The Use of the Internet in the Personal Sales Function for Building Materials B2B Firms: Adding Value with Technology

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Keywords
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Adding value with technology

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This paper seeks to explore the potential of the internet for adding value to members of a highly standardised and largely commodity priced industry. The focus is on the largely interpersonal area of personal sales to give an understanding of the need to look at processes underlying functions to get an appropriate evaluation of the potential benefits derived from the use of such technology. Beyond this, the paper deals with the analysis required to evaluate the potential impact of the adoption of technology based systems by such organisations to illustrate the complexity involved in such adoption. There are conclusions which can be drawn from this analysis for the vendors of such systems.

Introduction

Larry Ellison (CEO and co-founder of Oracle) said that “The Internet changes everything” (www.bbc.co.uk 2000). This frequently quoted catch cry typically omits the important qualification he made that this is particularly so for an industry such as the [digital] software industry. Given his celebrity, the use of this selective quote will probably influence the thinking of many people. Certainly the internet has changed a lot of things but perhaps one of the reasons for the “dot com bust” in early 2000 is that many people got carried away with such hyperbole. The hype effectively obscured what had not changed in firms; effectively that customers continue to seek out superior value. This is particularly so in B2B firms where buyers are accountable for their decisions in ways that lead to more rational choices than in B2C markets (Hutt and Speh 2001 p56). Part of the consideration in adopting the internet within such a business is then an analysis of how it adds value to the firm’s operations. With information or digital type products it is possible that the value constructs of the product form could be radically altered in both time and cost efficiencies for compilation and delivery (Hanson 2000 pp72-73). In most other cases firms should have to look at the process and/or capability development levels to determine how the internet can add value.

The most obvious and heavily reviewed source of value is the use of networked computers to automate business processes to achieve efficiency and effectiveness gains. Closely allied to this is the availability of greater amounts of information and ability to use the information in knowledge management to improve the choices made by firms.

Kevin Kelly (1997) offered some excellent insights in his assertion that the network was more important than the digital technology. He gave colour and texture for a greater understanding of the otherwise sterile law developed by Metcalfe (Gilder 1993). In addition to Metcalfe’s law which Kelly (1997) describes as the laws of “Plenitude” and “Exponential Value” Kelly describes further “laws” such as those of increasing returns, inverse pricing and generosity which are at the heart of value constructs.

As interesting as these laws and theories are, what do they suggest for action at an enterprise level? This paper presents some suggestions on process analysis in a part of the promotional mix to give an understanding of how best value might be derived from use of the technology.

The choice of promotional tool for analysis is based on the need for personal interaction in the function, an area not usually associated with internet technology. The building materials supply industry was chosen because of a high standardisation and resulting commoditisation of materials supply. The industry competes heavily on price with few
single source supply arrangements and trends toward transactional exchange than collaborative exchange as defined by Day (2000). It is also one of the lesser users of network technologies with some relatively rare exceptions.

The information on building supplies firms used in the paper was observed through in depth interviews with senior managers (n=12) of firms in the Sydney, Australia area with the objective of identifying ways of adding value to get beyond commodity pricing. This paper is preliminary to a larger thesis on the subject which will make cross industry comparisons.

Internet use in the personal sales function

The personal sales function is typically divided up into a number of stages to develop understanding of what is done to effect a sale. These stages are characterised as prospect search and qualification, pre-approach research, approach, sales presentation, dealing with objections, closing and post sales service (Kotler et al. 2001, pp 603-5). As stages that a function goes through to achieve its objectives however this typology is not helpful in with an understanding of the specific processes involved in each of the stages. An understanding of the processes, or what is done within the firm at each stage, is important to understand the potential of the internet to deliver value for this firm function.

The approach and qualification and pre-approach research stages of the sales process will be analysed to derive an understanding of the sources of value offered by the internet. These gains will be characterised in relative value terms of efficiency and effectiveness gains from automated processes as well as the value derived from networks and communities compared to physical world processes.

With the cost of a salesperson’s primary purpose (face to face selling) rising to the high hundreds of dollars per unit (Lucas 1995) any saving in their time and the time of their related supervision overheads will most likely be welcome. This can be effected by minimising their administration and co-ordination activities estimated at 26% of their time (O’Connell and Keenan 1990) to boost their selling activities time of 33%.

The ability to better manage information in digital form should help to reduce travelling time which was estimated at 16% of a salesperson’s time. This paper will look at effectiveness and efficiency based on Drucker’s (1998, pg 67) characterisations of effectiveness as “Doing the right job” and efficiency as “Doing the job right.” Translated to processes in firms this is taken as effectiveness meaning an improvement in outcome rates resulting and efficiency meaning minimising costs and time of processes.

Internet use for prospect search and qualification

The stock in a sales person’s trade is the leads that they acquire or are provided with to follow up on (Churchill, Ford and Walker 1997 p 32) and historically this has been one of the toughest tasks that they have faced. Cold calling to identify prospects is not only time consuming but also highly demotivating owing to low levels of success. The ability of a firm to provide its sales representatives with leads should typically result in them being far more productively employed, particularly if they have the means to better manage the leads that they are provided with. Ultimately, without sales leads, who does the sales person sell to?

Syndicated research data access

In Australia, a syndicated research data source is provided by Cordell (www.cordell.com.au) with weekly updates on building projects. Each year the service finds out about and reports on 28,450 new projects and publishes updates on 52,500 projects. This requires contact with over 14 500 industry firms and government departments on a regular basis. Such data collection would be beyond the means of an individual firm but highly valuable for scheduling sales calls based on whether your firm is a supplier of timber, masonry, concrete, plumbing or other components or materials. Beyond this data a subscription to Cordell also provides planning and analysis tools to enable firms to track their progress and benchmark results. Such a resource may well be central to the firm’s move to use network technologies.

Use of such a service can lead to gains in efficiency from the availability of data in digital form such that it can be loaded directly into a Marketing Information System (MIS) or Decision Support System (DSS). The gains in efficiency and effectiveness from the use of such systems are well documented by Malhotra at al (2002, p19) and are beyond the scope of this paper. These gains are compounded in efficiency by
eliminating the need for data entry processes within the firm saving time as well as costs for manpower required. In addition there should be effectiveness gains from cutting out a source of data error that occurs in manual data entry processes that compromises the effect of the data.

**Activity planning**

The tools made available to subscribers from Cordell provide the capability for sales people to achieve efficiencies in the time as well as cost by helping them with their planning.

A key process is qualifying and prioritising leads based on relative levels of probable success to maximise the level of success in sales calls given their very high cost. By having all sales leads in digital form they can be fed into a DSS to achieve time efficiencies as well as greater levels of effectiveness by eliminating personal biases that may arise in a salesperson’s choices of whom to call on.

A further benefit is found in the potential to reduce supervisor time commitments to individual sales people. The provision of information gives an effective empowerment (Gates 1999 in Reedy, Schullo and Zimmerman 2000 p 411) to a sales person, helping them to plan their work with less direction and/or advice from a supervisor. This should generate efficiencies in lowering the overhead for supervision and all of the on-costs associated with them.

**Performance monitoring**

Given the higher level of freedom and empowerment that sales people can take through the use of such a system higher levels of accountability may be required from people in the job. The benchmarking tools provided by Cordell as part of their “Acumen” product (www.cordell.com.au) can effectively automate and standardise the evaluation of sales force members by a supervisor. Again this will typically help to reduce numbers of middle management while at the same time speeding processes in what should be a useful efficiency gain in most instances. In addition if greater transparency is required in the management of such staff the data could be made available on the network so that access is available to all who require it.

The table below provides the above points in summary.

<table>
<thead>
<tr>
<th>Application</th>
<th>Efficiency gains</th>
<th>Effectiveness gains</th>
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<tbody>
<tr>
<td>Syndicated research access</td>
<td>• Minimises needs for cold calling</td>
<td>• Data available in electronic format</td>
</tr>
<tr>
<td></td>
<td>• Time and cost of data entry for MIS or DSS</td>
<td>• Minimisation of data entry errors in MIS or DSS</td>
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<tr>
<td></td>
<td>• Immediacy of access to data</td>
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<tr>
<td>Activity planning</td>
<td>• Information distribution to relevant people</td>
<td>• Timely and reliable availability of information on project progress</td>
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<td></td>
<td>• Speed of data availability</td>
<td>• Better rationality in decisions on prioritising prospects</td>
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<td></td>
<td>• Tools to facilitate planning and reduce input required from supervisors</td>
<td></td>
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<tr>
<td>Performance monitoring</td>
<td>• Integrated data processing provides fast access to reports</td>
<td>• Standardised benchmarking tools used for transparency and equity</td>
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<tr>
<td></td>
<td>• Time and cost gains from electronic communication</td>
<td>• Higher proportion of time available for selling</td>
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<td></td>
<td>• Reduced management overhead</td>
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**Pre approach research**

Given the high cost of sales calls, it is important to strive for maximum effect in sales calls. Kotler et al. (2001, p604) describes this as pre-approach research during the course of which the proposal is substantially developed. This is analogous to the Boy Scouts’ maxim of “Be Prepared” and ensures that when the salesperson does make the approach they are fully prepared with the approach that the firm wishes to adopt in approaching the prospect. This is not solely the domain of the salesperson as management usually require input on pricing, taking into account strategic and supply factors in play. In addition the logistics function, whether internal or outsourced to a
specialist provider may also need to input on ways that they can add value to the bid. In some cases suppliers form alliances with providers of complementary products (for example a supplier of pipes with a manufacturer of sanitary ware and plumbing installation services) to provide a systems solution (Bingham 1997 p372) for the developer or builder. In effect this adds value for the buyer by consolidating the management of subcontractors and suppliers while giving the collaborative partners the ability to develop competitive advantage through specialised offerings.

The key issue here probably revolves more around network connections than automation of processes given the requirement for various parties to interact in developing the proposal or sales offering with which the sales person can approach the prospect. This interaction finds its best form in an iterative process which is ideally suited to the use of the internet where a central resource for collaborating in development of an approach can be established. This can be very simply and easily effected at low cost by establishing a central site which allows access by password to authorised collaborators in the manner proposed by Wilson (2003).

**Customer need database**

Individual prospects generally have different needs, often based on work practices they choose to use, which can be identified over time in a process of working with them. This is an important variable in market segmentation (Vitale and Giglierano 2002 pg194) and firms could benefit from databasing such preferences to help them in dealing with such prospects. For example, a builder specialising in high-rise buildings in CBD areas can probably be identified from secondary data sources. However their chosen work practices on site typically lead to unique delivery characteristics based on how they deal with limited storage space and restricted delivery capability on busy city streets. Being able to factor such special arrangements into a sales proposal could ease the process of winning the business as it minimises the need for the prospect to educate a supplier as to their preferences.

Such preferences may also often detail whether there is a preference for systems based purchases or whether the prospect prefers to deal with all suppliers individually. It can also develop a profile of potential customers' buying processes and strategies. Hutt and Speh (2001, pp187-188) detail the importance of knowing purchasing policies and details of individuals involved in decision making. This is an important segmentation variable which enables a far better tailoring of a sales proposal to maximise effect or probability of success.

**Alliance based work practices complementary products**

As mentioned above, a toilet that is not connected to pipes has very little functional value for anyone. Suppliers of such complementary products can collaborate in the interests of developing systems based solutions (Bingham 1997 p372) to effectively enable the customer to delegate some of the project management to a group of materials and/or service providers. Apart from the convenience factor for the customer such arrangements also provide the potential to add value through development of innovative solutions by exploring the prospects of synergy between partners. Team based collaborative approaches have long been acknowledged for the value that they deliver within organisations (Harvey and Brown 1992 p340) and this simply extends the team catchment beyond the immediate firm. In particular teams are renowned for their ability to deal with complex problems and to develop innovative solutions based on the synergy of multiple talents working together. When working on an inter-firm basis, specialist knowledge of the possibilities and limitations of the parts contributed by each of the partners can be brought to bear for higher levels of innovation.

The key requirement here is to leverage skills to develop added value in an offering. Whereas in the past this would have required meetings of relevant people to exchange views in the iterative process referred to earlier this can now effectively be done online. If design capabilities are required the proposal development site can be relatively easily equipped with CAD/CAM design tools for the use of collaborators on the site.

The final outcome of this process should be a proposal which is innovative and priced to reflect the strategic importance (Boughton 1987) of the potential business being sought to each of the alliance partners. For example profitability levels may be sacrificed in situation where one or more of the partners is in urgent need of the work owing to overstocking. Alternatively if the prospect is one that has not been a customer
before and has potential to offer substantial business in the future, there may be an agreement to sacrifice price in the interests of establishing a connection with the prospect.

### 3rd Party involvement in sales proposal development

Perhaps the most commonly outsourced function amongst building supply organisations is that of logistics and more particularly the transport function. Apart from the operational focus required to operate expensive transport equipment safely and efficiently there are also differing capability requirements. Reference has been made earlier to the difficulties that arise from operating in busy and congested central business districts but this is just one of the scenarios that have to be dealt with. At the other extreme other specialist capabilities may include vehicles that can access remote rural locations or that have lift capability for loading and unloading as may be required. Ability to provide such specialist capabilities adds costs but it also adds value as effectively the task cannot be accomplished without them.

The ability to achieve economies and quality gains by sourcing supply arrangements online has been well documented (Siegel 2004 p63). Few transport companies are likely to have all of the specialised capabilities required over time so single source supply arrangements are rare owing to the limited leverage that buyers have. It seems preferable for building materials suppliers to work with a range of suppliers to maximise the price competition between suppliers when sourcing such services. Such suppliers can also be databased with performance compliance recorded to enable a better informed decision on the relative value or total cost of use (Hutt and Speh 2001 p 386) of different suppliers over time. Ultimately the network connection with databased communications is a more secure method of securing price options from such 3<sup>rd</sup> party suppliers as well as assurances of their ability to provide the services as and when required.

### Cross functional integration within the firm

Internally, management typically coordinate or facilitate interaction between various functions such as inbound logistics, production and inventory management for supply potential as well as finance and administration to assist with pricing parameters.

This is likely to be an iterative process as well but one less likely to require the design capabilities of alliance based work practices. Nonetheless, network connections could well be useful to help all of the relevant functional areas make their contribution to the development of the models used to assess the options considered.

The product of this is then provided to the promotion function for development of tools that will be of help to the salesperson in their eventual approach to the prospect. Making them aware of the considerations behind the decisions should enable them to get a better sense of the value proposition being offered and help develop a proposal that relates to the key value concepts. This may also have to be done collaboratively with alliance partners, which can be facilitated by network connections, or it may be tasked to one of the partners with a special capability, where approvals may be required at various stages of development.

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<td>• Identification of special requirements based on past work with or knowledge of prospect</td>
<td>• Tailoring sales offer to suit the particular work practices of the prospect</td>
</tr>
</tbody>
</table>
| Alliance based work practices for complementary products | • Sharing of contacts and prospects to be approached  
• Gathering input and component pricing | • Development of “solution” based system products that add value for prospects |
| 3<sup>rd</sup> Party involvement | • Sourcing and evaluation of suppliers  
• Advice of sales proposal and gathering input on relevant costs  
• Gathering input and service | • Better value development from a specialist service provider |
Integration of functions within the firm

- Sharing of information between relevant areas as part of an iterative process
- Better solutions based on a team based approach to the project

Analysis

The value added by these improvements in processes is however relative and depends on the circumstances within various firms. These circumstances include the potential for staff cuts, the amount of computing infrastructure already in place, the ability of partners to adopt the technology and other adoption costs such as training. These operational factors should be set against cost-benefit modelling of the gains which derive from using this technology for a simple cost and benefit analysis. In addition to this additional factors will probably have to be taken into account at a firm level.

Cost differentials

At the simplest level a firm evaluating this technology may compare the system costs of using resources not connected to networks with systems which do use such networks. Allowing for total cost of use (Hutt and Speh 2001 p 386) a firm would account for costs of additional computing equipment and network access for both staff and alliance partners. In addition training costs, subscription fees, insurance and other costs would also have to be brought to book. The result of this is likely to be a higher cost for the network based system and this will probably require justification against benefits in the next step.

Cost benefit modelling

The efficiencies of lower costs and better time performance or higher productivity of staff is a relatively easy calculation. This should result in ability to either cut staff numbers or to improve the outputs per staff member, depending where the firm’s interests lie. Similarly it should be possible to extrapolate the possible reductions in overhead with the lower needs for support and supervisory staff using a network based system. What may be a little harder is estimating the results of higher levels of effectiveness which are shown in higher proportions of bids or proposals which result in wins for the firm.

Improved effectiveness is however the critical issue online as Kelly (1997) suggests that to get the best out of the network economy one should not be as concerned with efficiency as with effectiveness. His argument was basically that with the potential to automate processes and interactions for efficiency gains the real benefit lies in improved effectiveness. The difficulty is that results achieved will typically be dependent on effective implementation within the organisation and this will probably add a level of uncertainty for potential adopters.

It seems as though there is very little alternative other than for a firm to take this on trust or to run a series of pilot trials to define the economic effects of using a network based system. Most of the firms interviewed were relatively sophisticated, many of them being publicly listed companies, and certainly seemed attuned to the benefits which could be achieved. These firms were typically using such systems but to nowhere like the full potential documented in this paper and were clearly frustrated as a result. It was interesting however that at the time of the interviews (2nd quarter of 2002) there did not seem to be any new adopters since late 1999 and all interviewees spoke of tighter budgets and tougher justification requirements.

Smaller enterprises (Turnover <$A10 million) seemed pretty bemused by the question. The cost benefit analysis required seemed to be beyond the capabilities of most of the organisations. Even many of the larger ones seemed to have taken the reputation or expectations of the technology on trust, perhaps fuelled by fear of competitor adoption.

What none of them seemed to have fully accounted for are the “other factors” dealt with in the next section which perhaps account for the frustratingly low levels of technology adoption.
Other factors
Apart from the problems of getting a clear and simple result from such a cost benefit analysis there are a number of other factors for adopters to take into account if planning full utilisation. These include a number of management issues, market structure factors and security concerns.

Management issues include the reengineering that may be required for reducing middle management and support staff numbers. There will probably also have to be some degree of change management (Mintzberg, Quinn and Voyer, 1995 pp268-270) to facilitate the higher levels of technology that are planned to be used. Training may help with this to some degree but some additional measures may be required to achieve a “buy in” from stakeholders within the firm. Such complications effectively raise the bar for adoption of the technology within organisations beyond the already difficult levels required for a proper cost benefit analysis for justification.

Market structure seemed to be a problem with a reasonable consensus amongst firms interviewed feeling that a major limitation of networks was the problem of involving customers. While a minority of larger builders or developers (estimates between 5% and 20%) accounted for a relatively large proportion of building supply sales (estimates between 65% and 80%) building products supply firms still felt it important to be able to network with smaller firms who do not apparently use much technology at all. In some sectors of the building products supply industry there is substantial overcapacity and as a result they cannot afford to neglect or discount any group of builders.

In the larger firms there was typically a well developed IT function and this is perhaps a limiting factors in some ways. Given the understandable security concerns that IT professionals would have in the area of security it seems that at times developing extranet type access for alliance-based collaboration is simply too hard. A few of the larger firms did however say that they had found a far more expeditious method of achieving this was to use an external server to host the collaboration in the manner suggested by Wilson (2003). In these cases a number of measures such as obscure URLs and password protected login to the site were used for protection.

Conclusions
The potential benefits that could be derived from the adoption of such technology for a highly competitive industry such as building products supply seem to be extensive. Technology marketers targeting this sector may encounter higher needs for justification, particularly since the tech wreck of early 2000, following which there seem to be far higher needs for a demonstrable return on any technology investment. In this scenario good research demonstrating improved effectiveness resulting from technology use should be a useful aid to a technology marketer’s cause. They should also be cognisant of the relative difficulty of the econometric modelling required to justify adoption of such a system and possibly develop a means to help potential customers evaluate the relative levels of cost and benefit which are expected. Such a service and the transparency given should help build levels of confidence, moving a customer closer toward a positive decision despite the potential impracticality of reliable econometric modelling.

Other issues, such as the management and security issues arising, should also be pointed out to potential users of technology products as it is in the interests of the vendor give a full understanding of the implications of product use to a prospective customer. This is a form of expectation management (Zeithaml and Bitner 2003 p464) that is an important contributor to customer satisfaction and resultant further business with a client firm.

In summary it is important that organisations considering adoption of such technology go beyond the very substantial potential benefits offered and look at both a solid justification in terms of costs versus benefits as well as consideration of the management factors involved. Organisations marketing such technology could do well to consider such needs in the decision making processes of prospective customer firms.
References

- Hanson W, (2000) Principles of Internet Marketing, South-Western College, Cincinatti Ohio
- Wilson, E.; “Covert Applications Reward the Stealthy.” Sydney Morning Herald, “Next” section, 06 May 2003 (http://www.smh.com.au/articles/2003/05/05/1051987642296.html)