

# Barriers to on-line learning – the experience of the Scottish Executive Business Development Unit

John F. Bothams and Lesley Fordyce

University of Strathclyde Graduate School of Business and Scottish Executive  
[j.f.bothams@strath.ac.uk](mailto:j.f.bothams@strath.ac.uk) and [lesley.fordyce@scotland.gsi.gov.uk](mailto:lesley.fordyce@scotland.gsi.gov.uk)

## ABSTRACT

This paper discusses the experience of the Scottish Executive's Business Development Unit when the individuals within the Unit were introduced to online learning as a knowledge exchange facility and vehicle for development of both individuals and the professional Unit. It describes the approach adopted in partnership with the University of Strathclyde Graduate School of Business. In particular, it explores the difficulties associated with making on-line learning a reality in an already established community. It also discusses the remedial action taken in an attempt to develop a solution to address the cultural, personal and environmental barriers to on-line learning cited by individuals within the community. In total it provides a useful comparator for other networked communities

## Keywords

Community, Experiential, Barriers, Knowledge and On-line learning

## INTRODUCTION

The Scottish Executive is the administrative arm of the Scottish Parliament. Prior to devolution it was referred to as The Scottish Office. Its current role is to support the Ministerial team in Scotland to help deliver an improvement in the lives of the Scottish people. It is made up of eight Departments and currently employs approximately 4,000 people. The Business Development Unit (BDU) is the internal consultancy unit of the Scottish Executive. It consists of 12 business analysts and has a remit to assist in the delivery of performance improvement and organisational change within the Scottish Executive.

The Scottish Executive has undergone significant change following devolution. The Business Development Unit has therefore been operating in a demanding environment. In addition, the Unit itself has undergone significant change in recent years. Its history is as an Efficiency Unit, focused heavily on large-scale structure and staffing reviews of business areas - in essence, a staff inspection type function. When the current Head of the Unit assumed post in 1999, the focus and direction of the Unit started to change and this change has increased in pace over the past 18 months. The focus of the Unit has moved away from an audit and inspection type role into a managerial support role and the work of the Unit is increasingly with managers in one of the eight Departments and other key players who can help drive performance improvement, for example, information technology, human resource and training and development professionals. The changed emphasis of the Unit means that the individuals within the Unit increasingly find themselves working in a devolved environment as the only source of expertise on organisational development matters.

## THE IMPORTANCE OF ON-LINE LEARNING

The environment within which BDU colleagues work presents a number of challenges on a weekly, if not daily, basis. The demand for BDU services out-strips supply and, increasingly, individual business analysts find themselves working in partnership with managers within specific business areas in a more reactive and pressured environment than before. The focus is on delivery of improvements (measured in terms of financial resources, quality of service, customer focus or modern working practices). Thus, a key element of BDU service is efficient and effective problem solving whilst also supporting managers with any change management that is required. Increasingly, the analysts within BDU are working on solo assignments rather than in teams and often in

geographically remote sites from their corporate centre. The opportunities to bridge information, knowledge and development gaps via more conventional routes are therefore becoming increasingly difficult to create.

### **THE APPROACH : A TAILORED PARTNERSHIP**

The Head of the Unit approached the University of Strathclyde Graduate School of Business to assist in developing a tailored solution for the Unit. The 'solution' developed in partnership with GSB centred on the establishment of a supported Intranet site which was hosted by GSB and accessed by Unit colleagues via the Internet. The Intranet included a knowledge area, where reading material could be posted, and discussion forums for colleagues to share operational problems and also to discuss developmental issues. In addition, the site provided colleagues with access to some business databases. The facility was not intended to replace all other forms of training and development for the Unit; rather it was always the intention that it would be complementary.

The benefits of this arrangement appeared to be significant. The partnership provided BDU colleagues with access to a range of business knowledge within GSB – an essential resource in helping BDU colleagues provide value added solutions to Scottish Executive managers. In addition, the Intranet site was supported externally thus removing any maintenance burden from BDU and yet providing the communication medium required to engage within their community when working on particular assignments or addressing development needs. The benefits to GSB were also significant – an established community within an organisation in which to trial their supported Intranet facility. GSB already used this facility extensively to support communities of MBA students but this opportunity would provide evidence about the validity of this method of supported learning to a community which was not self-selected. The individuals within the BDU community were bonded by their organisational environment and their professional roles - not by any common personal development interest (as is the case with MBA students who have a common interest in further developing their knowledge base).

The on-line learning facility was introduced to BDU colleagues as part of a two-day workshop at GSB. This workshop also included an investigation of emotional intelligence and narrative analysis in explaining organisational behaviour and change. The workshop was designed specifically to present on-line learning as a complement to other forms of more conventional training and development. During this session participants were introduced to MindManager™ electronic mind mapping software ([www.murges.com](http://www.murges.com)).

### **INITIAL BDU RESPONSE TO ON-LINE LEARNING**

In the first few weeks of use of the on-line learning facility, BDU colleagues were keen to access the site and share information. However, very quickly it became apparent that the site was not being utilised as frequently or as fully as had been planned and it soon fell into disuse. Some colleagues cited problems with the technology; others explained they simply did not have the time to use the facility. This presented an interesting set of circumstances.

It would have been quite easy at this point to call a halt to the attempts being made to establish on-line learning within the BDU community. However, this point proved to be the start of the learning process for all concerned. Although the Head of the Unit recognised the problems cited by colleagues, for example, technology problems in accessing and updating the site and workload problems squeezing out the time for development, she sensed that these were the superficial problems which, even if addressed, would not make on-line learning a reality within BDU. In order to understand the specific problems associated with introducing on-line learning into the BDU community, it was decided to commission GSB to explore more fully with BDU colleagues the reasons why they were struggling to make on-line learning a reality.

### **IDENTIFYING THE ISSUES**

It was evident that there were issues which were much deeper than simply technology and self-management - issues which were likely to be much more personal. In an attempt to determine whether this was indeed the case, the GSB author agreed to undertake a series of interviews to determine the root causes.

Interviews were held with groups of three to four staff within the Unit and their personal views on the use (or rather lack of use) of the on-line learning facility were recorded and mind mapped. This medium was used for two reasons:

- it reinforced use of a networked medium for information sharing;
- the medium had been absorbed into the community.

The result was a detailed understanding of the barriers to online learning within the Unit. Interestingly, although technological and workload barriers were cited, they were overshadowed by cultural, personal and environmental barriers. The following sections highlight the key issues identified.

### **Personal barriers**

There were a number of personal barriers cited which reflected:

- lack of confidence in personal abilities;
- fear of exposure amongst peers;
- fear of exposure to experts within GSB;
- feeling threatened by this new mode of learning.

These aspects indicated some discomfort in sharing information and knowledge within the BDU community in case it exposed perceived personal weaknesses. This highlighted that individuals within BDU were viewing their contributions to the site in performance management rather than developmental terms and this was proving to be a significant deterrent for them in terms of maximising the use of the facility. In other communities which are established with the aim of learning together (for example, MBA communities), personal barriers may not be so evident because there is a common understanding that the purpose of the community is primarily developmental. These psychological safety factors are critical in learning design. (Bothams, 2002)

### **Technological problems**

There were, not surprisingly, a number of technical difficulties experienced with the site. Very simply, BDU colleagues often experienced difficulty accessing the site and also had difficulty posting messages to discussion forums. Inevitably, the facility was very quickly deemed not to be robust enough to use. There were also concerns raised about the lack of interactivity which the site supported. Colleagues were of the opinion it was simply acting as a large data repository and were unconvinced of the direct relevance of this to their work.

### **Environmental Factors**

A few very obvious issues emerged under this heading. It was noted that an open plan office was not always conducive to learning and that increasingly communication was via e-mail and not personal. It was noted that the on-line learning facility encouraged a rather impersonal form of communication which was not always welcomed by colleagues within the BDU community. In addition to the physical environment, there were issues around the emotional environment within which the Unit was functioning. Colleagues were struggling at a personal level with the changing nature of the Unit and therefore the degree of emotional support they required was quite significant.

### **Culture of the Unit**

There were some very positive issues to emerge from the interviews which can be categorized as 'the Unit culture'. It was very apparent that BDU colleagues were very willing to try in the initial stages and welcomed a new approach for the development of themselves and the collective Unit. However, the decision to explore on-line learning was viewed as an imposition and colleagues did not feel they had been fully involved in the decision making process. In addition, it was generally accepted that development and learning were not formally recognised as part of the job by individuals within the BDU community and that this was a prerequisite if ventures of this nature are to be successful in future.

It is apparent from the above analysis that the original issues of technological problems and workload were not the issues which emerged strongly from the in-depth analysis. Lack of time to undertake the on-line learning was cited as a factor but, in reality, it did not adversely affect the acceptance of the approach as much as people had originally anticipated.

The evidence collected in the interviews proved very revealing and also provided a way forward for the Unit. Many of the cultural issues identified centred around ownership of, and involvement in, the decision making process, and therefore any attempts to reinvigorate the on-line learning would have to be seen to be inclusive. The Head of the Unit suggested an approach which would (i) involve all members of BDU, (ii) provide a safe environment for colleagues to practise their consultancy skills and (iii) would seek to develop a way forward for the on-line learning approach. The suggestion - a consulting assignment in which BDU colleagues would be invited to address the problems of a fictitious organisation which was experiencing exactly the same set of problems as the BDU were facing in relation to on-line learning.

## **DEVELOPING THE SOLUTION**

The suggestion that the Unit fix their own problems but in an objective and almost abstract way was well received by BDU colleagues – it was a case of administering some of their own medicine but with the benefit of a fictitious client in order that any personal ownership for the problems could be removed from the equation. The GSB author undertook the role of the client which was helpful in establishing a degree of objectivity for the consulting teams. Thus, a two-day consulting assignment was developed and colleagues within the Unit were divided into two consulting teams to consider the evidence described above and develop a solution. The teams independently developed very different but complementary solutions; one team attempting to solve the problem at a more strategic level and the other focusing on a more operational solution.

### **Strategic solution (Team 1)**

The strategic solution identified cultural and personal issues as the main barriers to successful on-line learning. Team 1 used Kolb's learning cycle to explain why on-line learning may not have been as effective within the BDU community as might have been anticipated. Kolb describes the distinct stages of learning - feeling, watching, thinking and doing. The Team suggested that perhaps the current on-line learning environment did not provide sufficient stimulation at a personal level, for example, there was insufficient experiential material being captured and individuals were not able to apply any of the learning in their work environment.

Team 1 then used Johari's Window to illustrate the need to develop effective knowledge sharing within the Unit. There is currently too much which is 'unknown' and therefore any solution to the on-line learning problem needs to seek to reduce the current blind spots.

The model of on-line learning for the BDU community suggested by Team 1 encompassed a number of elements including a knowledge base (comprising on-line training modules, access to Internet/Intranet, access to research papers, library access and discussion forums), tailored formal training, a personal commitment from all and cultural change within the Unit to help remove the personal barriers (for example, fear of exposure amongst peers). It was suggested that all of these elements be captured in a Learning Charter for the Unit which would provide a set of guiding principles designed to help change the culture; for example, ensuring equality of views, encouraging the freedom to challenge behaviours, dealing with issues as they arise even if this means addressing conflict and actively increasing awareness of impact of own behaviour on others.

Thus, the key elements for success identified by Team 1 were:

- more effective sharing of existing knowledge and experience;
- the need to create a working knowledge bank; and
- the need to develop both personally and collectively as a Unit to create an environment which removed the personal barriers to successful on-line learning.

### **Operational solution (Team 2)**

Team 2 focused on developing an operational solution to the particular issue of knowledge exchange (a key element in the package presented by Team 1). The "Knowledge Bank" developed by Team 2 was premised on the development of a centre of expertise where experiential learning would be captured and information shared:

- to ensure efficient practices are employed for the sharing of information;
- to deliver consistency in standards of knowledge and expertise;

- to ensure best practice is captured; and
- to ensure that the impact of changes in staff responsibilities are managed.

Although the focus of Team 2's efforts was primarily on the establishment of a working knowledge bank, the aim of this was to move BDU towards becoming a learning organisation. The reasons for creating a learning organisation are well known and there are some reasons which are particularly pertinent in the BDU circumstances, for example, improving customer relations, assisting with the management of change, creating an energized and committed workforce, improving the environment and providing an invitation and rationale for building communities. The "Knowledge Bank" developed by Team 2 would provide a first step towards change within BDU in relation to its learning potential and the establishment of a BDU community.

### Summary

There was considerable synergy in the solutions presented by both teams. Both highlighted the need for an effective knowledge bank for BDU which would not only provide access to relevant sources but would also capture experiential information and knowledge to be shared with colleagues in the Unit. However, both teams recognised that this would only be a partial solution - success would depend on personal commitment to the approach being actively demonstrated by all colleagues, a higher prioritisation of learning and development by individuals and creation of opportunities to apply learning.

### THE WAY FORWARD FOR BDU

The process recorded in this paper was very much the start of a learning process for the BDU community. The report back from the two consulting teams was regarded as a defining moment for the community when a sense of ownership for both personal and Unit development was achieved. The members of the BDU community had, at this point, assumed ownership for this aspect of their development and there was significant enthusiasm to try and develop the solutions which had been presented by the two teams. It was interesting and perhaps ironic that the critical development had taken place 'off-line' albeit generated by an 'on-line' issue.

Where is the Unit now? A knowledge bank is under development but the use of this facility has yet to become truly embedded in the consciousness of individuals within the Unit. However, there is an increased openness to share experiences and knowledge and an increased propensity to ask others for their views or advice. In addition, the BDU community has even developed to a point where some behaviours have been challenged in a very positive but direct way. These are all very good signals that the BDU community is beginning to establish itself. Undoubtedly, the test of robustness of the community will come when there is significant change - generated by movement in and out of the Unit.

However, without a shadow of a doubt, a venture which started quite simply as the introduction of a technological solution to an information sharing problem within a relatively small organisational Unit produced a very rich source of information which could not have been predicted at the outset. It also demonstrated quite clearly the difficulties associated with making on-line learning a reality in an already established community which was not self-selecting. The BDU community was a product of organisational structure - it was not established because of shared desire to learn and develop.

In hindsight, it seems somewhat naïve to assume that this venture was simply about making on-line learning a reality. It was not - it was a change management issue and the lessons learned from this have proved invaluable to a Unit whose remit is to assist with the delivery of change in a large organisation.

In conclusion, some key messages:

- The BDU community was an established community at the outset. The attempt to introduce on-line learning uncovered a range of issues including personal insecurities and cultural issues.
- The approach adopted of engaging in a consulting assignment with a fictitious client was instrumental in injecting a degree of objectivity to the analysis and solution development.
- More importantly, it established the ownership for the issue and united the community.
- Reinforcement of a useful electronic resource (MindManager™) gave coherence to the theme of online learning. It seemed particularly useful in doing this as the mind mapping was being enthusiastically used in the work of the Unit.

- More generally, gaining acceptance for on-line learning in an already established 'organisational community' produced a complex set of issues which may provide a useful comparator when investigating the use of on-line learning in other communities. For example,
  - self-selecting communities with a shared understanding of their learning and development needs;
  - the learning communities within universities.

## **ACKNOWLEDGMENTS**

The authors are very grateful to all members of the Scottish Executive's Business Development Unit who willingly and enthusiastically engaged in the process culminating in this paper. The Unit still has a long way to go to further develop its knowledge sharing capacity but it has started on its journey with open minds and vigour during a period of significant change and all colleagues within the Unit are to be commended for this.

## **REFERENCES**

- Bothams, J. (2002) What Really Matters In Operations Management Learning and Teaching  
Networked Learning Conference 2002 Sheffield University 26-28th March 2002
- Kolb, D., Rubin, I. And McIntyre, J. (1971) (3<sup>rd</sup> Edition. 1979) *Organizational Psychology An Experiential Approach*. Hemel Hempstead Prentice-Hall
- MindManager™ [www.murge.com](http://www.murge.com)