicates that organisational processes are re-engineered, integrated and made available online to enable employees carry out their daily work. Access to this information is also available remotely and on a 24/7 basis. All organisational related processes such as the academic management system, the online enrolment system, the employee support system and other administrative, management, teaching and research tools have also been integrated to the organisational system for easy access.

From the case study it is also apparent that people related information is available online, however, direct people management and monitoring their work and movement is not implemented. Processes for people include e-payroll, e-leave application and approval, e-training, integrated human resources, e-advertisement of positions, e-information on promotions, position changes and other people related information.

Services to employees are discussed at the end of Table One. Other services include all corporate information, online electronic communication and transparency. Providing easy access to information is a service to the employees that supports their work and gives them the freedom to produce improved outcomes.

Table 3  B2E Benefits

<table>
<thead>
<tr>
<th>Literature</th>
<th>Case Study</th>
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<tr>
<td>Organisational Benefits</td>
<td>Cost savings</td>
</tr>
<tr>
<td></td>
<td>Time savings</td>
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<tr>
<td></td>
<td>Better information dissemination</td>
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<td></td>
<td>Improved business processes</td>
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<tr>
<td></td>
<td>Informed decisions</td>
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<td></td>
<td>Improved communication</td>
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</tbody>
</table>
Better knowledge management and sharing: Knowledge is published on web sites for sharing and making decisions. Research findings are better shared.

Trained workforce: All employees became computer literate.

<table>
<thead>
<tr>
<th>Employee Benefits</th>
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<tbody>
<tr>
<td>Remote access to organisational systems</td>
</tr>
<tr>
<td>Employees could access information 24*7</td>
</tr>
<tr>
<td>Easy access to information</td>
</tr>
<tr>
<td>All information (policies, strategies, customer details, research, enrolments, calendar, project related software, etc) to accomplish tasks easily</td>
</tr>
<tr>
<td>Leave management</td>
</tr>
<tr>
<td>Employee Support System (ESS) enables electronic leave applications, cancellations, planning, salary</td>
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<tr>
<td>Team work</td>
</tr>
<tr>
<td>Ability to work in teams, tap into the expertise of colleagues and quickly complete projects</td>
</tr>
<tr>
<td>Enhanced knowledge</td>
</tr>
<tr>
<td>Access to documents, training and knowledge lead to enhanced learning</td>
</tr>
<tr>
<td>Convenience</td>
</tr>
<tr>
<td>Easy access to information, remote access, emails, attached files all lead to employee convenience, ability to work outside normal hours</td>
</tr>
</tbody>
</table>

From Table Three it is obvious that organisational benefits of B2E e-business model are greater than employee benefits. With improved business processes, enhanced learning and electronic communication the organisation has achieved savings, achieved innovation, enhanced knowledge management and supported group and team work. Employee benefits from the B2E e-business model are those that support their work. It provides them with convenience, training, remote access, easy access to information and better communication.

**Discussion**

This paper describes the B2E e-business model from literature and an exploratory study of its application in a large organisation. The case study findings and analysis discussed above indicate that the B2E e-business model is a type of employee service that is useful to the organisation. Based on the case study findings, discussed below are some interesting B2E e-business model issues. With online and integrated business processes productivity increases as employees end up with more time becoming more productive. This reduces delays in processes, enables self-service, empowering individuals to take control.

As organisations implement B2E e-business model they get all employees to use the Intranet. This ensures the intranet is deployed as a useful tool and incentive, encouraging employees to refer to the site/portal for their work. Winning the confidence of employees to continually use the site means creating an atmosphere of continuous innovation and a techno-centric workforce.

B2E e-business provides internal orientation of e-business, and prepares employees to manage and deal with e-business issues when it comes to dealing with customers and business partners. The B2E e-business model can be emulated to achieve success with B2C and B2B e-business.

From the benefits of the B2E e-business model it is clear that organisational efficiencies are achieved. These are derived from quick information retrieval and decision making as it reduces paperwork and the number of people required to deliver internal and external mail. Electronic information is also easily filed and
retrieved as and when needed. Downtime in making decisions has been reduced due to easy and remote access to information. Due to electronic communication meeting times have also been reduced to some extent.

Integrated processes, easy access to information and links to relevant information regarding the environment in which the organisation operates, enabled cross functional teams and cross pollination of ideas leading to informed and improved decisions, new opportunities and better outcomes for research collaboration, customer acquisition, partnerships and international collaborations. Group decisions are superior and better informed once again contributing to business efficiencies.

Substantial cost reductions from B2E e-business are evident from the case study. Firstly the number of phone calls has been reduced. Costs associated with paper and labour has reduced. Savings have also accrued from staff training by making available online training modules which staff can undertake at their own convenience and as many times as they need to become proficient.

B2E e-business has led to new ways of working, addressing organisational matters and dealing with colleagues and clients. It has supported e-procurement and e-negotiations, leading to transparency, efficiencies and application of state of the art systems and methods of work. The organisation saved time and money and better deployed the human resource talent.

**Conclusion**

This paper is an attempt to explain the B2E e-business model and illustrates that it is equally important as the B2C and B2B models. It also illustrates that B2E is internal to organisations, leads to improved and integrated business processes, supports employee work and activities and is based on Internet protocols. However, the case study discussed in this paper clearly demonstrates the B2E e-business model to be organisational management. Further research is required to establish if the findings of this case study are relevant and the same in other organisations, as well as large, medium and small organisations.

**References**


