

Online government: blurring the boundaries

Changing economics enabled by the Internet create opportunities for the private sector to provide services traditionally provided only by government

Public/private "service webs" can lead to disintermediated government, lost opportunities to leverage government strengths and important policy issues

Innovative public-private partnerships allow governments to leverage private sector skills while maintaining important policy controls and safeguards

Appropriate form of partnership will depend on the role of government and the private sector in creating content and managing context

Effective public/private service webs will depend on the public and private sector's ability to define strengths and weaknesses, and focus on core competencies



D I G I T A L 4 S I G H T

Governance in the Digital Economy

Online government: blurring the boundaries

"While the biggest IT benefits often require cooperation across the boundaries that separate one agency from another and government from the private sector, sustaining cooperation among diverse entities is almost always difficult. Those who ignore cross-boundary opportunities – especially now that the Internet has greatly reduced the obstacles to network interoperability – make a major mistake. Cross-boundary work is enormously more feasible than it used to be."

—Eight Imperatives for Leaders in a Networked World: Guidelines for the 2000 Election and Beyond, The Harvard Policy Group on Network-Enabled Services and Government, 9.

"The terms public and private are fundamental to the language of our laws, politics and social life, but they are sources of continual frustration. Many things seem to be public and private at the same time in varying degrees or in different ways. As a result, we quarrel endlessly about whether some act or institution is really one or the other."

Paul Starr, "The Meaning of Privatization," Yale Law and Policy Review 6 (1988): 6-41. This article also appears in Alfred Kahn and Sheila Kamerman, eds., Privatization and the Welfare State (Princeton University Press, 1989).

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Scorecard

Name

Public/Private Service Webs

Description

The interaction of the public and private sectors in the provision of services traditionally considered part of the "public realm" (Local Information and Services, Education, Health, Employment, Small Business, Taxation and Tourism)

Key Participants

Municipal, regional and national governments; citizens, students, patients, job seekers, entrepreneurs, taxpayers, tourists, technology companies and entrepreneurs

Technology Enabled Change

- The Internet has shifted the economics of government services – making previously uneconomical services profitable for the private sector to provide.
- HTML, Java, and "thin-client" architectures allow the private sector to polyintermediate government services without governments' active involvement.

Success Indicators

- Over 30 million Americans filed taxes online in 2000 with the help of private sector "e-filers".¹
- The British Government's portal, "Open.gov.uk", gets two million hits per day.
- DeKalb county, which includes Atlanta, got one million hits on its online property tax Web site during its first month.
- GovWorks.com has received over \$50 million in venture financing since mid-1999.
- 10,000 instructors from 3,300 institutions in 70 countries use Blackboard.com to conduct online instruction.²

Perils

- Loss of policy control
- Degradation of government services
- Loss of government revenue

Future State

- Increased leverage of market and civil society strengths in delivery of services.
- Better targeting of government strengths and asset deployment in online services.

URLs and Key Examples (full list in Appendix B)

- <http://www.ezgov.com>
- <http://www.maxi.gov.au>
- <http://www.versity.com>
- <http://www.fedjobs.com>
- <http://www.governmentguide.com>
- www.ezgov.com
- www.maxi.gov.au
- www.versity.com
- www.fedjobs.com

Introduction

The first few years of the Web has led to a burst of entrepreneurial creativity as the economics of communication and distribution have been altered. As transaction costs fall, entire industry supply chains have been disaggregated and re-aggregated. The resulting “service webs” take on forms ranging from hierarchical to self-organizing and create new value propositions for the end-customer.

To date, most technology-enabled government initiatives have been less dramatic than private sector initiatives. Rather than disaggregate and rebuild entire supply chains, many governments have transferred their internal information and systems to the Web. To be sure, this has had a dramatic impact on service costs and efficiency. But replicating existing systems and processes ignores one of the powerful implications of the Internet – the ability to create new forms of value by focusing on and transforming core competencies and creating partnerships for non-core activities.

Government has not yet embraced the potential of new organizational models of the service web. But the private sector has:

The operative word is easy: ezgov.com. The seamless, cost-effective, secure way to bring on-line government to the people. Be a hero. Make government user friendly. You will quickly see how easy and exciting this partnership can be.³

—Advertisement for ezgov.com

The Internet makes it easy for the private sector to compete with government on a growing number of fronts. Site traffic is one of the key metrics used by the investment community uses to value a Web site. Using this measure, government Web sites are worth millions to private sector investors. Since all citizens must interact with government on a regular basis (driver licenses, taxes, fines etc.), a staggering amount of Web traffic could flow to private sector sites that can improve upon government’s performance. GovWorks.com and ezgov.com, for example, aim to provide a better “user experience” than local governments and, in the process, cherry-pick the most profitable segments of the US\$600 billion per year government payments market.

The Internet also allows the private sector to create new extensions to public services with fewer inhibitions and greater speed than government. Some companies have moved in on existing government services such as small business development assistance and government recruiting and added new forms of value. Onvia.com provides small business with an online RFQ marketplace and FedJobs.com provides an email alert to candidates who may fit a particular government job posting. Both go beyond what the government has thus far provided.

Advertently or inadvertently, by design or of necessity, government is relinquishing some of its (existing or potential) services and control to the private sector. This amounts to a de facto privatization of government services – similar to what Paul Starr calls, “privatization through attrition.”⁴ Unlike traditional discussions of privatization, this privatization is descriptive, not prescriptive, and in many cases is inevitable.

Reacting to changing economics at various stages in the government supply chain, companies are creating services that compete directly with government. Whether governments approve or not, they have become part of emerging service webs – networks of private firms, civil society, and even other government institutions – operating in traditional government areas.

To manage this change effectively, governments must understand the dynamics of each type of service web, how to retain control where appropriate, and how to leverage its own core competencies to create a sustainable and appropriate service strategy.

Background

The Internet has changed the economics of public domains. For example, governments have traditionally taken an active role in small business development, local information services and various levels of healthcare (see box). Today, however, services such as Onvia.com, with its online RFQ marketplace, create a more level playing field for small business. CitySearch can now economically provide more local information than any phone book in history. And WebMD provides users with more information than they can typically get from a local public health office. None of these services charges a user-fee.

In these early days of experimentation and intrusion by both the private sector and civil society into traditional government areas, the dominant models have not emerged. However, government must respond quickly before new organizational models delivering high value take root, leaving in their wake unintended consequences such as disintermediated government, lost opportunities to leverage government strengths and unaddressed policy issues.

Three major challenges face government in the transition to online service delivery. And for each, appropriate responses are at hand.

- *The demand for citizen-centric, integrated services.* With few exceptions, governments continue to present a public face of fragmented services delivered from traditional departments. Private suppliers have spotted this weakness and are moving quickly to respond. The digital economy offers the opportunity to refocus service delivery as citizens want to access it: integrated service offers combining relevant services and information across jurisdictional boundaries with related market and civil society offerings. Often, governments need not be at the center of these integrated offerings.
- *Devolution and partnership.* The digital economy lays bare every player's strengths and weaknesses, and offers new ways of integrating value from a broader range of participants in any endeavor. Governments must focus on their core competencies and increasingly leverage the capacity of the market and civil society to deliver services.
- *Policy issues.* The new economy inevitably tests existing rules and policies. Issues – such as new twists on privacy and capacity for self-regulation – are emerging as the lines blur between government, the market and civil society. Where important policy objectives are at risk, governments must move quickly to determine the applicability of existing rules and amend where appropriate. At the same time, governments must take the opportunity to assess where innovation has surfaced the need for policy change.

Typology

THE BUSINESS WEB

Emerging service webs raise many new issues for government. An analytical typology is required to help governments identify and address these issues.

In their book *Digital Capital*, Don Tapscott, David Ticoll and Alex Lowy describe five dominant “business webs” ranging from the self-organized and highly integrated Alliance to the hierarchical and loosely integrated Aggregation.

The “b-web typology” describes the characteristics and operational issues within each type, focusing on the interactions of the players – regardless of who they are. The typology allows a comparison of dynamics in seemingly disparate industries and countries (e.g. Aggregations such as Yahoo! in the United States and Africa Online in Africa).

It also defines value exchange between the players in broad terms, including “goodwill,” “information,” and “attention,” not just in terms of financial transactions. This allows it to describe complex webs that create and exchange various forms of value but do not necessarily involve the payment of money (e.g. the Linux phenomenon).

This typology is a useful framework for understanding the shifts taking place in government service delivery as the dynamics of control and value integration are transformed in new organizational models. However, many of the key issues in public/private service webs arise from the different motivations of their public and private sector players. As a result, grouping service webs according to the issues they face requires an additional typology for these emerging models.

A COMPLEMENTARY TYPOLOGY

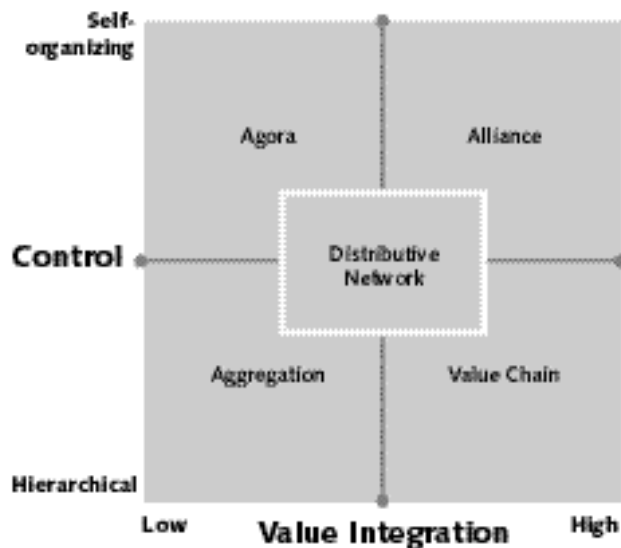


figure 1.

This *complementary typology* has two axes which both range from “public sector” to “private sector”:

- **Context Control:** Control of the “context” such as the Web site or toll-free telephone numbers.
- **Content Control:** Creation and formatting of the content represented on the Web site.
- A “Dot-Gov” is a government context that contains the government’s own content in the form of guides, instructions, fines, licenses, etc. (e.g. Open.Gov.uk). “Dot-Govs” were a dominant form at the dawn of the Web since governments were early – albeit rudimentary – users of the Internet.
- A “Government-Led Initiative” is a government controlled context that delivers private content (or a mixture of public and private content) in the form of articles, postings, reports, brochures, links, direct communications, and transactions (e.g. ePost.ca). “Government-Led Initiatives” bridged the gap between “Dot-Govs” and “Dot-Coms” as the private sector began to experiment with Internet-enabled business models.

- A “Dot-com” is a private sector context that incorporates private sector content but that operates in a “public domain” such as healthcare, education, or taxation (e.g. WebMD.com). “Dot-Coms” became viable only after the private sector had figured out how to make money on the Web.
- A “Private Doorway” is a private sector context that provides citizens with added value in their interactions with government. This can range from a simple list of links to online tax collection (e.g. govWorks.com). “Private Doorways” are a new phenomenon, made possible by the refinement of the private sector’s experience with “Dot-Coms”.

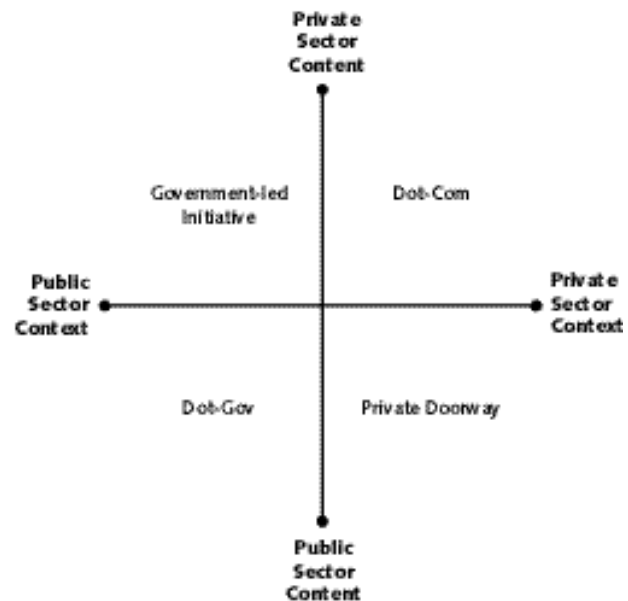


figure 2.

Various types of service webs can exist within each quadrant of this complementary model. For example, govWorks.com is an aggregation⁵ and FedJobs.com is an agora,⁶ but both are “Private Doorways” to government content.

figure 3.

PROCESS BREAKDOWN

To place different service webs in this model, “content creation” and “context management” must first be defined.

Content providers design, make and deliver core value – the goods and services – that ultimately satisfies customer needs. *Content creation* breaks down into three broad activities:

- **Manufacturing:** the initial creation of the content by researchers, writers, administrators, police officers, etc.
- **Assembling:** the collecting of content into a central repository so that it may be managed and communicated effectively (e.g. a database, library etc.)
- **Formatting:** the creating of communications material such as a brochure, textbook, invoice or piece of HTML code

Context providers are the interface between the customer and the system that creates the value. *Context management* can be broken down into three broad activities:

- **Deploying:** the management of the point of contact with citizens (e.g. a government office, the receipt of a piece of mail or the displaying of a Web site)
- **Tailoring:** the customization of the content to the needs of the individual citizen (e.g. a visit from a public health nurse, a classroom tutorial, an interview with a small business consultant)
- **Branding:** the creation of a “top-of-mind” awareness on behalf of the citizen. Organizations with a strong brand are usually the ones first contacted by a citizen when they require a service. For example, WebMD has a strong brand and Ernst & Young’s “Ernie Tax Advisor” has a weak brand.

This process breakdown can be used as a heuristic to determine whether the public sector or the private sector controls content and context.

Domains Studied

This survey reviews eight public domains: local information,⁷ transactional services,⁸ education, health, employment, small business development, taxation and tourism. These domains were chosen based on the widespread proliferation of different service webs within each one.

The survey analyzes four service webs in each domain. Service webs with similar positioning statements were selected to highlight how a specific value proposition can instantiate itself across all four quadrants of the typology. Appendix A contains a description of the 31 service webs studied.

Key Issues Identified

In the fast-moving digital age governments face a host of important issues as the dynamics of service delivery change. Rising user expectations, agile private sector offerings and available new technologies combine to present an extensive list of opportunities and challenges to policy-makers that demand immediate consideration and strategy formulation.

Dot-Govs often raise questions of whether government is ideally suited to provide both content and context. If not, a Dot-Gov may not be sustainable in the long run. If so, then its success rests on the ability of government to coordinate its services to provide an integrated value proposition to citizens.

Government-Led Initiatives face issues such as market interference and liability since government context providers that provide content from private sector sources have the capability to provide certain companies with an unfair market advantage or to provide an implicit endorsement to certain companies.

Dot-Coms can threaten government’s ability to implement effective policies if they supplant government as the primary provider of public domain services in areas such as healthcare, employment, and education. Arranged policies and even sovereignty can be undermined if not properly managed by government.

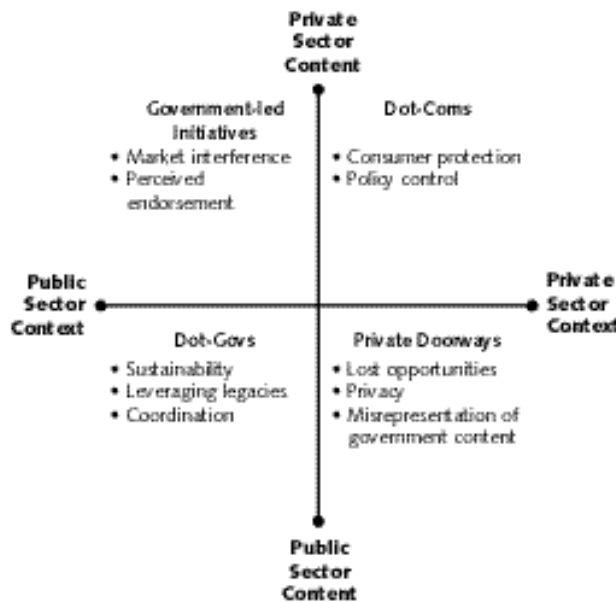


figure 4.

Private Doorways represent a powerful new phenomenon that in some areas threatens to take over the interface between citizen and government content. As a result, government loses opportunities to learn from and communicate with citizens. Private doorways can misrepresent government content, create new opportunities to collect private information even erode government's policy control.

DOT-GOVs

"Dot-Govs" contain government context and content. Governments operating in this quadrant face issues such as coordinating different departments, leveraging their legacies and guaranteeing sustainability in the face of private sector competition.

Sustainability

As the private sector devises new and profitable ways to replicate traditional government services, the public sector must ask itself whether its current course is sustainable. In other words, should government leverage the skills and competencies at which it excels or should it leverage skills and competencies that the private sector could easily replicate? Potentially unsustainable strategies include:

- **Replication strategies:** Canada's Job Bank is an example of the efforts some governments make to contrast their services with competing private sector offerings:

What makes the Electronic Labor Exchange different?

There are many "job matching" services available to you, and they are good. But we believe the Electronic Labor Exchange is better! ELE is Canada's only automatic, skills-based matching service. Employers and work seekers use the same list to define skills, education and experience, so the results are much more accurate than those of systems that rely on free text "key word" searches or other matching methods.

The Electronic Labor Exchange is also easy to use and available 24 hours a day, 7 days a week. There are no membership fees, hidden costs or small print - it's absolutely free! Don't be fooled by this. Sometimes you can get more than you paid for. And don't take our word for it. Give it a try, and let us know what you think at "mailto:elespe@magma.ca?subject=ELE"

In reality, Monster.com provides a very similar service. If Canadians go to Monster.com (and its Canadian site, Monster.ca) instead of the federal government's Job Bank, then the number of listings on Job Bank could fall below the "critical mass" required to keep it running.

- **Fragmented strategies:** Understanding what government can and cannot do well, some public institutions will unilaterally make decisions that will support the entry of the private sector into traditional government domains. For example, Monster.com is beginning to attract government job postings. Online government job boards will have less influence if governments begin using Monster.com instead of the government's job boards. Similarly, Versity.com, a Web site that provides students' classroom notes, is wooing some universities into its network because it provides an online service that the universities cannot match. As more universities join Versity.com, the public sector's key role in education will erode.
- **Misaligned strategies:** When crafting an Internet strategy, governments must also know when they are being "dragged into a fight" by the private sector even though they do not have a mandate to compete. While Internet-based distance education is growing dramatically, government agencies need to

consider their target audience before doing battle with private sector providers. Ontario's ILC is targeted at the province's most disadvantaged (those without a high school diploma, aboriginal groups, inmates at correctional facilities, clients of social agencies etc). But these groups tend not to have access to the Internet.

Similarly, Human Resources Development Canada, manager of Job Bank, has a mandate to help all Canadians, particularly disadvantaged groups. But these groups do not have extensive access to the Internet.

- *Inflexible strategies:* One of government's traditional strengths is its ability to provide information without a user fee. However, advertising-based revenue models on the Internet remove this key differentiator. The result could be dramatic. Britain's Open.gov.uk gets 14 million hits a week. If it were privatized, it could generate approximately US\$25 million per year in advertising revenue,⁹ and, at current portal revenue multiples, would be worth over US\$1 billion. How long will the private sector stay out of this business? Probably not long. Rather than competing with potential new private sector portals, governments could focus on managing the relationships with various government departments and Web sites (something at which it excels), leaving the value-added user interface management to the private sector (something at which the private sector excels).

A variety of "Dot-Govs" and "Government-Led Initiatives" confront this problem. The Small Business Administration's Pro-Net faces the challenge of providing added value to prevent users from going to Onvia.com for small business RFQ information. ERIC, the US Department of Education's clearinghouse for educational materials, must compete with "Dot-Coms" such as Blackboard.com that provide value-added through newsletters, chat rooms, Web space and news.

- *Silo strategies:* To be sustainable in the long run, "Dot-Govs" must also provide needs-based, customer-centric services. They must organize information based on users' needs, not government's internal organizational structure. The Australian Tax Office, like many private sector financial institutions, provides "life event

models"¹⁰ to help guide users to the content most relevant to them.

To build sustainable strategies:

- Critically assess government's competitive strengths and weaknesses, and find private sector partners in areas where government is not a recognized leader.
- Adopt a coherent government-wide strategy that includes all government departments and organizations.
- Avoid assuming the Web is the best channel for all citizens.
- Adopt metrics that mirror private sector metrics (e.g. valuation metrics). This will help forecast likely private sector responses to new opportunities.
- Design "citizen-centric" delivery models based on market segments and life events, incorporating relevant private sector and civil society offerings.

Coordination

One of the biggest challenges facing Dot-Gov's is their ability to coordinate content and services from a variety of different government departments. Lack of coordination can even lead to competition among departments or levels of government.

- *Interdepartmental coordination:* Government Web sites sometimes compete with one another. The Canadian government has at least four online labor markets: the Human Resources Development Department's Job Bank, "Electronic Labor Exchange (ELE)," and SkillNet.ca, and the Public Service Commission's government job openings Web site. In other cases, different levels of government compete for attention (e.g. the federal government's Job Bank and the province of New Brunswick's "NB JobNet").
- *Intergovernmental coordination:* "Neutral" third parties such as private sector suppliers may be better positioned to effectively coordinate different government departments and jurisdictions. Some governments may be more willing to work with the private sector than they are with each other or with other levels of government.

To manage the complexities of inter-departmental and inter-governmental coordination:

- Engage with the private sector as well as other governments or departments to create a service web.
- Separate content management from context management. This way, individual departments would be allowed to develop their own content, while a centralized context manager would ensure a “citizen-centric” business model.

Leveraging Legacies

Governments must re-evaluate their core competencies in the face of new private sector service offerings. However, in some cases governments possess legacies (assets and competencies) that represent “sunk costs” the private sector is unable or unwilling to replicate. Governments have an opportunity to recognize and leverage these unique legacies in the digital world without interfering with the marketplace.

- *Trust:* In many cases, government is trusted more than any one private sector firm. For example, Britain’s NHS Direct is a government-run health information Web site that provides Britons with “reliable and accredited” healthcare information. The NHS’s information strategy report, “Information for Health” states:

The Government recognizes that the patients and their carers look to clinicians providing their treatment and care as their most important source of information and support. However, additional sources of reliable and accredited information are also needed.

- *Physical infrastructure:* Public institutions possess extensive physical infrastructures. Facing online competitors such as Versity.com, universities are being forced to leverage their key differentiator – a live classroom experience.

Faced with the automation of the job matching process, Canada’s Human Resource Development ministry has redeployed thousands of personnel as value-added employment counselors, increasing the level of personal service provided to the unemployed. In addition, it has turned its offices, formerly dominated by job bulletin boards, into employment consulting centers.

- *Local knowledge:* NHS Direct also illustrates the value of local market expertise. While Britons are free to go to WebMD before NHS Direct, NHS

Direct provides more health information targeted to the British market. Similarly, Ontario’s Ministry of Tourism is likely to have a greater knowledge of Ontario than Fodors or L.L. Bean. As general portals, WebMD and Fodors may not have an economic incentive to develop local market expertise.

To effectively leverage legacy assets and competencies:

- Benchmark government against the private sector to identify legacy competencies.
- Identify unproductive fixed assets and find creative ways of re-purposing them in new models.

Government-Led Initiatives

A “Government-Led Initiative” is a service web that delivers private sector content through a government context. Since government must choose which private sector content to deliver, it faces issues such as potential interference with the marketplace and the perceived endorsement of select private sector firms.

Market Interference

Across all types of service webs governments face issues of market dynamics in this rapidly evolving space. Governments wear many hats – among them: supplier, regulator, policy-maker, purchaser, partner – giving rise to questions about the role to be played in a variety of emerging webs. Given government’s primacy in some policy fields and its sheer size, “Government-Led Initiatives” can potentially interfere with the market mechanism by favoring certain private sector content providers.

- *Favoring government content:* PureNZ.com has a responsibility to provide information on government venues (e.g. parks, government-owned attractions) and private venues (hotels, privately-owned attractions). This kind of mandate can give rise to claims of favoritism towards the government’s own tourist attractions.
- *Favoring specific private sector content:* The reverse charge is also possible. The Small Business Administration in the United States posts extensive disclaimers when users click on a link to an outside organization. However, the very existence of links to specific private sector sites can raise market interference concerns.
- *Exclusivity:* Outsourcing government content delivery to a few private sector Web sites arguably

constitutes a form of market interference. This type of outsourcing is different than typical outsourcing. In typical outsourcing, governments award contracts to the private sector with minimal adverse market impact because the government represents only one of the outsourcer's many customers. But when governments outsource the distribution of their content over the Web, they may give certain firms a market advantage. This effectively transfers government monopolies to the private sector.

To avoid real or perceived market interference:

- Separate the context management and (government) content creation processes. This will remove perceptions that a government-owned context favors government content over private sector content.
- Establish a robust partnership process and partner with many private sector firms.

Perceived Endorsements

In some service webs (particularly in "Government-Led Initiatives") governments must deal with liability issues when providing content from or links to private sector Web sites.

Many governments make extensive use of disclaimers to reduce their liability. The US Small Business Administration uses the following disclaimer regarding the content of its database:

The information contained in the PRO-Net System pertaining to specific business entities is the sole responsibility of the business entity.

and the following when linking from its Web site to a public or private sector Web site:

Any reference obtained from this server to a specific commercial product, process, or service does not constitute or imply an endorsement by SBA or the United States Government.

Links to private sector Web sites must be carefully managed since government contexts can appear to endorse specific private sector content (i.e. "Government-Led Initiatives").

To avoid a perceived endorsement, a Government-Led Initiative must create and enforce a strict policy governing non-government information and hyperlinks to private sector Web sites.

DOT-COMS

A "Dot-Com" is a service web that provides private sector content through a private sector context. While the public sector is usually not directly involved with "Dot-Coms", governments must be prepared to address their consequences. Since Dot-Coms operate without the direct involvement of the government, they raise issues such as consumer protection and a loss of policy control.

Consumer Protection

Consumer protection issues often accompany privacy issues. Dot-Govs, Government-Led Initiatives, and Private Doorways all entail some form of government involvement, which allows government to exert influence over the private sector to protect consumer interests. But consumer protection can be more complicated in the Dot-Com quadrant due to the lack of direct government involvement in these service webs. Traditional government responses to consumer protection issues involving Dot-Coms can include: providing consumer information, establishing industry guidelines, encouraging self-regulation or passing laws.

- *Content Sources:* Due to the nature of medical advice, businesses such as WebMD raise major consumer protection issues. WebMD refers to two types of business alliances on its Web site: *Partner* and *Affiliate*:

WebMD Partners' information has been created with both a commercial purpose and a good will intent to the public. All Partner content on WebMD is well defined and documented and displayed in a highly visible fashion, so that a WebMD user should not confuse Partner content with WebMD editorial information and daily news. Furthermore, WebMD users will know that content has originated from a Partner before they access such content.

Content Affiliates will house information from WebMD healthcare information partners who do not have a commercial purpose. This includes non-profit and government organizations and professional societies. Content Affiliates agree that their information will be reviewed by medical professionals, continuously updated, and delivered to WebMD on a timely basis.

Consumers need to know whether an article on the side effects of a particular heart medication was written by a “Partner” or an “Affiliate.” However, few will appreciate – let alone pay attention to – such distinctions. The constant turnover of information on WebMD means that governments must constantly monitor such issues.

- **Advertisers:** Because Web advertisements often look like real functions on a Web site, citizens might confuse a paying advertiser with a portion of the actual WebMD site. As a result, WebMD could be implicated if an advertiser’s asthma drug calculation tool gives a patient the wrong dosage recommendation. Governments must be prepared to respond to such consumer protection issues.
- **Services:** Governments need to consider defining minimum standards for many new Dot-Com and Private Doorway service webs. For example, governments must determine whether govWorks.com’s guarantee to pay a parking ticket within seven days is good enough. Governments must also determine if students should use Versity.com at their own risk or if Versity.com has some responsibility to ensure the quality of its classroom notes. In addition, governments will need to determine whether incorrect tax advice via email (and based on a limited set of file attachments) makes an accountant liable for any taxes owed.
- **Disclaimers:** The private sector is careful to remove as much liability as possible through extensive disclaimers such as govWorks’:

[GovWorks] is not intended to serve as a substitute for any professional advice such as, legal, tax, accounting or financial advice. We urge you to seek advice from a competent professional before taking any action based on the Content contained on the govWorks Web site. govWorks strives to provide you quality Content; however, we make no representation as to the accuracy, completeness, timeliness or suitability of such information. It is your responsibility to evaluate the information contained on this site.

Governments should determine whether govWorks’ disclaimer is more or less substantial than the (implied or explicit) disclaimer provided by the government’s own Internet offerings.

As these examples illustrate, consumer protection is particularly challenging for government to manage when the private sector owns both the context and the content (i.e. “Dot-Coms”). Governments can influence Dot-Coms by becoming part of a Dot-Com service web as a major customer or a provider of content.

Governments should respond to emerging consumer protection issues quickly. In most cases, the appropriate response will depend on subject matter (health information requires a different level of control than local services information) and will likely mirror appropriate responses in the physical world. Government can take the following actions:

- Provide consumer information
- Encourage industry self-regulation
- Establish oversight bodies
- Create guidelines
- Set minimum standards
- Legislative regimes

More difficult issues arise when Web-based services are beyond the reach of a jurisdiction and not subject to regulations or even influence. In such cases, public information campaigns may be necessary. In the longer term, transborder agreements may be required.

Policy Control

Emerging service webs can challenge government’s control over basic policy levers.

- **Economic development policy:** These new service webs can pose challenges to government’s economic development policy. The government of Canada supports regional development policies in areas of economic transition such as Cape Breton. Yet Onvia.com/Canada (Onvia’s Canadian Web site) does not provide any services targeted specifically at Cape Breton small businesses and Monster.ca (Monster.com’s Canadian Web site) lists thousands of jobs in Ontario, not Cape Breton. If job seekers and small businesses in Cape Breton access these private sector services rather than government services, then the government’s regional development initiatives might be frustrated.

The Canadian government’s Cape Breton policy challenge could easily evolve into a sovereignty issue if young Cape Bretoners were wooed away from Canada and toward Silicon Valley by a US-based labor agora.

- *Civil order:* Governments control driving behavior through fines and licenses. This policy control is mitigated by govWorks.com's parking ticket discounts for those who use its payment service frequently or for those who buy products at affiliated Web sites. These rewards confound the government's disincentives to park illegally. These service webs want to expand into payment services for more serious violations such as speeding, potentially undermining government attempts to promote safe highways.
- *Favoring wealthier companies:* Monster.com's alliance program provides better service to big recruiters. This could perpetuate the dominance of some industry leaders. Canada's Job Bank provides no such "premium" service.

Similarly, Onvia.com is under no obligation to recognize women or minority owned businesses in its RFQ database. However, the US Small Business Administration recognizes these groups and provides incentives for businesses to purchase from them.

The State of Indiana has partnered with a private sector firm, Indian@Interactive, to provide citizens with access to state records. It provides detailed or "premium" information for a \$50 per annum fee and automatic email updates regarding legislation for \$49.95. Critics say this approach "guarantees unequal access" by favoring wealthier companies.¹¹

Finally, if a government Web site sells advertising (e.g. BangaloreIT), partnering with a few dominant advertisers would likely provoke questions of fairness and equality.

- *Favoring certain industries:* Monster.com is known for its emphasis on IT job listings, which does not help low paid service industry workers. Canada's Job Bank contains extensive listings for mechanics and fast food cashiers – listings that would not be as profitable for a private sector labor exchange to post.
- *Favoring wealthier citizens:* Toronto.com pitches advertisers on its ability to target an affluent marketplace. Because of this strategic focus, Toronto.com does not have a strong business incentive to provide information on social services targeted at the poor.

GovWorks provides "govRewards" points to those who shop at govWorks and affiliated Web sites.

These reward points can be redeemed for discounts on government fees, fines, etc. Governments need to be aware that this benefits those who can afford to make substantial online purchases. If this catches on, there could someday be a service web targeted at affluent citizens (with transaction costs subsidized by advertisers eager to reach this audience) and another Web site targeted at the mass market (with a transaction surcharge).

- *Public health:* Through the National Health Service, the British government has major responsibilities in health care provision for all Britons, so the British government must carefully consider its response if substantial numbers of Britons begin using WebMD rather than NHS Direct. It could run the risk of being unable to effectively disseminate information relevant to the British market.

Like policies aimed at creating equality, policies that support specific social or economic strategies can be particularly challenging when the private sector owns the context (i.e. "Dot-Coms" and "Private Doorways").

To mitigate the effects of "Private Doorways" and "Dot-Coms" on government policy:

- Create a service web involving the private sector. Then use government's influence in the service web to reinforce policy positions.
- Co-brand Web sites for groups not adequately served by the private sector (e.g. "The Cape Breton Job Bank" – powered by Monster.ca).
- Only charge users for truly "premium" content and value-added services, not content currently provided for free.
- Prohibit the use of differential pricing for government fines based on affinity programs or unrelated purchases.
- Create off-line promotional strategies that drive local traffic to government sites. This will help governments compete with large Web sites in other countries.

PRIVATE DOORWAYS

"Private Doorways" are a new form of service web that provide government content via private sector context. Since "Private Doorways" act as the primary

interface with citizens, they raise issues such as: lost opportunities to connect with citizens, consumer privacy and the potential misrepresentation of government content by the private sector.

Lost Opportunities

Due to inaction or slow reaction, some governments risk losing control over major portions of public domain service:

- *Deployment:* Governments have historically deployed job market data through media such as job bulletin boards at local employment centers and were able to target those most in need. As more unemployed citizens begin using private sector online job boards instead, government's role as a deployer of employment information will decrease.
- *Brand:* The U.S. government's Office of Personnel Management manages a free Web site containing all federal government job postings. FedJobs.com, a private company, has a similar site containing the same list of jobs. Fedjobs.com charges users \$19.97 per month to search its database. Why would customers pay this when the site has very little added value? Because FedJobs has created a brand. The federal government has forfeited its opportunity to maintain a dominant brand in the government job vacancies arena. In fact many job seekers don't even know about the government's "USAJobs.OPM.gov" Web site.

Governments may also be relinquishing control over their brand images by allowing private Web sites to link to government sites without government's knowledge or permission. Such linking may appear benign, but it raises issues of brand control and implicit endorsement. Hyperlinks can be a form of intermediation between the citizen and the destination site, especially when the originating site serves up the destination site within an HTML frame. For example, a private portal to government services that also contains illegal or undesirable content would not be appropriate. In the private sector, Web sites wanting to link to Fodors.com must sign a contract which covers issues such as logo usage, context of the link, and content surrounding the link. Governments generally do not track how links to their content are used.

GovWorks says it can provide local governments with more Web site traffic "through [its] nationwide advertising and marketing efforts." By relying on govWorks for Web traffic, local governments run the risk of allowing an intermediary to assume the role of primary brand for citizens looking for government information and services.

- *Customer knowledge:* FedJobs.com could eventually charge the government a "finder's fee" for qualified applicants. In addition, FedJobs.com could sell its usage data back to the government so the government could improve its recruiting strategies. In this way, governments can become dependent on the private sector for job applicants and recruiting data.

America Online's Government Guide can track how small business users access government services through its Web site. If enough small businesses use this service, AOL will eventually have a better knowledge of how small business accesses government services than the government itself. Like FedJobs.com, it could then offer to sell this data back to government.

Similarly, TurboTax.com, with 17 million users, may eventually know more about the effects of tax policy than the government itself. Some day, the media might call TurboTax for an objective analysis of the effects of a capital gains tax reduction.

- *Revenue:* Government can also lose revenue opportunities by giving away content for free to private sector Web sites. CitySearch's toronto.com Web site contains links to government Web pages. These government pages appear within the toronto.com frame and have the same look and feel as the rest of toronto.com. Meanwhile, toronto.com earns advertising revenue based on Web traffic, generated in part by the government content.
- *Feedback:* Private sector companies can collect user feedback on any Web site across the Internet. Technologies such as Third Voice allow users to post their comments right onto specific Web sites for other users to read. AOL's Government Guide offers users the same functionality using AOL's own software. In these cases, the private sector has become a facilitator between the citizen and the government. Therefore, governments will need to gain access to and learn from this feedback or it

will risk effectively forfeiting its role in the collection and management of citizen feedback. In addition, governments must be aware that users of its Web site might also be able to view other users' (potentially disparaging) comments as they move through the government's Web site.

- *Recognition:* Many private sector contexts link to government content without acknowledging that the content was not developed by the private sector firm. AOL's Government Guide posts a message signaling the use of government content, but the message is small and obscured by a frame border. CitySearch's toronto.com also makes extensive use of municipal government content with little recognition.

Lost opportunities are mostly likely to arise where the private sector has assumed control over the (usually more lucrative) context, leaving the government with control over (the usually less profitable) content generation activities.

To effectively address these lost opportunities:

- Seek partnership with the private sector firms that are attracting citizens away from Dot-Govs (e.g. FedJobs.com, Toronto.com).
- Establish a "Third Voice" -type service to collect feedback from citizens. This will enhance government's ability to manage the "relationship capital" it has with citizens.
- Establish brand strategies for government Web sites.
- Create a comprehensive linking policy to ensure that its content is not abused.
- Require that government content always be cited by private sector Web sites.

NEW TYPES OF PRIVACY ISSUES

Privacy issues affect all types of service webs. But the emergence of "Private Doorways" creates new types of privacy concerns. New service webs allow the private sector to view and record citizens' interactions with government.

- *Service Usage:* America Online's Government Guide serves up government Web pages from within an AOL Web page which provides targeted banner advertising throughout the citizen's online experience with government. AOL is able to target specific advertisements to those citizens using

particular government services: it can suggest a brand of dog food to users applying for pet licenses, a driving lesson to those paying speeding fines or a singles club membership to those finalizing divorce certificates. Even if a citizen links from a private sector site to a government site and then back, current technologies allow the private sector Web site to track and record where the citizen entered and where they exited the government site.

- *Resumes:* FedJobs.com can track the personal information of applicants for government positions and could augment this personal profile if users fill out a survey to qualify for a "\$5.00 Off" deal. Then FedJobs.com could forward the applicants' interests (and resumes) to other recruiters.
- *Tax Returns:* Similarly, TurboTax could analyze a citizen's tax return and forward the name to a partner organization such as a bank (for a loan to cover a tax bill) or a furniture store (if the citizen is getting a tax return). Intuit, owner of TurboTax.com, was recently sued for allegedly not informing users that their personal tax information would be used to direct targeted ads at them.
- *Medical Records:* Medical Web sites in the "Private Doorway" quadrant pose a particular threat to privacy since personal medical information is very private but can be very profitable for advertisers. For example, MedicalRecord.com could serve a banner ad for Alcoholics Anonymous if your records show a drinking problem or an article about a new life-saving drug if your cholesterol is too high.

The California Healthcare Foundation recently found that 75% of those seeking health information on the Internet are "concerned" or "very concerned" about the sites sharing their personal health information with a third party.¹² The California Healthcare Foundation also found that although 19 of the 21 largest health Web sites had privacy policies,¹³ there are "numerous examples of practices that appear to contradict the stated privacy policies".

Standard commercial Web site privacy policies do not prevent personal information from being used – only from being sold to *third parties*. Internet business models are predicated on target marketing. Therefore, personal information is almost always used to customize the advertising, content, and functionality of the Web site. Ironically, calls for greater privacy end

up benefiting the context providers and advertising networks since they are now required to manage the entire marketing process themselves.

To address these emerging privacy issues:

- Require all “Private Doorways” to provide explicit opt-out policies to citizens.
- Establish a government privacy seal of approval program for Private Doorways.

MISREPRESENTATION OF GOVERNMENT CONTENT

One of the key dangers of delivering government content through a private sector context is the potential misrepresentation of government information and services by private sector Web sites. For an example of the private sector’s ability to confuse citizens, one need look no further than the generic, official-sounding URL’s of some private sector Web sites (Toronto.com, FedJobs.com, Government Guide.com).

- *Content generation:* CitySearch provides an “editorial profile” on government services for each of its local markets. Governments must ensure that these profiles are accurate since many citizens may mistakenly believe that Web sites such as Toronto.com are the “official” Web sites of their respective municipal governments.

When the private sector controls citizens’ transactions with government, this editorial power can be even more dramatic. As it processes a citizen’s speeding ticket, govWorks.com could provide a message telling the user how they can help to repeal a new speeding law.

- *Content editing:* Private sector Web sites could even modify government information to suit their business needs. FedJobs.com has a “privately compiled list of [government] jobs”, but does not define “privately compiled.” Could it delete jobs it thinks are boring? Dangerous? Low paying?
- *Content organization:* AOL’s Government Guide categorizes government links for ease of navigation. However, by grouping government Web sites under different headings, AOL effectively editorializes government services. For example, it lists product recalls under “Consumer Services,” not “Health & Safety.” If product safety were a cornerstone of the government’s health agenda, then AOL’s categorization could confuse the government’s policy message.

- *Brand confusion:* For \$4,000 per month, companies can place a button linking FedJobs.com’s home page to their own. For users who mistakenly believe FedJobs.com is actually a government Web site, this could be viewed as a government endorsement.

Governments must be especially cognizant of potential misrepresentations of their content when the private sector owns the context (i.e. in “Private Doorways”).

To ensure government content is not misrepresented by “Private Doorways”:

- Encourage Private Doorways with URLs that can be confused with those of the government to make it clear they are private sector Web sites.
- Provide Private Doorways with value-added content in exchange for the opportunity to ensure government content is correctly represented.
- Establish other types of partnerships with Private Doorways to exert influence over copy and design, thus ensuring government content is correctly represented.

Conclusions

As the Internet changes the economics of traditional government services, the private sector has unilaterally begun to compete with government to provide some of these services. The resulting de facto privatization has raised a number of new issues for government.

This study highlights the need for governments to respond quickly. The appropriate government response will depend on the type of public/private service web:

Historical, cultural and political issues will shape the appropriate response to these issues within each jurisdiction. However, the following steps will smooth the transition from the historical process flow to any new form of service web.

- *Define the specific value proposition:* Determine the value of government services and the way they are provided to citizens. Disaggregate the various elements of this value proposition.
- *Clarify the policy issues:* In many areas of government activity, public policy goals are an important feature of both the content and context. Governments need to consider how these goals are

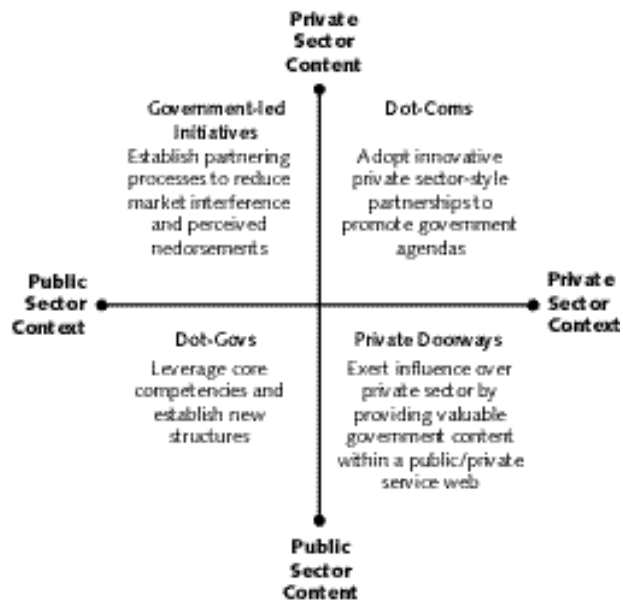


figure 5.

affected by the variety of options now available to government, citizens and the market in service delivery.

- *Conduct an internal strategic analysis:* Turn a critical eye on government's strengths, weaknesses, opportunities and threats. Focus on leveraging core competencies and strategic assets and acknowledge where private sector partnerships will be required to support the value proposition.
- *Develop a service web model:* Where appropriate, proactively seek out private sector partners before they become competitors and before government loses its negotiating power. Make civil society an integral part of the service web. Involve as many partners as possible to reduce the possibility of new monopolies.
- *Determine a service web governance structure:* Act now by establishing a service web governance structure that ensures government maintains the appropriate controls over policy, consumer protection and privacy. A central role in the governance of the service web will also reduce the risk of misrepresentation of government content.
- *Move fast:* The private sector moves at "Internet speed." Government decision making and implementation needs to be able to respond to

opportunities and threats as soon as they arise.

Despite the rapid evolution and fluidity of digitally enabled service delivery, an enduring inevitability is that the private sector will continue to seek new opportunities in areas where they can more quickly add value and be more competitive.

The lines are blurring between public, private and civil society. The new service web models are an opportunity to leverage new value to the end-user and a "smarter" use of government assets and strengths in achieving its policy goals and fiscal objectives.

— Christopher Holt

Appendix A – Case Overviews

Local Information

HISTORICAL PROCESS FLOW

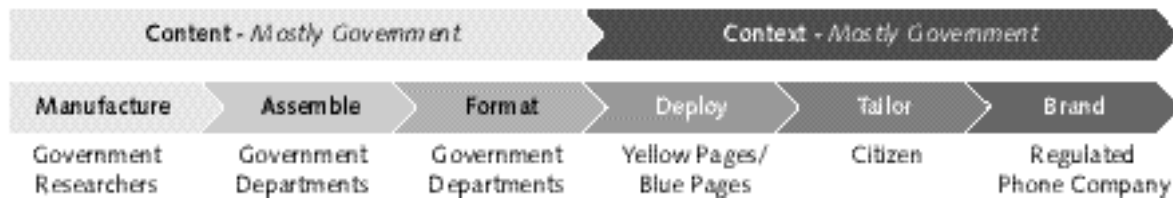


figure 6.

NEW MODELS

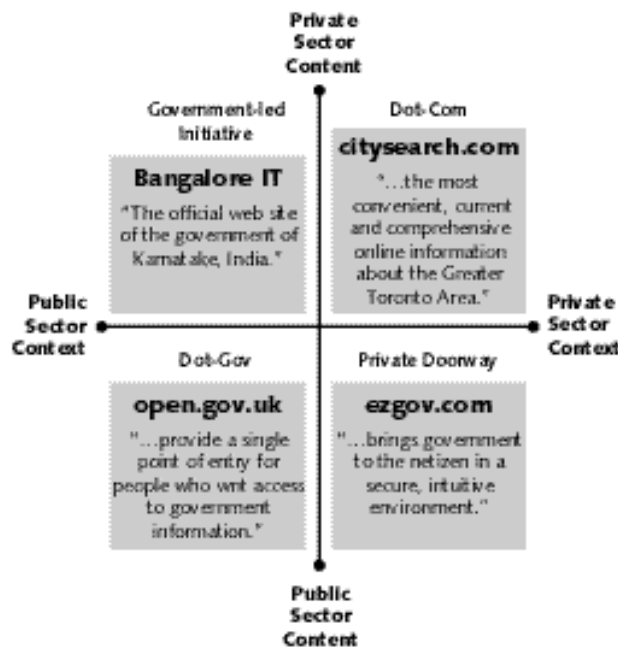


figure 7.

"Government-Led Initiatives" in local information dissemination generally occur in jurisdictions where the private sector cannot justify investing in the creation of a local portal or where the government has taken a leadership position on the Internet. Many developing countries have taken a "Government-Led Initiative" approach to local information. Bangalore IT is a government site for the Indian state of Karnataka and acts as a primary portal to both government and the private sector.

"Dot-Govs" in this domain often take the form of government portals aimed at simplifying citizens' search for government information. Open.gov.uk is a well-known example. Canada's "InfoCentre" pilot project and The Netherlands' "Public Counter 2000" initiative are other good examples.

In the future, many **"Private Doorways"** plan to provide more than just local information (e.g. ezgov.com plans to offer a tax payment service to select counties). But for now, Private Doorways to local information are mostly made up of links to government Web pages.

"Dot-Coms" providing local information can often be confused with governments' own Web sites (e.g. CitySearch's Toronto.com vs. The City of Toronto's City.Toronto.on.ca). Many of these Web sites contain extensive municipal government content.

Transactional Services

HISTORICAL PROCESS FLOW

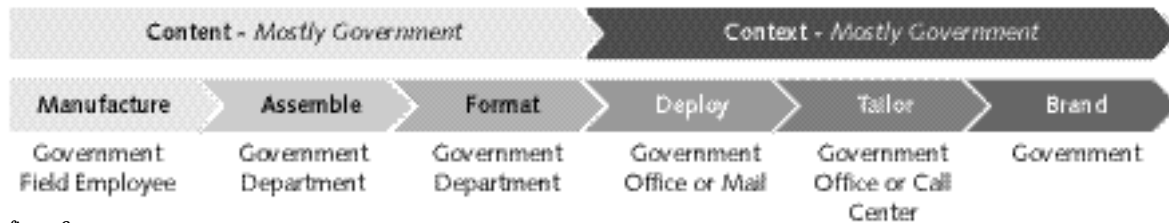


figure 8.

NEW MODELS

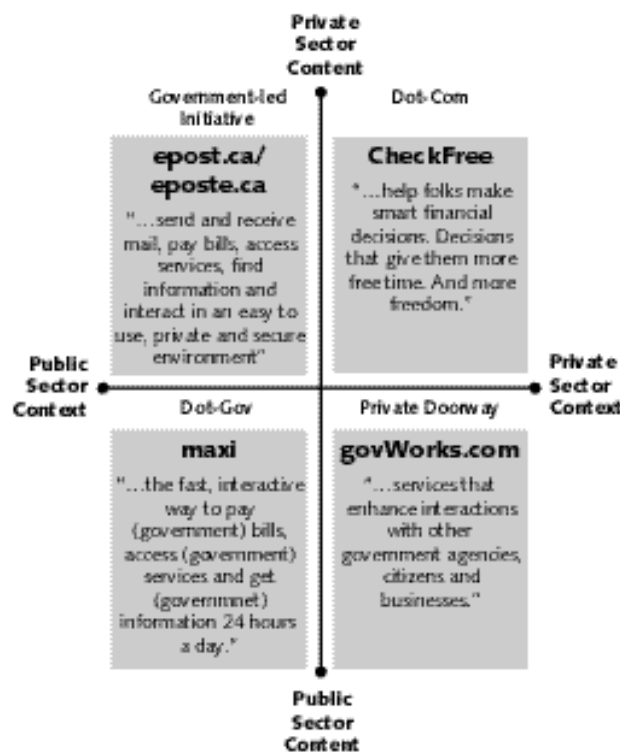


figure 9.

"Government-Led Initiatives" in the transaction of public (and private) business over the Internet take the form of services such as bill payment that require the *large scale* and *trust* that government provides. Canada's ePost.ca leverages its commercial client relationships to provide on-line bill payment services.

Government controlled **"Dot-Govs,"** such as the Australian State of Victoria's "Maxi," have the advantage of tight integration with government back-end systems. Another example of a "Dot-Gov" providing transactional services is Washington State's "Access Washington."

Because the private sector excels at adding value to the customer experience, **"Private Doorways"** give Dot-Govs a run for their money. However, for these sites to become truly transactional, they must integrate with the back-end systems of each individual government. GovWorks.com allows citizens to pay parking tickets for any city in the United States via its (mostly manual) process.

"Dot-Coms" such as Checkfree and a variety of other private sector bill presentment companies allow customers to see and pay bills from public (and private) sector organizations. Most of Checkfree's full partners are actually public utilities.

Educational Materials

HISTORICAL PROCESS FLOW

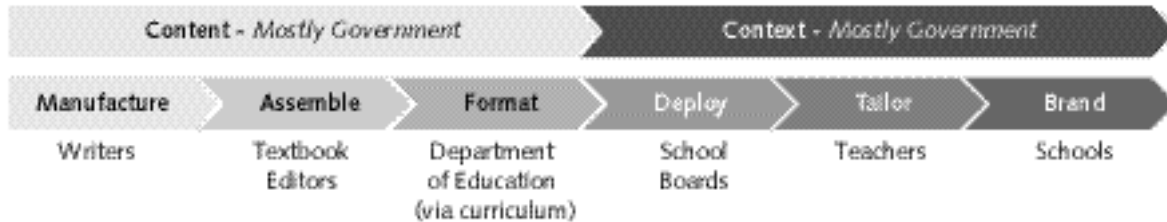


figure 10.

NEW MODELS

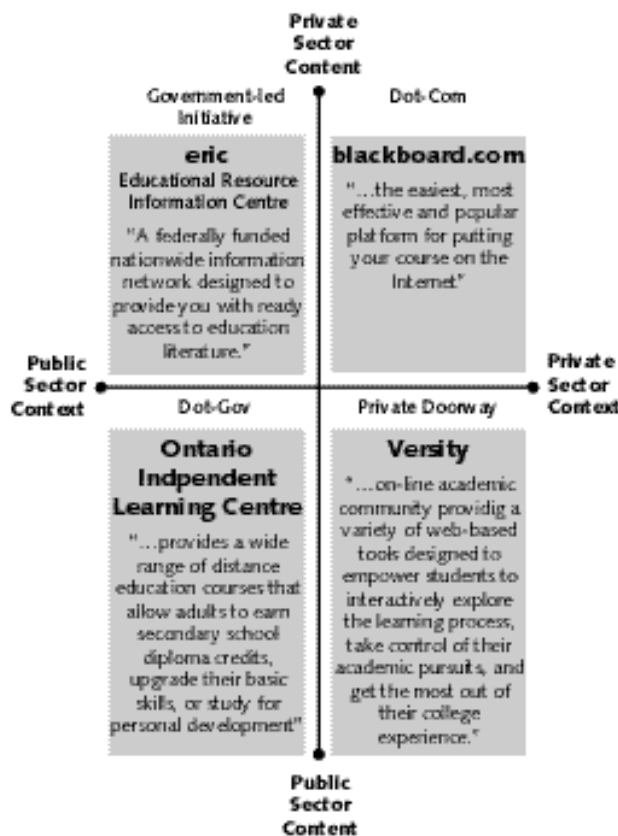


figure 11.

“Government-Led Initiatives” in education can take the form of educational “clearinghouses” where governments carefully screen input from a variety of public and private sources. Most are libraries or databases and offer little direct interaction among users.

“Dot-Govs” are online replications of the historical process model for education – government controlled content (via its control over curriculum) and context (via its control over schools). This type of service web is particularly well suited to disadvantaged groups that may not be targeted by a private sector context or content (as long as these groups have access to the Internet). The Ontario Government’s Independent Learning Center targets native groups and correctional institutions, two segments that would likely not be well served by the private sector.

“Private Doorways” are less common in education than in other domains because private sector Web sites have access to plentiful private education content and therefore have little reason to partner with government/public content providers. Versity.com, however, is a unique example of private sector context employing public sector educational content. The site provides free lecture notes from students at 160 US (mostly government funded) universities, making it a Private Doorway to government content.

Educational **“Dot-Coms”** such as Blackboard.com are privately owned Web sites that help educators conduct courses using a free Web page and a “resource center” of educational material from the public and private sectors. Blackboard.com hosts courses from 1,600 institutions in 70 countries.

Health Information

HISTORICAL PROCESS FLOW

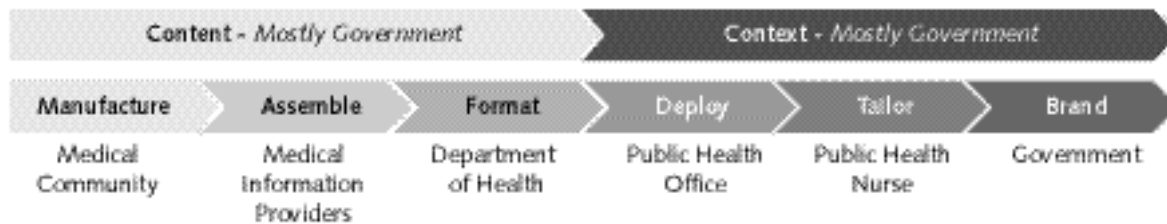


figure 12.

NEW MODELS

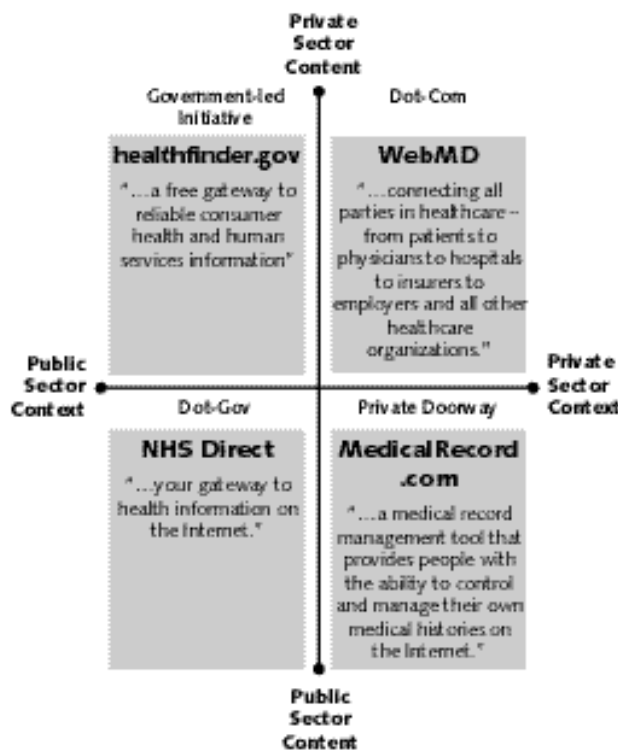


figure 13.

As in education, **"Government-Led Initiatives"** in health information can take the form of "clearinghouses" where governments carefully screen input from a variety of public and private sources. Most of these clearinghouses are libraries or databases with little emphasis on direct interaction between users. Healthfinder.org is one such clearinghouse.

"Dot-Govs" in the health domain exist in many countries and focus primarily on public health issues rather than individual health information. Britain's NHS Direct pre-dated the World Wide Web as a toll-free phone line. As a result, it is one of the few service webs where government provides tailoring activities – the customization of content – as part of its context ownership.

As in education, private healthcare contexts needn't use public content since so much privately generated healthcare content already exists.

MedicalRecord.com, and the many new services like it, provide patients with access to medical records that, in many countries, is managed by government institutions such as hospitals and clinics. Thus, Medical Record.com is a "Private Doorway" in the health information domain.

WebMD is a health information **"Dot-Com."** While both content and context are privately owned, governments have an important role in protecting consumers and ensuring the site publishes accurate information.

Employment Information

HISTORICAL PROCESS FLOW

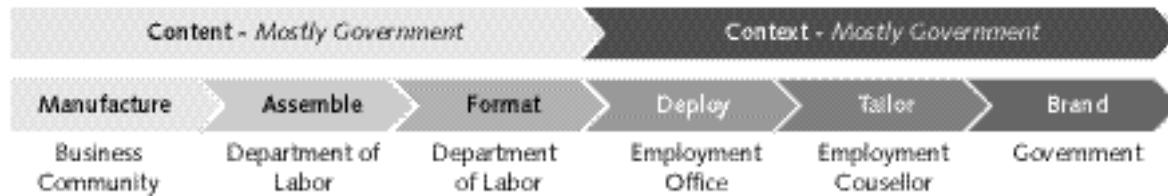


figure 14.

NEW MODELS

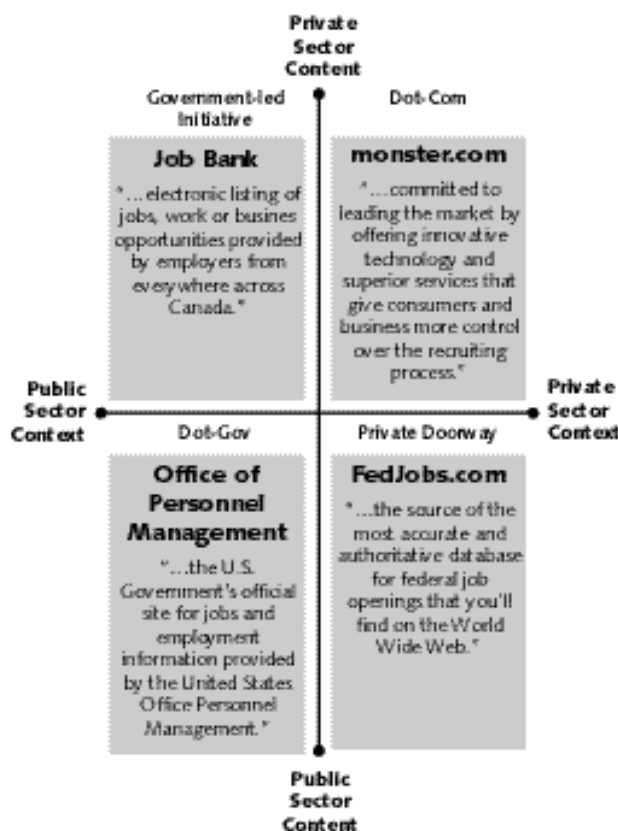


figure 15.

"Government-Led Initiatives" in the employment domain (such as online job boards) like Canada's Job Bank are often touted as good examples of how government has embraced the Internet.

"Dot-Govs" in the employment domain are government-run job boards that contain only government job openings. The US Federal Government's Office of Personnel Management (OPM) maintains a database of approximately 15,000 federal job openings.

"Private Doorways" into government job opening databases attempt to provide added value such as enhanced search capabilities to the basic list of postings. In return, some charge a fee (e.g. FedJobs.com), while other generate revenue from advertising or software sales (e.g. FederalJobs.com).

Monster.com, a **"Dot-Com"** in the employment domain, is a private sector context delivering a vast amount of private sector content. Interestingly, many governments are beginning to post jobs on Monster.com to supplement (or even replace) their postings on government Web sites.

Small Business Development

HISTORICAL PROCESS FLOW

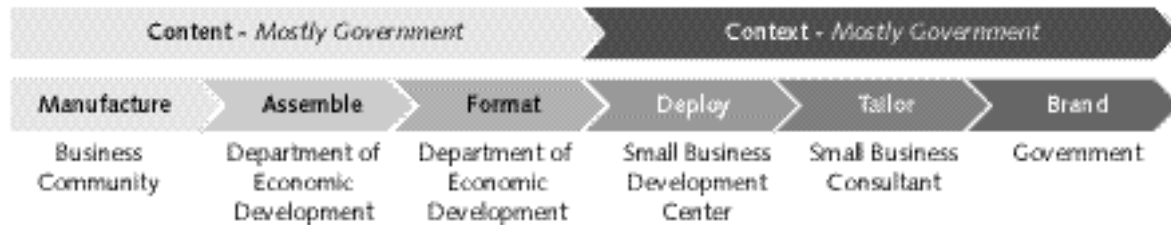


figure 14.

NEW MODELS

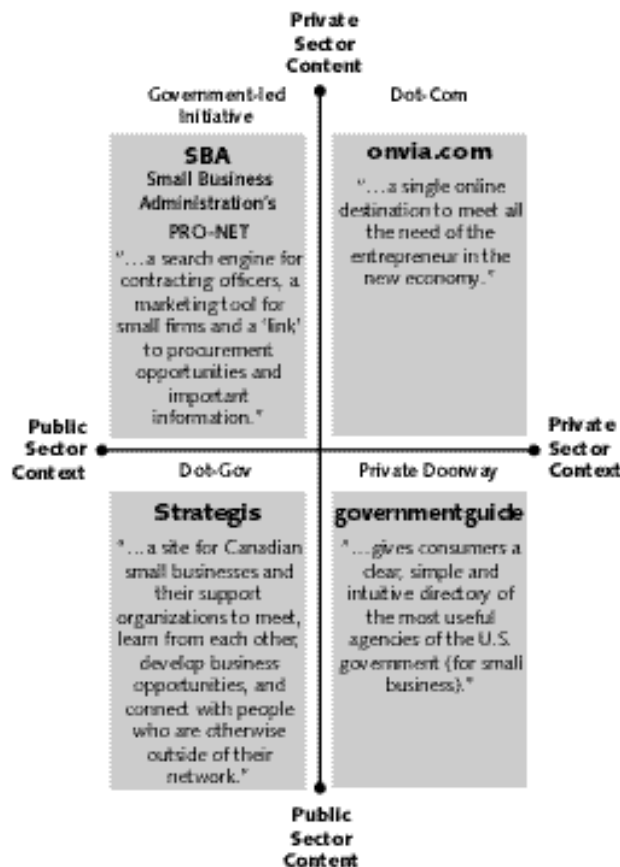


figure 15.

The U.S. Small Business Administration's Pro-Net is an example of a **"Government-Led Initiative"** in the small business development domain. Pro-Net is a database of Requests for Proposals (RFQs) targeted at small business.

"Dot-Govs" in the small business development domain replicate or augment the government historical efforts to develop the small business sector. Industry Canada's Strategis Web site has a specific area called "Contact!" targeted at small business.

"Private Doorways" into the government's own small business information can add significant value when the government's existing content is widely dispersed across a variety of departmental Web sites. America Online's Government Guide has a section to help small businesses navigate the maze of small business information from dozens of government departments.

Onvia.com, valued at \$10 billion after its recent IPO on the NASDAQ, is a **"Dot-Com"** with many of the same features as Strategis and Pro-Net. On March 15, 2000, Onvia announced a \$3 fee for bidders in its "RFQ market." Because Onvia's brand is so strong, it is likely to retain users even though Pro-Net's RFQ database is free.

Taxation

HISTORICAL PROCESS FLOW

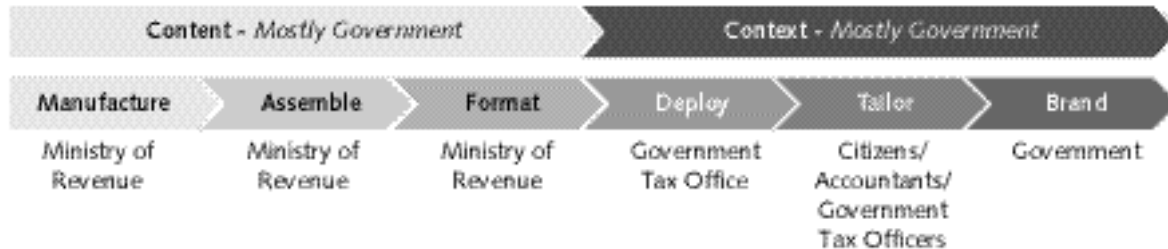


figure 16.

NEW MODELS

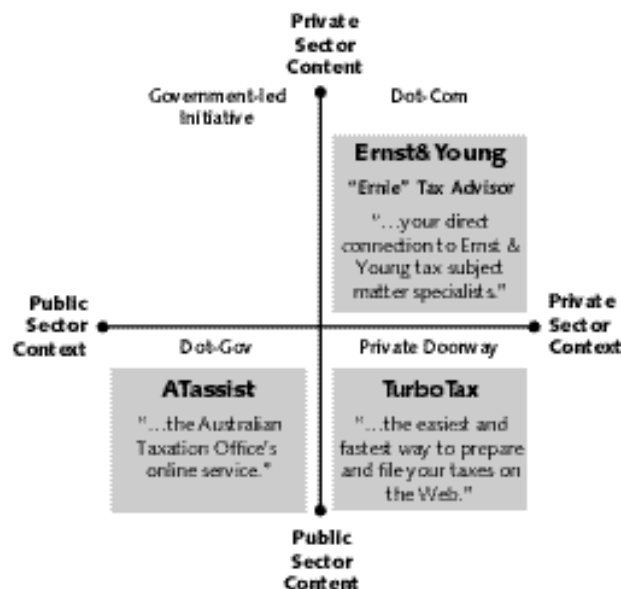


figure 17.

“Government-Led Initiatives” are not prevalent in the taxation domain since government Web sites do not generally refer to private sector content regarding tax issues.

The Australian Taxation Office’s “ATO Assist” Web site is actually the home page for the ATO itself (www.ato.gov.au). This site uses a “life event model” to help users find information relevant to them. The private sector uses life event modeling extensively and its use by the Australian government illustrates the ATO’s leadership in the **“Dot-Gov”** quadrant.

As a **“Private Doorway”** into the government’s tax processes, TurboTax.com provides citizens with instant online tax filing (for a fee).

Not all tax content is government owned. Tax avoidance strategies are generally not part of the government’s mandate. Ernst & Young provides an online service called “Ernie Tax Advisor” which links business clients with tax professionals for a fraction of the fee they would regularly pay to engage the firm. Ernie Tax Advisor is a **“Dot-Com”** operating in the taxation domain.

Tourism

HISTORICAL PROCESS FLOW

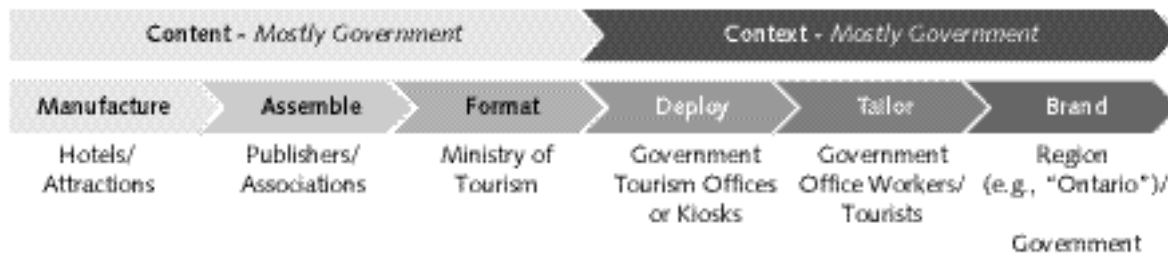


figure 18.

NEW MODELS

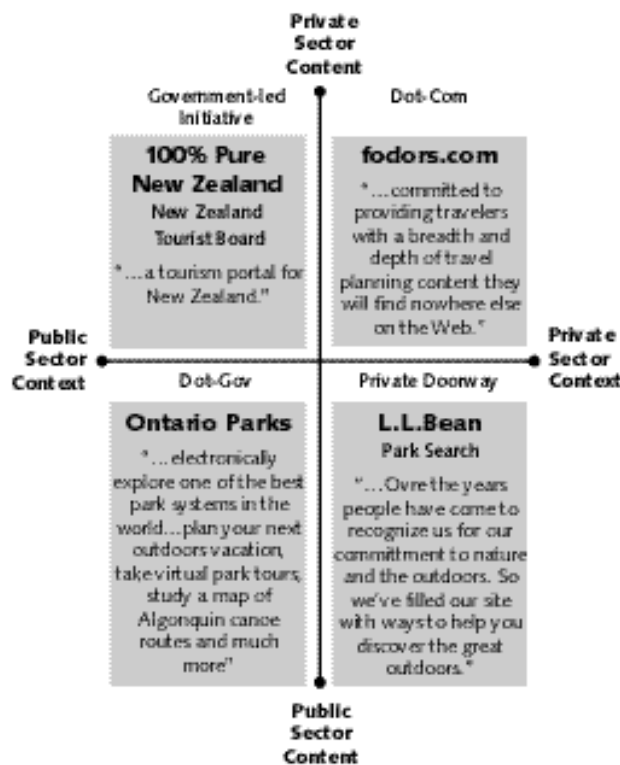


figure 19.

As they have in the small business development domain, governments have embraced the Internet for tourism development. As a result, there are many **"Government-Led Initiatives"** in this domain – such as the New Zealand Government's pureNZ.com Web site. Since tourism plays such a major role in New Zealand's economy, the government has been quick to adopt the Internet to promote private sector tourist venues.

Governments have also leapt into the Internet to market their own tourism assets. The Ontario Government has a Web site dedicated to its provincial park system. OntarioParks.com (a **"Dot-Gov"**) provides online bookings for provincial parks.

"Private Doorways" to government content generally focus on publicly owned parks and other government owned tourism venues. Clothing retailer L.L. Bean's Web site has a section called Park Search – a **"Private Doorway"** into the US Government's park system.

Due to the availability of private sector content and the potential profitability of tourism Web sites, there are many **"Dot-Coms"** in the tourism domain. Fodors.com is one such Web site.

Appendix B

Web Site	URL
Bangalore IT	www.bangaloreit.com
Open Gov	www.open.gov.uk
City Search	www.citysearch.com
EZ Gov	www.ezgov.com
E Post	www.epost.ca
Maxi	www.maxi.com.au
Checkfree	www.checkfree.com
Gov Works	www.govworks.com
ERIC	www.accesseric.org
Independent Learning Center	ilc.edu.gov.on.ca
Versity.com	www.versity.com
Blackboard.com	www.blackboard.com
Health Finder	www.healthfinder.org
NHS Direct	www.nhsdirect.nhs.uk
WebMD	www.webmd.com
Medical Record.com	www.medicalrecord.com
Job Bank	jb-ge.hrdc-drhc.gc.ca
Office of Personnel Management	www.usajobs.opm.gov
Monster.com	www.monster.com
Fed Jobs.com	www.fedjobs.com
Pro-Net	www.pro-net.sba.gov
Contadl	www.strategicic.gc.ca
Onvia	www.onvia.com
Government Guide	www.governmentguide.com
ATO Assist	www.ato.gov.au
Ernie Tax Advisor	www.ey.com
Turbo Tax	www.turbotax.com
Pure NZ	www.purenz.com
Ontario Parks	www.ontarioparks.com
Fodors.com	www.fodors.com

Endnotes

- 1 "Taxpayers Flock to E-filing", Federal Computer Week, April 17, 2000
- 2 Blackboard.com Web site
- 3 Advertisement for ezgov.com in March 2000 issue of Governing Magazine, 42-43.
- 4 Starr, Paul, "The Meaning of Privatization," Yale Law and Policy Review 12 (1988): 6-41. This article also appears in Alfred Kahn and Sheila Kamerman, eds., Privatization and the Welfare State (Princeton University Press, 1989).
- 5 An "aggregation" is a business model that provides selection and convenience to users. (e.g. Amazon and Yahoo!)
- 6 An "agora" is a business model providing dynamic pricing (e.g. eBay and Priceline)
- 7 Throughout this article, "local information" refers to government directories, telephone listings, municipal services information. local government news etc.
- 8 "Transactional services" refers to paying fines, fees, utility bills, taxes etc.
- 19 Based on US \$35 per 1,000 hits and a market value of 40x revenue.
- 10 Organizing information based on life events such as: graduation, having children, retirement etc.
- 11 Jim Warren, founder of InfoWorld, quoted in "Not So Strange Bedfellows", Government Technology Magazine, February 2000.
- 12 "Ethics Survey About Consumer Attitudes Toward Health Web Sites", 2, (January 2000). sponsored by the California Healthcare Foundation and the Internet Healthcare Coalition, conducted by Cyberdialogue in cooperation with the Institute for the Future.
- 13 "Report on Privacy Policies and Practices of Health Web Sites", 5, (January 2000). sponsored by the California Healthcare Foundation and the Internet Healthcare Coalition, conducted by Janlori Goldman and Zoe Hudson (Georgetown University) and Richard M. Smith.