

Characteristics of Growth Firms, 2004

A collaborative research project between NRC-IRAP and Statistics Canada

INTERVIEWER GUIDE

November 23, 2004

Instructions to the interviewer***Screening***

*The respondents will have been screened as being of the correct size, industry, and growth characteristics. The company should also be **“technology-based”**.*

The respondent should be a senior manager of the company. The respondent should have been with the company during its period of growth.

Before finally selecting the company to interview, we would also like to know whether or not it ~~had ever received~~ IRAP funding.

The respondent may have a copy of the “Information Sheet” e-mailed or faxed before the interview.

Symbols and notation

Text to be read or paraphrased is in regular type. Important text is in **regular bold** type.

Other instructions are in ***bold italic***. These also include outstanding issues about the guide itself.

Underlined words are explained in more detail in the glossary.

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Introduction

Introduce interviewer(s). Give business cards. Thank the participant.

Purpose of interview

I would now like to take a few moments to introduce the purpose of this interview. Feel free to interrupt if you have any questions.

The National Research Council's Industrial Research Assistance Program (NRC-IRAP) and Statistics Canada are undertaking a study to determine the characteristics of growth firms. NRC-IRAP provides Canadian small and medium-sized enterprises (or SMEs) with technological and business advice, financial support and a range of other innovation assistance.

A set of interviews is being conducted to supplement the scientific literature, Statistics Canada's databases and the knowledge of the NRC-IRAP officers (ITAs). We are specifically looking at characteristics of firms that are in the top 10% in terms of **employment growth** in your sector. These characteristics will be further analyzed using our existing data on R&D, innovation and technology-based companies.

I am here to obtain your views on the factors, internal and external, that were important to the growth of your company.

The entire interview is designed to take about one hour. If we do not have the time to complete all the detailed questions, we would appreciate a few minutes on the last question (on "other factors").

Statistics Canada was engaged to undertake this study in order that NRC-IRAP would receive a frank and neutral assessment of characteristics of growth firms.

If you like, we can put you on a mailing list to receive any documents that are published based on these interviews.

If yes, get business card or detailed address with e-mail.

Confidentiality

This interview is voluntary. We will be taking notes under the provisions of the Statistics Act. **Everything you tell us will be confidential.** This interview will be analyzed together with others to provide an aggregate overview. Nothing that we release will allow you or your company to be identified.

Process for participants in one-on-one interviews

Here is a quick overview of the interview process:

- The first step will be to present an overview of the project.
- Secondly, I will ask you to describe your company's situation at the beginning of its most recent growth phase and the important milestones in its growth.
- Next, we will ask some specific questions about the factors critical to your company's recent growth.
- Then we will talk about the barriers to your growth (or crises) that you had to overcome to get to where you are now.
- Finally, we will ask you to suggest any critical growth factors that we haven't yet discussed.

Do you have any questions before we start?

Interview Questions

Background to the project

The economic literature discusses many factors that are important to the growth of firms. Some focus on R&D and innovation, others on management practices, financing or market conditions. In this study, we would like to consider the broad range of factors that are specifically relevant to the growth of small and medium-sized, technology-based Canadian businesses.

One common theory of business growth is that a firm will pass through various stages of evolution (slow and steady growth) and revolution (crises of rapid growth or decline) as it matures. **Our definition of growth is generally based on employment** but growth in revenues, profits and market are also of interest.

An important part of the project is to talk to the managers of companies that have recently grown. By looking at the characteristics of *these* firms **before a recent growth stage** (about 5 years ago) **and during their recent growth**, we hope to assess what further support small and medium sized firms might need to grow.

Question 1: Company background and milestones

When was the firm established? Could you describe the most recent growth stage of the company? What was the number of employees then and now? Who was involved? What was the business plan? Was there a growth strategy?

Question 2: Specific growth factors

We will now go into more detail about specific conditions that contributed to your growth: R&D, innovation, ownership, management, human resources, intellectual property, business strategy and external factors.

Refer to the glossary at the back if necessary. The interviewer should drop any individual questions if they are not relevant or have already been answered.

R&D [skip if none or already covered]

How did R&D contribute to your company before and during this growth stage?

Innovation [skip if already covered]

Did you develop any new or significantly improved products (goods or services) or implement any new or significantly improved processes before and during this growth stage? If so, can you briefly describe these?

Before and during this growth stage, did you implement any new or significantly improved ways of marketing your products to your clients? If so, can you briefly describe these?

Intellectual property [skip if already covered]

Before and during this growth stage, did you undertake to protect your intellectual property rights (with patents, trademarks, copyrights, trade secrets agreements)?

Ownership, management and human resources *[skip if already covered]*

Were there any changes in ownership before or during the growth stage? Could you tell us some more about the people and skills involved in the growth stage? Did the management structure or team change?

Business strategy *[skip if already covered]*

Could you briefly describe your business strategy before and during the growth stage?

External factors *[skip if already covered]*

Most of the factors we have discussed have been largely internal to your firm. What were the most important external factors in your growth, for example, the economic environment, the market, sources of funding and sources of information?

Question 3: Barriers (and crises)

Now, we would like to discuss some of the barriers (and crises) that you had to overcome for your business to grow. What aspects of growth did you find most difficult (such as, financing, marketing, partnerships, skills, business advice, government regulations, competition, taxes, acceptance of new products or technologies, etc.)? Were there any crises (internal or external) that led to a major change in your management strategy?

Question 4: Other factors

We're certain that we didn't cover all the important factors contributing to your growth. Were there any important ones that we didn't discuss?

What would you say differentiates your company from similar companies *in your industry* that have either not grown or gone out of business? What would you say differentiates your industry from other technology-based industries in terms of facilitating or inhibiting growth?

If you were to do it all over again, what would you do differently?

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Checklist:

| Interviewers ensure that these items have been covered: | | |
|---|---|--|
| 1 | Age of firm | ___ years |
| 2 | Growth stage (at beginning of growth stage) | <input type="checkbox"/> start-up <input type="checkbox"/> expansion <input type="checkbox"/> mature <input type="checkbox"/> diversification <input type="checkbox"/> lifestyle <input type="checkbox"/> capped growth; <input type="checkbox"/> growing <input type="checkbox"/> stable <input type="checkbox"/> declining |
| 3 | Conducted R&D | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 4 | Innovation | <input type="checkbox"/> none <input type="checkbox"/> new to firm <input type="checkbox"/> new to market <input type="checkbox"/> world first <input type="checkbox"/> disruptive <input type="checkbox"/> product <input type="checkbox"/> process <input type="checkbox"/> organizational <input type="checkbox"/> market |
| 5 | IP protection | <input type="checkbox"/> NA <input type="checkbox"/> none <input type="checkbox"/> formal <input type="checkbox"/> informal |
| 6 | Leadership structure | <input type="checkbox"/> founder <input type="checkbox"/> family <input type="checkbox"/> partners <input type="checkbox"/> board <input type="checkbox"/> external |
| 7 | Formal planning structure | <input type="checkbox"/> business plan <input type="checkbox"/> strategic plan <input type="checkbox"/> informal |
| 8 | Access to highly qualified personnel | <input type="checkbox"/> problem <input type="checkbox"/> no problem |
| 9 | Market niche | <input type="checkbox"/> competitive <input checked="" type="checkbox"/> moderate <input type="checkbox"/> monopolistic |
| 10 | Growth strategy | <input type="checkbox"/> control <input type="checkbox"/> grow <input type="checkbox"/> survive |
| 11 | Sources of business advice | <input type="checkbox"/> internal <input type="checkbox"/> board <input checked="" type="checkbox"/> coach <input type="checkbox"/> consultant <input type="checkbox"/> other _____ |
| 12 | Relationship to clients | <input type="checkbox"/> client <input type="checkbox"/> market <input type="checkbox"/> none <input checked="" type="checkbox"/> advisory <input type="checkbox"/> collaborative |
| 13 | Relationship to suppliers | <input type="checkbox"/> none <input checked="" type="checkbox"/> advisory <input type="checkbox"/> collaborative |
| 14 | Relationship to governments | <input type="checkbox"/> federal <input type="checkbox"/> provincial <input type="checkbox"/> municipal <input type="checkbox"/> IRAP |
| 15 | Relationship to universities/colleges | <input type="checkbox"/> graduates <input type="checkbox"/> training <input type="checkbox"/> business advice <input type="checkbox"/> technical advice |
| 16 | Engaged in alliances | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 17 | Sources of funds | <input type="checkbox"/> Own, Private <input type="checkbox"/> VC <input type="checkbox"/> Angel <input type="checkbox"/> Love <input type="checkbox"/> Bank <input type="checkbox"/> Public/IPO <input type="checkbox"/> Government |
| 18 | Adaptability | <input type="checkbox"/> survived crises <input type="checkbox"/> minor crises <input type="checkbox"/> no crises <input type="checkbox"/> took advantage of opportunities |
| 19 | Other | |

Conclusion

Thank you very much for your time. The information you have given us will be very useful to our research.

If you have any further thoughts on this topic, you are welcome to call us. Also, if you have any background documents on your company that you think would help us, we would appreciate having them. You will have our names and addresses on the **Information Sheet**.

We would like to present you with this small token of our appreciation for having participated in our research, *Canada a Portrait* and a copy of the *Innovation Analysis Bulletin* that includes some articles about the first phase of this project.

Glossary

Clusters: Technology clusters are geographic concentrations of interconnected companies, academic or government research organizations, financial institutions, and other service providers working together to achieve innovation for economic growth. (p. 19 NRC- IRAP 2003-2006 Strategy - Investing in Innovation)

Contract workers and consultants: People working under contract for the firm normally to undertake specific services often on a short-term basis. These are generally not counted as employees.

Cross-licensing: Agreements to exchange the use of one technology in return for the rights to use another.

Employees: Full-time equivalents excluding partners and directors of the corporation.

Firm: For this study, we are focusing on companies that have experienced significant recent growth.

Growth: We are focusing on companies that have increased significantly in the number of employees over approximately the past 5 years.

Growth stage: A period of prolonged growth, decline or stability. Firms could evolve from start-up, to expansion, to mature to diversifying. Firms may also stop growing. We try to classify these into “lifestyle” firms or “capped growth”. Start-up companies tend to be small and managed by the founders. Expansion companies would be likely to have a formal management structure. A mature firm would be relatively stable in size. A diversifying firm would be a mature firm that is trying to adapt to new technologies and markets. Lifestyle firms are those that already fit the ideals of the founder (e.g., a family-run operation). Capped growth firms are unlikely to grow for internal (e.g., management) or external (e.g., limited market) reasons.

Intellectual property: Refers to creations of the human mind that can be protected by legal means: inventions, copyrightable works, industrial designs, trademarks, know-how, integrated circuit topographies, new plant varieties and know-how.

Innovation: For this study, innovation is translating knowledge into new or improved products, processes and services that improve the firm's competitiveness.

IRAP (Industrial Research Assistance Program): The National Research Council (NRC) of Canada's IRAP is the Government of Canada's premier innovation and technology assistance instrument for small- and medium-sized enterprises (SMEs). The mandate for IRAP is to stimulate wealth creation for Canada through technological innovation.

ITA (Industrial Technology Advisors): NRC-IRAP employees who administer the program in the field, i.e. the contacts for the small- and medium-sized firms.

Medium-sized firm: For this study, we are looking at four size groups in terms of employees 1-19, 20-49, 50-99 and over 100. We would consider a firm with between 20 and 499 employees that has doubled in employment or revenues over the past 5 years.

R&D (Research and Development): Expenditures on scientific research and experimental development eligible for the SR&RD tax credit.

Revenues: Annual revenues from all sources.

Sector (Industry Sector): 3-digit NAICS or 3-digit SIC80.

SMEs (Small- and medium-sized enterprises): A term that is used to describe small- and medium-sized firms.

Small-sized firm: As with a **medium-sized firm**, a small-sized firm is relative. In general, we are looking for firms that employed fewer than 20 persons 5 years ago.

Spin-off: A company established with the assistance of a parent company to (a) exploit a specific licensed technology, (b) conduct R&D to develop a technology that is intended to be licensed back to the parent or (c) to provide a service that was originally offered by the parent company.

Subsidiary: A company with a reporting relationship to a parent company.

Technology: is the practical application of knowledge. We use the word technology as a general term for good, service, know-how, design, etc. produced by a technology-based company.

Technology-based: Companies that create or use technology through R&D, licensing or purchasing technology. The company invented a product, licensed a technology and developed it to market it, purchased a significantly new technology embodied in equipment, or based on the exploitation of new technological knowledge.

Venture capital: Capital (as retained corporate earnings or individual savings) invested or available for investment in the ownership element of new or fresh enterprise - called also *risk capital*.

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