

Managing Social and Intellectual Capital: Factors Affecting the Adoption and Provision of Online Marketing of Government Services

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Abstract

A significant issue facing government at all levels is the provision of governmental services, information and property (e.g. government's social and intellectual capital) through "online" marketing transactions. Using a diffusion theory approach (Rogers, 1983) this paper discusses the findings of a study investigating strategic factors that affect the adoption of an online e-commerce marketing approach, with emphasis on elements related both to the innovation itself (e.g. Rogers, 1983), as well as environmental characteristics. In-depth interviews of a sample of 42 high level governmental officials, chosen across various agency types, and Australian states were conducted. Governmental decision-making about on-line service provision tended to be generally following a "production" or "product" orientation rather than a customer oriented marketing one. Findings showed support for the hypothesised relationship between political pressure and adoption, and the importance of being shown to "be doing something" immediately or in the very near future. Implications for marketing management and suggestions for further research in the area are given.

Keywords: Government, Not for profit marketing, Electronic marketing, Innovation Adoption

Introduction

E-commerce, the ability to offer goods and services over the World Wide Web, is expected to have a compound annual growth rate of 100 per cent around the world in the next few years. In Asia-Pacific e-commerce revenues are forecast to grow from \$US37.4 billion in 2001 to nearly \$US 893 billion in 2006—a huge increase! (www.idc.com), with the three leading markets, Australia, Japan and Korea—accounting for 94 percent of the Asia-Pacific on-line market. Consequently, e-commerce and online marketing in particular have become important new competitive realities for both the private and public sectors—with *important implications for the management of social and intellectual capital*.

The aim of this study was to identify factors that drive the adoption process and provision of e-commerce in public sector agencies. While considerable (though largely descriptive) research has been done to investigate the early online marketing environment of private sector firms, there is a dearth of such studies of the online marketing and decision-making experiences of public sector enterprises. Yet given the huge potential impact on consumers and public sector agencies alike arising from decisions to offer online services, this is a key area for research. This paper contributes to knowledge by examining this issue from a diffusion theory (e.g. Rogers, 1983) and marketing orientation perspective. Rogers (1983) theory proposes that an individual first forms an attitude toward the innovation leading to an adoption or rejection decision. Numerous studies in the marketing literature have shown the importance of the marketing orientation and understanding customer need in the diffusion (adoption) process (Aaker and Mills, 2005). The relevant research literature from these perspectives and that concerning adoption of technology is first discussed, followed by the study methodology, and key findings and marketing implications.

Background and Literature

The aim of this study was to identify those decision-making factors that affect the adoption and marketing of online service provision by public sector enterprises. This area of research is extremely important for a number of reasons. Firstly (and perhaps most critically), the decision-making factors affecting online marketing and service provision are key areas for research that have been essentially ignored in the existing literature to date (Ching and Ellis, 2004). Secondly, the existing literature in the area of online marketing has also been characterised by a dearth of public sector studies—a crucial empirical gap. Thirdly, as

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Federal, State and Local governments in Australia are currently launching or contemplating launching early efforts to provide services “on-line” to their various constituencies, it would seem important to examine the marketing decisions associated with the online adoption process of these efforts .

These public sector efforts provide an important and interesting area for marketing investigation, for many reasons. First, the decisions made now by governments relating to whether and how to adopt and disseminate online transactional service delivery to their constituents may have far-reaching and lasting implications for service delivery to customers both in the present *and* in the future. For example, decisions made about which technological platforms to adopt in this regard are not easily reversed, and once adopted, governmental online service programs—like some other government activities--once begun may take on a life of their own. Are such decisions being undertaken with the needs of the market foremost on the agenda? Second, both large numbers of citizens will potentially be affected and large economic expenditures are likely. Making the “right”, “informed”, “efficient” decisions would therefore seem paramount. Given that the literature supports economic and financial, as well as other measures of success for firms with a market orientation, does current governmental thinking about on-line service delivery reflect a market orientation? Third, and perhaps most importantly, there are many important questions requiring decisions layered within the on-line service delivery issue. For example, a growing body of research exists concerning the dilemmas inherent in balancing technological service delivery against the issues of public access to information and services(cf. Mills and Harris 1982 study on the impact of scanning technology in supermarkets on disadvantaged consumer groups) , safety concerns (e.g. Leverick, Littler, Wilson and Bruce 1997) as well as on privacy and other legal issues associated with electronic databases (Long, Hogg, Hartley and Angold 1999).

Examples of early governmental online efforts in Australia include the Canberra Connect project, Our Brisbane portal, many aspects of Treasury’s ASAP shared services program, various efforts in NSW and Victoria, and so on. Depending on agency a myriad of services may potentially be offered through on –line transactions-- for example, payment of household rates, pet licensing, driver licensing renewals, online payments for driving citations, auto registration and ownership checks, reservations for public accommodations, property searches, and legal conveyancing.

These on-line service programs have in many instances received considerable media and political attention, in some cases being tied to larger political agendas. For example in Queensland, the much- hyped “Smart State” program stresses technological innovation and governmental research and other support for high-tech industries and high tech service provision of various types (Lucas 2003). State and local government efforts in Queensland are joining the political bandwagon in this regard. For example, Brisbane City Council has a major effort under way in the provision of on-line services to its citizens.

Clearly, researching the factors important to the adoption of online service programs by government would seem to be an important area for study.

Literature

Adoption of On-Line Marketing

As noted above, the decision-making factors affecting online marketing and service provision are key areas for research that have been essentially ignored in the existing literature to date (Ching and Ellis, 2004). Secondly, the existing literature in the area of online marketing has also been characterised by a dearth of public sector studies—a crucial empirical gap!

Further, much of the existing literature to date has also been descriptive, providing little more than typologies of current and/or anticipated online business practices (e.g. Bennett

1997; Hamill and Gregory 1997 Poon and Swatman 1997). For example Poon and Swatman's (1997) study of how 23 small Australian businesses used the Internet for business and what benefits were obtained used a case study methodology and descriptive statistics. Few studies have attempted to go beyond simple descriptive goals of identifying online marketing practices or to measure their perceived contributions (Ching and Ellis, 2004).

Previous (private sector) literature has tended to descriptively address the relationship between new electronic technology such as ATMS, electronic funds payment systems, or the Internet and user profiling or user experiences, either from the perspective of diffusion of innovations theory (eg Kangis and Rankin 1996; Alpert 1994; Pope, Brown and Forrest 1999; Antonides, Amesz and Hulscher 1999) consumer attitudes towards technology (e.g. LeBlanc 1990; Goode, Moutinho and Chien 1996) or willingness to pay for technological innovation (e.g. Mills 1994, 2002). Ching and Ellis (2004) point out that the literature documenting the pattern of Internet adoption has itself reflected a geographical pattern mirroring actual Internet usage. Early studies originated in the United States (Breitenbach and Van Doren 1997; Vadapilli and Ramamurthy 1997) and Europe (Bennett 1997; Webb and Sayer 1998), with more recent studies done in Asia Pacific (Ching and Ellis 2004; Phau and Poon, 2000; Teo 2001), and the Pacific Rim (Fenech and O'Cass 2001; Poon and Joseph, 2001).

Diffusion Theory and the Adoption Process

The diffusion theoretical approach was felt to be particularly relevant for the current investigation. Rogers' (1983) seminal work defined an innovation as any idea, process or object perceived as new by an individual or other unit of adoption. In particular a favourable attitude towards an innovation is a function of the innovation's perceived relative advantage, compatibility with potential user needs, and complexity (ease of use).

The innovation potentially provides a new mechanism of problem solving facilitation. Rogers (1983) theory proposes that an individual first forms an attitude toward the innovation leading to an adoption or rejection decision. A favourable attitude toward the innovation is more likely if the innovation is perceived to have a relative advantage over an existing system, is compatible with the needs, values and experiences of the potential adopter, and is easy to understand and use.

Characteristics of Innovations

The salience of these innovation characteristics has been demonstrated in numerous studies related to adoption of e-commerce. Relevant advantage, the degree to which an innovation is perceived as being better than its predecessors, has been shown to be an important positive characteristic leading to adoption (e.g. Premkumar et al. 1994; Thong and Yap 1995, Teo, et al. 1997, Thong 1999). Both Premkumar and Roberts' (1994) study and Thong's (1999) study showed, for example, the perceived relative advantage of new information technologies to be a significant factor in their adoption in small businesses.

Compatibility has also been shown to be a significant positive factor affecting adoption (c.f. Cooper and Zmud, 1990, Teo, et. al., 1997, Thong, 1999). Thong's (1999) study, for example, showed the influence of compatibility in the positive adoption of information systems in 166 small Singaporean firms.

Adoption of an innovation is less likely, however, if the innovation is perceived to be difficult to use or complex (Tornatzky and Klein, 1982, Cooper and Zmud, 1990, Thong 1999), and is

also affected by the perceived costs versus benefits of the innovation (e.g. Mills 1994). There are many dimensions of cost, including the costs of acquiring, tooling up costs, costs related to the experience curve (learning to use the innovation), opportunity costs of acquiring the wrong innovation, and social and psychological costs--to name a few.

In the information technology area, the research evidence has generally supported the notion that cost is an important variable affecting adoption (c.f. Tornatzky and Klein 1982, Fink 1998, Prekumar et al. 1994, Mills, 1994), although a study by Palvia, et. al (1994) suggested that the drive toward commodity hardware and the availability of inexpensive software packages mean cost is not a significant deterrent in the adoption of information technology.

Environmental Factors

There is a significant amount of research investigating the effect of environmental factors on adoption of an innovation, including the intensity of competition, provision of incentives to purchase, customer pressure and willingness to pay for innovation, and the like.

Incentives offered by suppliers have been shown to have an effect on adoption in studies by Gatignon and Robertson (1989), and Ha (2000). In the latter study, for example, respondents reported that incentives offered by their Internet service providers (ISPs) were important factors in their adoption of websites. Intensive competition has also been found to be correlated with adoption (Kimberly and Evanisko, 1981, Ettlief 1983, Delone, 1988, Gatignon and Robertson 1989).

Customer pressure has also been shown to be an environmental factor in adoption (Premkumar and Robert, 1999). Other studies (such as Mills, 1994) have investigated customers' willingness to pay for technological innovation, finding a "gap" often exists between customers' willingness to pay and the realities of technological service delivery costs—thus making for dilemmas in terms of (1) potential adoption of the technology by supplier organisations, as well as (2) pricing service delivery if the innovation is adopted.

Finally, environmental factors in the form of regulatory issues concerned with a variety of consumer protection, (e.g. Mills and Harris 1982), safety concerns (e.g. Leverick, Littler, Wilson and Bruce 1997) as well as on privacy and other legal issues associated with electronic databases (Long, Hogg, Hartley and Angold 1999) have been shown to be related to adoption of technology, and/or the ability to recognise optimally the significant gains in productivity or information retrieval the innovation represents.

Study Hypotheses

While the nature of the research, given the dearth of public sector studies, was certainly somewhat exploratory (and probed a number of more general issues surrounding adoption decisions), the findings of existing private sector research (and the extensive diffusion theory literature cited above (which begun with Rogers, 1983 seminal work) suggested a number of hypotheses related to adoption of e-commerce by government agencies that were subsequently examined for confirmation in the study. These are shown below.

In particular, it was proposed that adoption will be positively correlated (+) with :

- (h1)the perceived advantages of the innovation itself relative to substitutes,
- (h2)its compatibility with existing organisational values,
- (h3)the presence of political pressure
- (h4)competitive intensity, and
- (h5)customer pressure.

With respect to the variables of competitive intensity and customer pressure that make up hypotheses Four and Five, while it is true that the some governmental agencies are the sole providers of public services and do not necessarily operate under all aspects of private sector markets, it is nonetheless true that governmental agencies do often compete among themselves (as well as with private sectors providers in many instances) for both customers and market position. Further their customers, even if an agency is a “sole provider” may well exert pressure on the agency to provide services through an online format. Thus it was felt valuable to include these variables in the study.

It was further proposed that adoption would be negatively correlated (-) with:
(h6) the perceived costs of offering online transactions,
(h7) the perceived unwillingness of customers to pay for the service innovation,
(h8) the perceived complexity of the online service, and
(h9) perceived regulatory barriers believed associated with the management and dissemination of such governmental “capital”.

Method

Research Design

An initial questionnaire was drafted to cover the more general as well as specific issues and hypotheses above. Measures for the constructs subject to hypothesis testing in the study were drawn from previous research. The questionnaire and interview protocols were pre-tested both internally and with a convenience sample of representatives from two Queensland government agencies. The pre-testing generally supported the items and procedures to be used in the study, with only minor modifications necessary.

Sample

The sample consisted of 42 high ranking governmental representatives from 20 Government agencies from Queensland, Canberra, New South Wales and Victoria. Given the “Smart State” emphasis in Queensland as well as a limited research budget, a decision was made to primarily focus the study in Queensland. An initial listing of Queensland governmental agencies was compiled and a random sample of these was taken for the study, with the purposive addition of a limited number of other agencies outside Queensland to somewhat broaden the sample. Agencies and number of representatives appear in the Appendix.

Data Collection Procedure

The data collection procedure consisted of in-depth interviews held with high- ranking agency officials, with representatives from both executive management (e.g. Chief Strategy Officer, General Manager) and senior technical management (eg. General Manager Technology). Interviews lasted an average time of 30 minutes, and covered topics suggested from the literature and the hypotheses mentioned above, and were intended to explore issues, generate findings and for hypothesis development for later stages of the research.

The use of in-depth interviews that allowed response follow-up was consistent with the study’s exploratory purpose as defined above, and with a myriad of other Internet marketing studies (e.g. Ching and Ellis 2004;Doherty, Ellis-Chadwick, and Hart 1999; Poon and Swatman 1997). Interviews were semi-structured, with respondents encouraged to freely discuss their adoption considerations in some detail, but also probed respondents on a set of standard questions, to allow for hypothesis testing.

The protocol first called for a series of open-ended questions that allowed respondents to tell their adoption decision story, but which were followed up by the interviewer to gain clarity

with respect to the considerations that featured in the adoption decision-making process. In particular, respondents were follow-up probed about three categories of marketing variables that may or may not be important in the agencies' decisions to adopt online marketing of services: (1) Marketing Mix decisions (2) Target Market/ Segmentation Issues and (3) Service Quality/Customer Satisfaction/Dissatisfaction issues.

Then, respondents were asked a series of standardised questions, with scaled items drawn from previous research (in particular Ching and Ellis 2004, Mills, 1995). These items formed the basis for the hypothesis testing. Finally, respondents were asked follow-up questions to elicit additional understanding of their responses to the hypothesised relationships.

Findings and Discussion

Qualitative Findings

Findings mentioned briefly below are derived from verbatims from the depth interviews, content analysis/order of mentions from the interview notes across all agencies.

Key factors driving service decisions:

Key factors driving online service decisions, in order of mentions, included political expediency, quickness, ease of application/trial, being "first", some history in providing the product/service. A key factor not mentioned by any agency was customer needs/desires.

Verbatim statements relating to this section of the interview included the following:

"There is a lot of implicit and perhaps explicit political pressure to be seen as being responsive and "up to date" through providing online services. In essence, we *have* to have online transactions....".

"We have dabbled in online provision of a very few services, but the political pressure is there now such that we are about to considerably expand what we offer".

"In terms of online, we've pretty much taken things we've provided in hard copy because that's what we know."

Marketing Mix Decisions:

Follow-up probing revealed that pricing was by far regarded as the most difficult decision area. Only six of the agencies interviewed had given consideration to development of promotional efforts to facilitate use of the individual services. Of these predominantly this was to be directed to existing (usually hard copy) purchasers of services. Distribution or service availability issues ranged over a large variety of topics, including setting up computer equipped "kiosks" for consumer interface in various public venues.

Verbatims from the respondents relating to this section included the following:

"The most difficult area for us is pricing. We know how to price over-the-counter hardcopy, but the price for electronic transactions is another matter."

"Who's going to use it, how many, and access are all potential issues for which we don't have a lot of answers."

Target Market Selection and Profiling Decisions:

Only a very few of those agencies interviewed had a history of on-line service provision and some sense of customer profiles. Most agencies were focussed on the conversion of present “hard-copy” customers to electronic service provision. Issues of technological competence among users were mentioned by only 7 of the agencies interviewed.

Sample verbatims from the interviewer notes included the following comments:

”Generally we’d like to move our existing customers to online.”

“Our online target, for the most part, is the current users of our hard copy services.”

Service Quality/Customer Satisfaction, Dissatisfaction Issues:

Importantly, tracking of customer satisfaction/dissatisfaction with on-line service provision did not feature in *any* of the interviews. Service quality was primarily mentioned in technological terms of 24/7, lack of downtime, and infrastructure provision.

A sample verbatim statement from this area of the interview is below:

“Certainly, our decision in some areas (to adopt an e-commerce approach) is heavily weighted around the necessity of reliable technology. We need to have 24/7 availability and a minimum of downtime to be credible and to provide a useful offering. This is a highly visible thing, and we don’t want to wear egg on our face.”

Discussion of Qualitative Results

The depth interview results showed a generally reactive (as opposed to a *proactive*) process to on-line marketing strategy taken by government agencies; agencies seemed to be reacting to The nature of the process tended to follow a “product” (e.g. “build a better mousetrap and the world will beat a path to your door”), as opposed to a “marketing” orientation. That is, a key factor not mentioned by any agency was a pro-active consideration of customer needs/desires—the foundation for a marketing orientation. The decision-making process, as discussed, also seemed to reflect a more “emergent” strategic development process, as characterised by the work of Downs, Durant and Carr (2003) who note that emergent strategy is (1), less advanced, compared to other strategic development processes, (2) has the potential to address current challenges facing organisations, and (3) these strategies are reliant on the ability of the organisation to learn from employee experiences on all organisation levels. The direction of the qualitative results is also consistent with a study by Fuller-Love and Cooper (2000) that indicates a key disadvantage in emergent strategies and their use. Fuller-Love and Cooper (2000), in studying the strategic information management of the Post Office, note that a planned strategy would have been more beneficial towards Post Office customers as this would focus on customer needs rather than those of other interested parties.

Degree of Agency Adoption

Using an approach from previous research (e.g. Ching and Ellis, 2004), prior to the hypothesis testing, agencies were classified as to the degree of overall adoption of online service transactions, using a classification system that features three categories of Internet adoption—traditionalist, straddler, and innovator, which represent a continuum of Internet adoption. Traditionalists are limited adopters of Internet technology, who may use the Web only to advertise or provide basic information. Straddlers go further than traditionalists in

using a somewhat greater array of Web capabilities, but hedge their bets—also offering the more traditional range of ordering and service delivery channels. Innovators, by contrast, conduct many of their business processes, including delivery, online. As Ching and Ellis (2004, p.417) note, these definitions go further than simple measures of website features, encompassing a variety of promotional, communication and payment activities.

Following a procedure employed by Ching and Ellis (2004) a composite measure of overall online activity was calculated based on the relative proportion of five marketing-related internet activities—information provision, ordering, product promotion, product customisation, and payment. Then, using Ching and Ellis’s (2004) decision rule agencies were assigned into three approximately equal samples by adopting a cut-off point of .3 standard deviation either side of the mean for the composite overall activity variable. Agencies more than .3 standard deviation to the left of the mean were classed as traditionalists, agencies greater than .3 standard deviation to the right of the mean were classed as innovators, and firms between were classed as straddlers. For more detail on the classification procedure the reader is referred to Ching and Ellis (2004).

Hypothesis Test Results

Analysis of variance on the normalised data was used to test the hypotheses, with the analysis results using the above three groups shown below in Table 1

Table 1 Hypothesis Tests

	Traditionalist	Straddler	Innovator	p<
Variable	8	7	5	
Relative advantage	-.2091	.1097	.5898	**
Compatibility	-.1493	.2223	.4749	**
Cost	.2807	.1148	-.4913	**
Political pressure	-.1381	.2912	.5655	**
Customer pressure	.1881	.2659	.2843	NS
Competitive intensity	.0211	.1978	.1817	NS
Customers won't pay	.2598	-.1983	-.2458	*
Complexity	.1469	-.1522	-.4996	**
Regulatory barriers	.1397	-.0213	-.3011	NS

* p<.10

** p<.05

As shown in Table 1, the findings generally showed quite positive support for the hypothesised relationships in terms of correlations. As is evident from the Table, there are statistically significant differences across groups in the directions hypothesized in all but three instances, though also at least clear directional differences in the hypothesized directions shown, for example, between innovators and straddlers. More innovative public sector agencies were more likely to perceive the adoption of online e-commerce transactions as offering relative advantages, greater compatibility with existing agency business practices and values, cost benefits compared to standard ways of offering services, as less complex, report higher levels of certainty regarding customer willingness to pay, and were more likely to report greater levels of political pressure to feature online transactions.

Discussion

Relative advantage

The findings show innovators and straddlers are more likely than traditionalists to see greater relative advantage to the adoption of e-commerce in terms of online service provision.

Innovators and straddlers listed a broader range of advantages than did traditionalists, as well, citing relative advantages to e-commerce adoption to include such elements as allowing greater efficiency and lowered costs of operation, possible re-assignment of staff to other productive duties, provision of a easily accessible record of transactions for reporting and analysis, and greater visibility for the organisation.

These results are consistent with prior studies that have shown relative advantage to be a key factor in adoption of an electronic innovation. For example in a study of ATMs and their marketing implications, with the results based on a survey of 630 retail banking consumers from two separate Australian banking institutions, Rugimbana and Iversen (1994) found that that ATM users from both institutions differed quite significantly from non-users in their perceptions of at least three relative advantages of ATMs-- convenience, reliability, and suitability. In a similar fashion Leblanc's 1990 study of 208 customers of a financial institution, found that in comparison with non-users, the ATM user group was more likely to believe the automated teller had the following relative advantages: improvement of service quality, reduction of the financial institution's operating costs, no personal or financial risks, and is simple to use. Finally, in their study of online financial services Black, et.al (2001) found that adopters were more likely to non-adopters to recognise relative advantages in terms of improved accessibility, convenience and cost.

Compatibility

The findings have shown innovators and straddlers were more likely than traditionalists to report the adoption of e-commerce as compatible with their existing business values and practices. This is consistent with previous research referenced above (e.g. Black, et.al 2000).

Political pressure

Consistent with the qualitative (general) findings shown earlier the quantitative findings of this study as revealed in the standardised beta weights show that the adoption of e-commerce by governmental agencies is significantly affected by political pressure. This variable has not been featured in previous (private sector) research into online e-commerce decisions, so the results are not directly comparable with these studies. Private sector studies have, however, featured an independent variable *customers'* pressure, and this variable has been shown to have a positive relationship with adoption of electronic innovation (c.f. Premukumar and Roberts 1999, Ha 2000 and Thong and Yap 1995).

Competitive intensity

The non-significance of this dimension across the groups perhaps is interesting. Both the qualitative and the quantitative results suggest that agency adoption decisions are perhaps more influenced by direct political pressure than by concerns about the efforts of other agencies (perhaps not viewed as direct "competitors" in a private sector sense.) The findings may also be a reflection of the relative importance of the other factors tested in the study,

consistent with, for example, the research done by Ching and Ellis 2004, where in a study of 84 SMEs in Hong Kong, they found that competitive pressures were relatively unimportant in the adoption decision when compared to the factors of relative advantage, compatibility and cost.

Customer pressure

The non- significant differences observed between traditionalist, straddlers and innovators on this dimension are perhaps not surprising from at least one aspect. That is, the qualitative data showed the tendency across all agencies to approach the online service adoption issue from other than a customer orientation perspective. That is, agencies did not report that they were actively conducting marketing research of customer needs and/or desires in terms of online service offerings, but rather that they were approaching the adoption decision from what might be classically termed a “product” or “production” orientation. Further, as a majority of the actual or potential online service offerings were aimed at individual consumers who would likely not have had contact with each other, it is very unlikely that concerted customer pressure would have resulted in any case.

Cost

The quantitative findings of the study with respect to costs are very consistent with the qualitative interviews on this issue and with previous research. That is, more innovative agencies were more likely to see the cost benefits of online transactions than those less innovative.

Perceived customer unwillingness to pay

The quantitative results on this dimension are perhaps reflective of the concerns expressed by some agency respondents in terms of perceived difficulties in pricing of online service offerings. While they are not the same thing, if one is not confident of the “correct” price for online services, one is perhaps less likely to believe that customers would be willing to pay the asked price.

Complexity

The findings of the study showed the influence of perceived complexity in the adoption decision. In particular, those agencies classified as traditionalists were more likely to report complexity as a barrier to adoption and implementation. This result is quite consistent with results from previous research in the adoption area.

Perceived regulatory barriers

Environmental factors relating to regulatory barriers while important, did not account for any significant differences between the groups of respondent agencies. These findings would appear to be consistent with the qualitative results from the interviews in which respondents across agencies indicated the importance of the Privacy Act, for example, as a key regulatory influence on what they might be allowed to do in terms of online transactions. Sharing and transfer of public information, the accuracy of information shared, and the legal implications

of potential damages arising from service delivery also featured quite prominently in the qualitative stage.

Illustrative verbatims included:

“The Privacy Act is a key factor..... We are bound by legislation and privacy issues that complicate the sort of transactions and information sharing we can pursue.”

“Probably one of the biggest issues is the sharing of information across several databases and agencies required to complete a transaction. Not only accuracy, but security issues of accessing data files come into play.”

Conclusions and Implications

This study has systematically investigated factors affecting adoption of online service provision by government agencies in Australia. The results contribute to the existing literature in several ways. First, the study has investigated an important, under-researched area for marketing inquiry—that dealing with public sector decision-making regarding online marketing efforts. Given that both large numbers of citizens will potentially be affected by these efforts, and large economic expenditures are likely, the study would seem to have made a key contribution. The study has further contributed to existing knowledge by largely confirming elements of the Internet experience seen in previous, more descriptive, private sector studies of Internet adoption. Finally, the study has contributed to the existing body of marketing knowledge surrounding diffusion theory and the adoption process.

The limitations of the study affect its generalisability. These limitations include the generally qualitative nature of the study—aimed at generating insight through follow-up open-ended questions and probing of responses, the relatively small sample size, the fact that the study was done only in Australia (and principally in Queensland), and the relatively small number of quantitative measures used in the interviews given the limited time available to busy government officials. These limitations serve as useful directions for further research.

Further research might either usefully replicate the study perhaps within a somewhat differing context, or might build on this study as a first effort toward generating insight through a more quantitative hypothesis testing approach, with a larger more geographically representative sample and additional measures. Other such measures might be drawn from previous studies of technology to detail aspects of customer willingness to pay and/or cost/benefit aspects of the decision-making calculation, organisational characteristics and differences as these relate to the online marketing decision, characteristics of decision-makers, and so on.

Implications for marketing management

In light of today’s fast changing, extremely competitive environment, the qualitative study results may imply a sense of some concern for marketing management in that early efforts and thinking about on-line service provision by government appear far less than “optimal” and are lacking in both strategic cohesion and in customer orientation. While government decision-makers show recognition of the importance of the Internet and online service provision, and the findings show their recognition of the relative advantage, cost and so on of

the innovation, the study results also show that for the most part public sector efforts in this area are somewhat ad-hoc and lacking a cohesive strategy for implementation.

Further, the qualitative findings point to the facts that governmental agencies appear to be employing a “product” or “production” approach to the delivery of services on-line, with very little attention being addressed to the customer side of service delivery issues. Instead decision-making, as revealed in both the qualitative and quantitative results appears to be driven strongly by “political pressure”. Ease of “getting something happening” as this relates to technology and product offerings is guiding decisions about which service offerings will be delivered and to whom. It also appears little is being done in the way of evaluation (or planning for evaluation) of such on-line service provision.

Given the above, the results imply that public sector managers might do well to study the online, e-commerce efforts of the best of their private sector marketing counterparts. Much can likely be gleaned from a study of private sector e-commerce sites or case studies of successful online commercial efforts—whether private or public sector.

Additionally, substantial evidence supports the idea that being market-oriented pays dividends, at least in highly developed societies. A number of studies involving more than

500 firms or business units across a variety of industries indicate that marketing orientation has a significant positive effect on various dimensions of performance, including return on assets, sales growth, and new product success (c.f. Narver and Slater, 1990; Jaworski and Kohli, 1993; Slater and Narver, 1994; Workman, 1993), as well as being a key element for customer satisfaction and service delivery. The implications for successful public sector online marketing efforts would seem clear.

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Appendix One; Agencies and Respondents Numbers Interviewed

Queensland Transport –3
Canberra Connect Project–4
Brisbane City Council-4
Department of Natural Resources and Mines 1
QLD Department of Main Roads-3
Queensland Treasury ASAP program-3
Department of Premier and Cabinet-3
Queensland Rail—2
CITEC-6
Queensland Office of Fair Trading-1
Education QLD-1
Department of Families-1
Department of Health-1
Public Works –2
Employment and Training-1
QLD Local Government and Planning-1
QFleet-1
NSW Police-1
Immigration and Multicultural Affairs-2
VIC Roads-1