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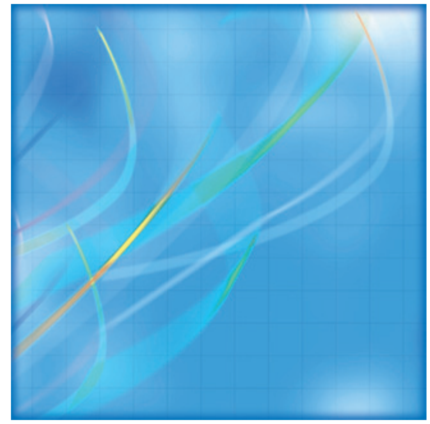
Strategies of Small and Mid-Sized Internet Service Providers (ISPs)



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Strategies of Small and Mid-Sized Internet Service Providers (ISPs)

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Introduction

With the Internet continuing to grow in popularity, how are companies competing to satisfy this growing demand? In 2002, Internet use continued to rise for Canadians[1], but at a slower rate. As a result, although the Internet Service Provider (ISP) industry continued to expand, it too experienced a slowdown in its growth.[2]

The post-bubble environment has led to more realism regarding the Internet's potential and has prompted a new wave of competition and consolidation in the industry. Still, although their market share is slipping[3], small- and mid-sized firms (defined here as those with operating revenues of less than $10 million in 2000) comprised well over 90% of the number of ISP companies in Statistics Canada's *Survey of Internet Service Providers and Related Services* in 2000, 2001, and 2002.

The Study

This study examines what differentiates fast-growing small- and mid-sized ISPs from those that grow slower. More specifically, it looks at which strategies were employed by fast-growing and slow-growing firms from 2000 to 2002, along with the costs and benefits that resulted. The two types of firms are compared in terms of revenue generation, expense structure, connectivity options, and factors perceived to be impeding their growth.

The results are based on data for small- and mid-sized ISPs in the annual *Survey of Internet Service Providers and Related Services* in both 2000 and 2002.[4] In total, these companies experienced a 28.8% increase in their operating revenues from 2000 to 2002. The companies were separated into two groups based on their operating revenue growth rates from 2000 to 2002: the faster-growing group comprised the 36% of firms that had growth exceeding the 28.8% growth rate recorded for the whole set of firms, and the slower-growing 64% of firms that had two-year growth rates of below 28.8%.

Rapid Expansion – Short-term Losses

Although an average firm in the faster-growing group operated at a loss over the two year period (as the overall industry did[5]), its operating revenues grew by 71.4% from 2000 to 2002, as opposed to a 3.1% drop for the slower-growing companies (Table 1). However, slower-growing firms also reduced their operating expenses by 3.5%, enabling them to perfectly break even in 2002, following marginal losses in 2000.

Overall, it appears that faster-growing firms focused their efforts on increasing market share even if it meant spending more and sacrificing immediate profits. Slower-growing firms, on the other hand, seemed to pursue a more traditional business strategy of making, or at least not losing money *now*.

Table 1. Performance of fast-and slow-growing firms

	Faster-growing Firms		**Slower-growing Firms**	
	2000	**2002**	**2000**	**2002**
Average operating revenues	$1,453,336	$2,490,465	$1,108,752	$1,073,895
Operating revenue growth rate (2000 to 2002)		71.4%		-3.1%
Average operating expenses	$1,527,710	$2,728,315	$1,111,804	$1,073,376
Operating expenses growth rate (2000 to 2002)		78.6%		-3.5%
Operating margin	-5.1%	-9.6%	-0.3%	0.0%

Since big telecommunication and cable players in the industry have the infrastructure for high-speed services and often offer discounted broadband access at almost dial-up prices, they make competing on price more challenging for other ISP players. This is one reason why, for small- and mid-sized ISPs, it is important to know what separates successful firms from those that lag behind.

But the question of what is “successful” is an open one, because it still remains to be seen whether the faster growth strategy or the improved profitability strategy will produce more ISP winners in the long run, particularly at the time when more and more Canadians desire high-speed Internet access.

Focus Versus Diversification

Strategically, one thing that differentiated the faster- and slower-growing firms from each other was that the former stayed focused on their core business – Internet access, while the latter further diversified their activities.

In 2002, faster-growing firms earned about one quarter of their operating revenues from non-ISP activities - about the same proportion as in 2000. For slower-growing firms, however, this proportion rose sharply from 19% to 28% largely due to diversification into computer system design, web site hosting, hardware sales, and rentals and maintenance activities (Table 2).

Table 2. Proportions of revenues earned by type of service

	Faster-growing Firms		Slower-growing Firms	
	2000	**2002**	**2000**	**2002**
Internet service provision & related services:				
Internet access - narrowband (64 Kbps or less)	50.2%	38.1%	61.1%	40.2%
Internet access - broadband (more than 64 Kbps)	20.8%	33.2%	10.1%	26.2%
Other ISP-related services	4.5%	2.6%	9.4%	6.1%
Subtotal for ISP and related services:	**75.5%**	**74.0%**	**80.6%**	**72.4%**
Services other than ISP-related:				
Computer systems design	5.0%	9.4%	6.3%	10.3%
Web site hosting	7.7%	6.6%	6.4%	10.1%
Data processing and related services	0.8%	5.2%	1.9%	2.4%
Hardware sales, rentals, and maintenance	3.8%	4.6%	2.8%	4.1%
Other services	7.2%	0.3%	1.9%	0.7%
Subtotal for services other than ISP-related	**24.5%**	**26.0%**	**19.4%**	**27.6%**
Total operating revenue:	100.0%	100.0%	100.0%	100.0%

Yet, the slower-growing firms' absolute increase in non-ISP revenues did not compensate for their drop in ISP-related revenues, and their operating margin stayed flat mainly due to an even bigger drop in operating expenses. Although diversification may have helped these firms survive, it did not make them profitable.

While faster-growing firms did place some more emphasis on data processing and computer systems design[6], they tended to stay focused on their core ISP activities. In absolute dollars (see Table 3) over 70% of the operating revenues that they added from 2000 to 2002 were earned through Internet service provision, and most of this ISP-related growth came from broadband[7] ISP services, which are rapidly becoming the most popular way to access the Internet. Interestingly, fast-growing firms also increased their narrowband revenues by nearly one-third over the two years. In other words, even though broadband services generated most of their growth, these firms kept building upon their traditional customer base – dial-up users.

A different dichotomy between narrowband and broadband revenues occurred for slower-growing ISPs. While they more than doubled their broadband revenues during the two years, their narrowband revenues slid by 36%. This, coupled with a similar drop in "other" ISP-related revenues, resulted in an overall 13% reduction in the group's core business revenue stream, despite the broadband revenue growth.

Table 3. Revenues earned by type of service

	Faster-growing Firms $ (millions)			Slower-growing Firms $ (millions)		
	2000	2002	Growth	2000	2002	Growth
Internet Service Provision and related:						
Internet access - narrowband (64 Kbps or less)	23.4	30.4	30.1%	37.9	24.2	-36.3%
Internet access - broadband (over 64 Kbps)	9.7	26.5	174.5%	6.3	15.8	150.4%
Other ISP-related services	2.1	2.1	-1.6%	5.8	3.6	-37.5%
Total for ISP and related services:	**35.1**	**58.9**	**67.9%**	**50.1**	**43.6**	**-13.0%**
Services other than ISP-related:						
Computer systems design	2.3	7.5	225.7%	3.9	6.2	57.4%
Web site hosting	3.6	5.3	46.3%	4.0	6.1	52.6%
Data processing and related services	0.4	4.1	1004.7%	1.2	1.4	18.2%
Hardware sales, rentals, and maintenance	1.8	3.6	103.1%	1.7	2.5	40.6%
Other services	3.3	0.2	-93.3%	1.2	0.4	-62.7%
Total for non-ISP services	**11.4**	**20.8**	**81.9%**	**12.0**	**16.6**	**37.8%**
Total operating revenue:	**46.5**	**79.7**	**71.4%**	**62.1**	**60.1**	**-3.1%**

Spending for Growth

The operating expense section of the two groups' income statements provides more clues as to what separates the faster-growing firms from the slower-growing ones. In their quest for growth, the faster-growing firms boosted spending by 79%, with absolute spending increases across all major expenditure categories (Table 4).

Table 4. Expenses by type

	Faster-growing Firms $ (millions)			Slower-growing Firms $ (millions)		
	2000	2002	Growth	2000	2002	Growth
Salaries, wages, and benefits (incl. outside services and contract workers)	18.1	30.6	69.1%	20.1	20.1	-0.2%
Telecommunication expenses (incl. upstream line, dial-up line & equipment, telephone and other telecom costs)	14.1	29.5	109.3%	18.9	18.9	-0.2%
Depreciation and amortization	3.1	6.3	103.1%	4.4	4.2	-5.3%
Computer equipment, software, office supplies purchased for use in business	2.2	2.4	9.8%	3.3	1.6	-52.2%
Computer equipment and software purchased for re-sale	1.4	2.2	60.4%	1.2	3.8	208.4%
Marketing expenses (incl. advertising, sales promotion, travel and entertainment)	1.7	2.1	26.7%	2.7	1.5	-43.5%
Insurance, interest, management fees, royalties, taxes	1.6	3.3	99.4%	3.8	2.8	-26.0%
Occupancy costs (incl. rent, lease, utilities)	1.8	2.6	44.9%	2.5	2.6	5.2%
Other operating expenses	4.9	8.3	68.6%	5.3	4.6	-12.8%
Total operating revenue:	**48.9**	**87.3**	**78.6%**	**62.3**	**60.1**	**-3.5%**

Consistent with their surge in ISP-related revenues, the fast-growing firms' telecommunication expenses, which include upstream line leasing as well as dial-up line and equipment charges, more than doubled between 2000 and 2002. As a result, telecommunication expenses as a proportion of their operating expenses also went up (from 29% to 34%), almost catching up with what is traditionally the most costly item on an ISP's income statement – salaries, wages, and employee benefits (Table 5).

With their amortization expenses doubling over the two years, the faster-growing firms also seemed to increase their capital expenditures between 2000 and 2002 to support their expansion strategy.

Table 5. Proportions of expenses by type

	Faster-growing Firms		**Slower-growing Firms**	
	2000	**2002**	**2000**	**2002**
Salaries, wages, and benefits (incl. outside services and contract workers)	37.0%	35.1%	32.3%	33.4%
Telecommunication expenses (incl. upstream line, dial-up line & equipment, telephone and other telecom costs)	28.9%	33.8%	30.4%	31.5%
Depreciation and amortization	6.3%	7.2%	7.1%	7.0%
Computer equipment, software, office supplies purchased for use in business	4.4%	2.7%	5.3%	2.6%
Computer equipment and software purchased for re-sale	2.8%	2.5%	2.0%	6.3%
Marketing expenses (incl. advertising, sales promotion, travel and entertainment)	3.4%	2.4%	4.3%	2.5%
Insurance, interest, management fees, royalties, taxes	3.4%	3.7%	6.1%	4.7%
Occupancy costs (incl. rent, lease, utilities)	3.7%	3.0%	4.0%	4.3%
Other operating expenses	10.0%	9.5%	8.5%	7.7%
Total operating expenses:	100.0%	100.0%	100.0%	100.0%

Meanwhile, Table 4 shows that in absolute dollars the slower-growing firms reduced their costs in most expense categories. The only exceptions were occupancy costs, essential for staying in business, and computer equipment and software purchased for re-sale, which was rising in importance for these diversifying businesses. In particular, they cut spending on computer equipment, software, office supplies for in-house use by 52%. They also scaled back on marketing, which likely dampened their revenue growth. As well, amortization and depreciation expenses declined slightly during the same period, suggesting a slowdown in new capital investment by this group.

Overall, the expense patterns are consistent with the apparent strategies of rapid expansion for the fast-growing group, and profitability for the slower-growing one. Arguably, the expansion strategy may pay off in the long-term for ISPs that become profitable. However, for some small- and mid-sized ISPs, the short-term "survival break-even" approach might have been the only option.

Growth in Subscribers

Another important factor differentiating faster-growing ISPs from their slower-growing counterparts was their aggressive pursuit of new subscribers. The number of subscribers per faster-growing firm went up by about one quarter from 2000 to 2002, while the number for slower-growing firms fell by one-third (Table 6).

Table 6. Number of subscribers

	Faster-growing Firms			Slower-growing Firms		
	2000	2002	Growth Rate	2000	2002	Growth Rate
Average number of subscribers	6,436	7,982	24%	4,312	2,901	-33%
Average annual Internet access revenue per subscriber	$273	$264	-3%	$252	$278	10%

This difference may have resulted, in part, from a greater emphasis on marketing by the faster-growing firms. Table 4 showed that, from 2000 to 2002, they boosted their average marketing expenditures by 27%, compared to a 44% decrease for their slower-growing counterparts.

Moreover, in an effort to expand their subscriber base it appears that the faster-growing firms also offered price discounts for their Internet services. Despite offering more broadband services, which tend to be more expensive, their average Internet access revenue per subscriber fell by 3% from 2000 to 2002. This pricing strategy, while attracting more customers, also quite likely contributed to the higher operating losses experienced by fast-growing ISPs in 2002.

In contrast, the slower-growing firms increased their average access revenue per subscriber by 10% from 2000 and 2002. Although this increase may have helped slower-growing ISPs to avoid or minimize operating losses, it also may have contributed to the 33% shrinkage in their subscriber base.

The slower-growing firms also managed to service more business customers (Tables 7 and 8), even though their revenues from households and public sector clients declined. The fact that businesses tend to be higher-margin customers likely contributed to the slower-growing firms' increase in average access revenue per subscriber. Another factor in this increase was the slower-growing firms' greater provision of broadband services at the expense of narrowband.

Table 7. Operating revenue earned by customer type

	Faster-growing Firms			Slower-growing Firms		
	2000	2002	Growth Rate	2000	2002	Growth Rate
Individuals and households	$23.7 M	$41.6 M	75.6%	$38.2 M	$36.1 M	-5.4%
Public institutions and Government	$4.4 M	$5.9 M	33.9%	$6.9 M	$4.0 M	-41.5%
All businesses	$18.3 M	$29.8 M	62.6%	$14.5 M	$18.7 M	28.6%
Customers outside Canada	$0.1 M	$2.4 M	2282.8%	$2.5 M	$1.3 M	-47.6%
Total operating revenue:	**$46.5 M**	**$79.7 M**	**71.4%**	**$62.1 M**	**$60.1 M**	**-3.1%**

Table 8. Proportions of operating revenue earned by customer type

	Faster-growing Firms		Slower-growing Firms	
	2000	2002	2000	2002
Individuals and households	50.9%	52.2%	61.5%	60.1%
Public institutions and Government	9.4%	7.4%	11.1%	6.7%
All businesses	39.4%	37.4%	23.4%	31.0%
Customers outside Canada	0.2%	3.0%	4.0%	2.2%
Total operating revenue:	100.0%	100.0%	100.0%	100.0%

Factors Impeding Growth

The *Survey of Internet Service Providers and Related Services* also asked ISPs about what they perceived to be possible impediments to their growth. Some of these potential impediments, such as a lack of on-line security or privacy and an inability to attract or retain qualified personnel, were perceived by very few firms in either group to be high impediments to growth[8] (Table 9).

However, as pointed out earlier, companies in both groups were struggling to compete with larger players from the telecommunications and cable industries. Therefore, not surprisingly, competition was the obstacle most frequently mentioned by both fast- and slow-growing ISPs as being a high impediment to growth. Nearly 60% of all ISPs cited competition as an impediment to growth in 2000. By 2002, this had jumped to 75% of all ISPs. Beyond having to compete with bigger players, competition may have also grown fiercer by 2002 due to market saturation resulting from the recent slowdown in Internet growth.

Table 9. Proportion of ISPs perceiving various factors to be high impediments to growth

Impediments to growth (in order of importance for slow-growing ISPs in 2002)	Faster-growing Firms		Slower-growing Firms	
	2000	2002	2000	2002
Competition	55%	75%	60%	75%
Cost of leased upstream lines	39%	45%	54%	66%
Cost of dial-up lines	30%	33%	46%	60%
Delays from telephone & cable companies	36%	30%	44%	42%
Access to financing	45%	33%	59%	39%
Access to markets	23%	37%	21%	34%
Delays from backbone suppliers	18%	13%	30%	32%
Lack of qualified staff	18%	10%	23%	23%
Ability to attract qualified personnel	18%	27%	17%	23%
Ability to retain qualified personnel	14%	13%	17%	20%
Data and transaction security	9%	7%	13%	14%
Lack of on-line security	9%	3%	13%	11%
Lack of on-line privacy	0%	3%	4%	11%

The cost of leasing upstream lines from telecommunication companies was an ongoing concern of firms in both groups, and nearly half of the slower-growing firms felt that delays posed by telecommunication companies were a high impediment to growth.

In 2000, many ISPs in both groups also regarded access to financing as a factor impeding their growth, but by 2002 this concern was not as evident. Perhaps the fast-growing firms were able to secure the necessary financing for their expansion after 2000, while some of the slower-growing companies turned to different priorities and to “self-financing” via better profit margins.

By 2002, a slow-growing firm was nearly twice as likely as a fast-growing one to state that the cost of dial-up lines and equipment was a high impediment to growth. The fact that this type of cost is usually spread out with economies of scale could explain why the faster-growing firms did not find this to be as significant an obstacle.

Summary

The vast majority of Internet service providers in Canada are small and medium size companies that are striving to compete with large telecommunication and cable companies.

This article investigated differences between faster-growing small- and mid-sized ISPs and their slower-growing counterparts. The two groups appeared to pursue different strategies.

The slower-growing ISPs diversified somewhat into non-ISP activities from 2000 to 2002, probably in response to intense competition from other providers, and their ability to rein in operating costs enabled them to break even in both years.

In contrast, the faster-growing ISPs remained relatively focused on their core ISP activities. Also, compared to their slower-growing counterparts, they invested more in marketing and more aggressively pursued and gained new subscribers. But this was not without costs because, to gain subscribers, they had to relax their prices for Internet access and incur higher expenses, particularly for telecommunications. Consequently, although they did succeed in expanding their subscriber base, fast-growing ISPs suffered even higher operating losses in 2002 than they did in 2000.

But it is still an open question as to which of the two strategies is “better”, because it remains to be seen which one produces more winners in the long run.

Endnotes:

1. The number of Canadian households using the Internet rose by 4% in 2002, compared to growth of 19% in 2001 and 24% in 2000. Source: Statistics Canada, *The Daily,* catalogue 11-001-XIE, September 18, 2003, p. 6.

2. Total operating revenues for the industry increased by only 13% in 2002, down from 27% in 2001 and 72% in 2000. Note that these figures differ from those cited later in this study because the latter are based on the smaller subset of 88 firms that responded in detail to both the 2000 and 2002 surveys. Source: Statistics Canada, *Annual Survey of Internet Service Providers and Related Services, 2000, 2001, 2002 (CANSIM, Table 354-0006).*

3. The market share of incumbent telecommunication and cable companies reached 77% of ISP revenues in 2002, up from 60% in 2000. The share of smaller competitors in the ISP business therefore fell to 23% in 2002 from 40% in 2000. In 2002, the revenues of smaller competitors declined by 1.8%, while the whole industry's revenues rose 27%. Source: CRTC, *Status of Competition in Canadian Telecommunications Markets*, November 2003.

4. Note that the survey covers only companies whose *primary* activity, based on the North American Industrial Classification System (NAICS), is providing Internet access services. Telecommunication and cable companies that provide Internet access, but only as a *secondary* activity, are excluded.

5. The operating profit margin for the overall ISP industry, not the subset of 88 firms, was negative in both years: -13.9% in 2000 and -4.9% in 2002. Source: Statistics Canada, *Annual Survey of Internet Service Providers and Related Services, 2000, 2001, 2002 (CANSIM, Table 354-0006).*

6. Data processing and related services include application service provisioning (ASP), data storage and management, business process management, video and audio streaming, and IT infrastructure and network management services. They do not include web hosting, which is in a separate category for this study.

7. For the purposes of this study, broadband Internet access services comprise all types of Internet access (DSL – digital subscriber lines, ISDN – integrated services digital networks, and coaxial and fibre optic cable lines) providing speeds in excess of 64 Kbps (kilobits per second). Speeds below 64 Kbps constitute narrowband access services, which are typically delivered over dial-up phone lines.

8. Respondents were asked to rate each potential impediment to growth on a scale of one to five, with one representing a very low impediment, and five representing a very high impediment. For this study companies ascribing a rating of 4 or 5 to a particular factor were assumed to regard that factor as being a high impediment to growth.