

# The Success of Designer-producers in Québec

André Desrosiers, Université du Québec à Montréal, Canada

## Abstract

The author identified more than 120 designer owned manufacturing companies in Québec. He interviewed 50 designers who owned such companies, and obtained detailed information on more than 75 companies. He examined these companies for: area of activity, size, longevity and economic impact. The companies are highly concentrated in the area of lifestyle products and are of comparable size to other manufacturing companies, show similar revenue per employee and have similar economic impact. They are also much more successful than other Québec manufacturers as far as longevity is concerned. These designer-owned companies create more direct employment than do industrial design consulting firms in Québec. The author proposes several hypotheses for the business success of designer-producers.

## Keywords

Professional practice; Industrial design; Manufacturing; Business; Success; Québec

Since the 1960s, the practice of industrial design has been part of the industrial and cultural landscape of Québec. The demand for industrial designers was first felt among design consultancies, but the supply of design jobs within manufacturing companies soon greatly outnumbered that of consulting jobs (Emploi, 2009). This was followed by a new wave of employment in the virtual imaging field, representing a vocational route for a new generation of image-makers especially in the area of electronic gaming (Trépanier and Gosselin, 2007: 22). Other industrial designers began to work in public institutions, research organizations, in the promotion or management of design. A significant proportion of designers have also followed career paths that have led them to hold strategic or leadership functions in companies from a variety of sectors.

In addition, a good number of designers have edited, produced, or otherwise distributed their own creations at one time or another in their careers. Some of these designers have gone on to establish their own manufacturing companies. We call these entrepreneurs “designer-producers”—designers, because design is their field of training or what they claim to be, and producers, not only in the sense of manufacturers, but also in the sense of economic agents who participate in the risk and ensure the financing of their companies, much like film producers. These companies and their performance are the subject of this paper. It is based on a larger study, which was conducted in 2009, entitled “*Les designers-producteurs au Québec*” (Desrosiers, 2009).

The companies we have studied encompass the broad spectrum from craft production to mass production, from local manufacturing to offshore production, from regional distribution to global marketing. Though not common, the practice of designer-producer has nevertheless existed since the birth of industrial design (Choko et al., 2003). Are designers

successful in business? Why do they succeed or fail? Are the economic repercussions of designer-producer companies significant? These are some of the questions this paper will address.

## Methods used

From January to July 2009, around 50 interviews were conducted with designer-producers, usually at their companies or workshops, occasionally at a café or in their homes. During these meetings, the designer-producers often recommended other designers or identified other designer-producer companies. In this and other ways, our list grew and now includes over 120 companies. If one considers that no more than 3000 individuals practice industrial design in Québec (Emploi, 2009), but more realistically 1500, this list is actually quite extensive.<sup>1</sup> Without claiming that we have identified all companies, we are confident about the representativeness of our study. Since few studies had addressed this issue, we chose to chronicle not only current companies, but also those that were founded over thirty years ago and that are still active, have been sold or merged, or have simply closed.

The interviews were recorded and took place in two phases. A first questionnaire was used to identify the characteristics, motivations, and socio-economic profile of designer-producers, while a second questionnaire produced a description of each company. By combining a number of quantitative and qualitative questions in the interviews, we were able to use both types of information and establish correlations between the two where appropriate. The collected information was then revised, supplemented, and verified by consulting the *Registre des entreprises du Québec*, the database of the *Centre de recherche industrielle du Québec* (CRIQ, 2009) and the biographical notes of designers on their websites or in press kits (Choko, 2004). Several shorter phone interviews were also conducted.

Interviewees were not selected randomly. We attempted to reflect the geographical, historical, and economic diversity of the field. We interviewed in Québec City, Laval, Boucherville, Rigaud, Verchères, and of course, Montréal. We met men and women between 28 and 76 years of age, some whom have been designer-producers for most of their professional lives, and others who have only produced occasionally.

Where possible, and where our sampling permitted, we compared the data with those of similar studies focusing on entrepreneurship (Aramis, 2006) or the manufacturing sector in Québec (Statistiques, 2007).

## Definition of designer-producer

In 2007, Michel Trépanier and Pierre-Marc Gosselin (2007:13-15) identified three types of industrial design practice: in-house industrial designers, industrial design consultants, and independent industrial designers or manufacturers. Our study addresses, in part, this latter category. It is our understanding that this last category is quite inappropriate and somehow assimilates practices that are often opposite in the spectrum of practices of industrial

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<sup>1</sup> Data from Service Canada shows 2,950 industrial designers in Québec. A review of this data and their definition suggests that Service Canada uses a broader definition of industrial designer than we do and includes many categories of draftsmen. Their definition is as follows: "Industrial designers conceptualize and produce drawings for manufactured products." A trade definition such as this is at odds with the professional vision that characterizes the industrial design milieu.

design. Leaving the discussion of this typology aside, and to further orient our study, we first define what we mean by “designer-producer.”

The definition of design provided by the International Council of Societies of Industrial Design can be read as follows:

"Design is a creative activity whose aim is to establish the multi-faceted qualities of objects, processes, services and their systems in whole life cycles. Therefore, design is the central factor of innovative humanization of technologies and the crucial factor of cultural and economic exchange." (ICSID, 2003).

This broad definition includes several activities not traditionally associated with industrial design. The design of a surgical procedure could certainly fit this bill, yet few would call this industrial design. It also encompasses both goods and services, and considers the aesthetic attributes of objects as part of their "multifaceted qualities."

In this context, what is the meaning of "industrial"? Does it refer to mechanized or mass production, or simply to the processing of raw materials? How central are materials to this definition when all around us, objects are being defined less and less by their materiality, and more and more by the meanings and values we attribute to them? Furthermore, the definition of “industry” is associated with the production of goods as opposed to the provision of services. This separation between goods and services, already outmoded (Findeli, 2001: 15), is increasingly difficult to maintain. In our modern economies, goods can practically no longer be dissociated from services, and vice versa. Whether we are talking about a bank account booklet, a simple light fixture sold with a guarantee, or software for a video game console, all these products reflect this duality.

We have opted for the broadest and most inclusive notion of industry. We visited designer-producers whose workshops occupy a few square meters, and we visited major industrial facilities. We also looked at companies whose entire production is outsourced, and other companies where every stage of production is conducted in-house, including the manufacturing of their moulds and production tools. In the lighting industry alone, we met artists, craftspeople, technicians, architects, graphic designers, environmental designers, and industrial designers who have started and operated manufacturing companies. In our opinion they are all designers. They define themselves as designers as does the general public. As such, we met designers from a variety of training backgrounds, with different experiences and with various business skills. In this study we did not consider diplomas as the sole criteria for defining professional identity. Rather, we placed an emphasis on the accounts of the participants themselves.

Insofar as we were interested in the practice of designers who have started production companies, our primary concern in this study was the examination of manufacturing companies. Thus, although consulting firms are obviously companies, and their owners and founders entrepreneurs, they were excluded from our area of research unless they comprised a division or branch whose mission was to produce, manufacture, or distribute goods. We also excluded from our interviews those companies whose main activity is trade.

We thus define designer-producers as “designers who have undertaken to produce goods and services (or have them produced) and to market them.” This definition encompasses both artisans and more traditional manufacturers, and is one that the people whom we interviewed could easily identify with.

## **Measure of Success**

Early in our study, we wanted to identify factors and markers of success. It quickly became apparent that the concept of success is relative (Chandler et Hanks, 1993). First, success is relative to each entrepreneur and to each entrepreneur's motivation for transforming his or her project into a company. While money was a primary motivation and a measure of business success for some, it was not the case generally. For many designers, distribution, reputation, the satisfaction of seeing their products sold and therefore purchased, lifestyle, as well as independence were the main motivations. Secondly, success is relative to that of others.

To a large extent, it is the motivation of the entrepreneur that defines his success. Satisfaction changes over time as the motivations of entrepreneurs change. Achieving a goal can sometimes bring about a new one, while for other entrepreneurs, attaining the goal or the original vision is an end in itself.

While all businesses must end, the great majority of entrepreneurs invest time, effort, and money so that their ventures will last. It is interesting to note, however, how the expiration date of a company is a concept that, at least initially, is foreign to entrepreneurs. A few did foresee the end of their ventures, but for the most part, these projects were of indeterminate length (Desrosiers, 2009:21).

In industrial design, longevity is rarely a measure of success. Most design awards, for example, do not recognize the durability or longevity of goods. Instead the organizers request that these products be recent, usually less than two years on the market. There are even awards for products that do not or will not exist. Design tends to celebrate innovation and novelty, not longevity and durability. For the few designers that enjoy license revenues, however, longevity does have its rewards. It is ironic that in industrial design it is easier to obtain an award for a product that does not exist than to get one for a product that has sold for a decade.

In business, it is generally accepted that profits, size and longevity (Dafna, 2008: 305-306) are the ultimate measures of success. Since unprofitable businesses do not endure, we considered profit a *sine qua non* condition for a company's survival, i.e. it is a means more than an end. In terms of economic impact, job creation, and social utility, a company's longevity is certainly an indicator of its success, and it is the indicator we retained.

## **Findings**

### ***Areas of company activities***

The fields of application of industrial design are many and varied. Each year, in Québec universities, a large number of undergraduate projects in industrial and environmental design are related to the fields of transportation, health, sports and recreation, and electronics. Furniture and household consumer goods are also presented, but they clearly do not represent the bulk of the projects of these future designers.

Through their creative input and diverse technical expertise, designers are able to contribute to a wide variety of industries. It must be said, however, that the more a product undergoes transformation and processing, the more designers are involved in its production. Designers are mostly absent from the primary and food sectors. Although it is difficult to classify companies according to the level of contribution of designers, based on

the NAICS,<sup>2</sup> we separated industries into two groups: those that are "accessible" to designer-producers and those that are not. In Table 1, industry groups that we considered "accessible" appear in bold. Columns indicate the percentage of manufacturing shipments by year for each industry group.

	1992	1997	1998	2001	2002	2004	2006	2008
Food Manufacturing	14,0	11,7	11,2	10,8	11,1	11,2	10,9	11,8
Beverage and Tobacco Product Manufacturing	3,9	3,1	3,1	2,8	3,0	2,6	2,1	2,3
Primary Metal Manufacturing	8,8	10,0	10,2	10,4	10,3	11,2	14,8	15,2
Paper Manufacturing	9,6	10,0	9,9	9,1	8,6	7,9	7,4	6,7
Printing and Related Support Activities	3,0	2,4	2,6	2,4	2,4	2,4	1,9	1,8
Petroleum and Coal Products Manufacturing	4,9	4,1	3,3	5,1	5,4	7,4	9,7	11,7
Textile Mills	2,6	2,4	2,5	2,0	2,0	1,6	1,0	0,7
Textile Product Mills	1,2	0,9	0,9	0,8	0,8	0,6	0,5	0,4
Chemical Manufacturing	7,6	7,0	6,2	6,2	6,3	6,8	7,6	6,5
Machinery Manufacturing	3,7	3,9	4,2	3,9	3,9	3,8	3,7	4,1
<b>Apparel Manufacturing</b>	<b>5,5</b>	<b>4,3</b>	<b>4,1</b>	<b>3,6</b>	<b>3,5</b>	<b>2,8</b>	<b>1,9</b>	<b>1,3</b>
<b>Leather and Allied Product Manufacturing</b>	<b>0,6</b>	<b>0,5</b>	<b>0,4</b>	<b>0,4</b>	<b>0,3</b>	<b>0,3</b>	<b>0,1</b>	<b>0,1</b>
<b>Wood Product Manufacturing</b>	<b>4,7</b>	<b>6,2</b>	<b>6,4</b>	<b>6,1</b>	<b>6,7</b>	<b>7,1</b>	<b>5,4</b>	<b>4,3</b>
<b>Plastics and Rubber Products Manufacturing</b>	<b>3,3</b>	<b>3,8</b>	<b>3,9</b>	<b>4</b>	<b>4,4</b>	<b>4,6</b>	<b>4,6</b>	<b>4,1</b>
<b>Nonmetallic Mineral Product Manufacturing</b>	<b>2,0</b>	<b>1,8</b>	<b>1,7</b>	<b>1,8</b>	<b>2,0</b>	<b>2,2</b>	<b>2,1</b>	<b>2,1</b>
<b>Fabricated Metal Product Manufacturing</b>	<b>4,5</b>	<b>4,3</b>	<b>4,4</b>	<b>4,9</b>	<b>5,0</b>	<b>5,2</b>	<b>5,0</b>	<b>5,6</b>
<b>Computer and Electronic Product Manufacturing</b>	<b>6,7</b>	<b>7,0</b>	<b>8,1</b>	<b>6,5</b>	<b>5,1</b>	<b>4,8</b>	<b>3,4</b>	<b>2,8</b>
<b>Electrical Equipment, Appliance, and Component Manufacturing</b>	<b>2,6</b>	<b>2,1</b>	<b>2,1</b>	<b>2,4</b>	<b>2,4</b>	<b>2,4</b>	<b>2,6</b>	<b>2,5</b>
<b>Transportation Equipment Manufacturing</b>	<b>6,9</b>	<b>10,7</b>	<b>10,7</b>	<b>12,3</b>	<b>11,9</b>	<b>10,5</b>	<b>11,1</b>	<b>11,8</b>
<b>Furniture and Related Product Manufacturing</b>	<b>2,2</b>	<b>2,1</b>	<b>2,2</b>	<b>2,9</b>	<b>3,0</b>	<b>3,0</b>	<b>2,5</b>	<b>2,6</b>
<b>Miscellaneous Manufacturing</b>	<b>1,6</b>	<b>1,9</b>	<b>1,8</b>	<b>1,6</b>	<b>1,8</b>	<b>1,7</b>	<b>1,7</b>	<b>1,7</b>
<b>Industries accessible to designers</b>	<b>40,6</b>	<b>44,7</b>	<b>45,8</b>	<b>46,5</b>	<b>46,1</b>	<b>44,6</b>	<b>40,4</b>	<b>38,9</b>
Industries not accessible to designers	59,4	55,3	54,2	53,5	53,9	55,4	59,6	61,1

Table 1. Québec manufacturing shipments, by industry group, 1992-2008, in % (Enquête, 2009)

Many in-house designers work in the transportation or rubber and plastic industries, which alone account for 16% of the manufacturing activity in Québec, and about 40% of accessible manufacturing. In contrast, about two-thirds of designer-producers form companies related to household objects (furniture, decorative accessories, lighting, tableware). Out of some 100 companies established by designers, 30 were from the furniture sector, 13 from the lighting sector, and 18 from the decorative accessories or

<sup>2</sup> North American Industry Classification System.

tableware sector (figure 1). Therefore, designer-producers tend to operate in areas that represent only about 5% of manufactured goods in Québec. We were thus able to identify the sector of choice for designer-producers (table 2).

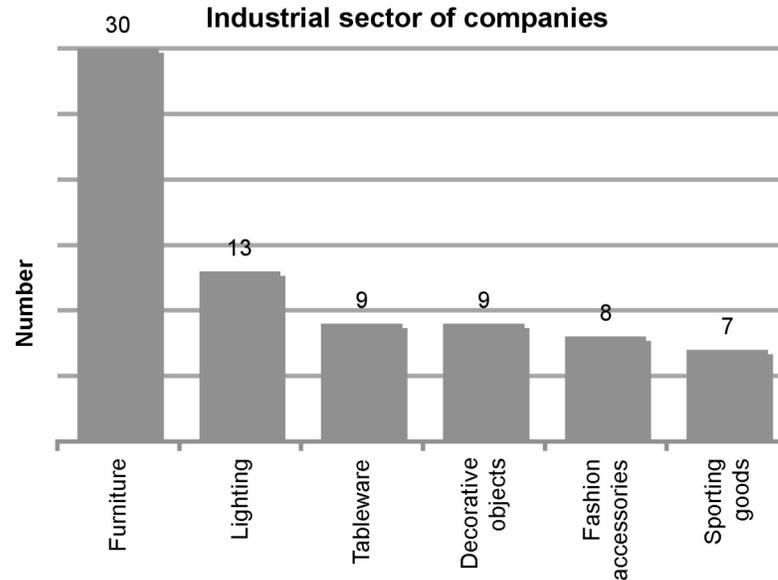


Fig 1. Industrial sector of companies founded by designer-producers

We must be cautious in interpreting these figures, since there is no indication that business opportunities are distributed proportionally to manufacturing shipments. The fact remains that the chosen area of activity of designer-producers is not driven as much by market opportunities as by their love of the activity and the prospects it offers for self-expression (Desrosiers, 2009:19). One could argue that this area requires less investment, or that there are fewer technical and commercial challenges; this is not the case, however. Recent years have been extremely demanding for the furniture sector, with fierce international competition and a particularly difficult economic climate.

	1992	1997	1998	2001	2002	2004	2006	2008
Electrical Equipment, Appliance, and Component Manufacturing	2,6	2,1	2,1	2,4	2,4	2,4	2,6	2,5
Furniture and Related Product Manufacturing	2,2	2,1	2,2	2,9	3,0	3,0	2,5	2,6
<b>Sectors of choice of designer-producers</b>	<b>4,8</b>	<b>4,2</b>	<b>4,3</b>	<b>5,3</b>	<b>5,1</b>	<b>5,4</b>	<b>5,4</b>	<b>5,1</b>

Table 2. Manufacturing shipments in sectors of choice for designer-producers by industry group, Québec, 1992-2008, in % (Enquête, 2009)

Designers create companies in areas they are passionate about (Desrosiers, 2009:18). For a few designers, this means sports or recreation, but the vast majority opts for the more expressive areas of decorative and household objects. This passion for beauty, for personal expression and aesthetics, is the same motivation that led them to design. This feature of designer-producer companies is important and reveals the underlying motivations of this group of entrepreneurs. It also underlines the historical link between the design profession and decorative arts, here as elsewhere. But does this passion, infused with emotion, prevent entrepreneurs from cogently building their companies, or on the contrary, does it provide the necessary fuel for driving them?

### **Company size**

Some measurements are used to assess a company's size, the most common being the number of employees and sales. These two factors vary considerably during a company's life cycle. From the entrepreneurs we interviewed, we obtained the highest sales and employee numbers on record for each company. We must therefore be cautious about the resulting portrait because it is the most favorable possible. For example, our top company in terms of job creation employed 300 people. However, these jobs were not all in Québec, and the company shut down abruptly in 1982 because of soaring interest rates.

The number of direct jobs is an important economic and social indicator (figure 2). We obtained employment data for 75 companies. About half of these companies had two employees or less. The average number of jobs created, at peak employment, was nineteen.<sup>3 4</sup> About one third of the companies had created no jobs, while nine companies had created more than fifty. The latter are all well-established, commercially successful companies.

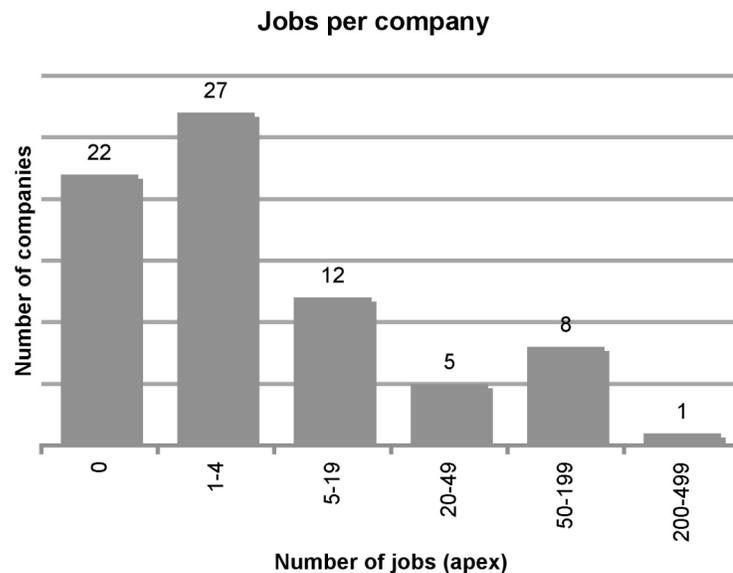


Fig 2. Number of jobs created per company

<sup>3</sup> Mean = 18.79; standard deviation = 46

<sup>4</sup> If we survey only job-creating firms, the average increases to 27 jobs.

Questions can certainly be raised about companies that create no jobs or whether they can be legitimately considered businesses. A large proportion of these companies were created for specific projects, but were dissolved for lack of income; a few remained active because there was no reason to close them, and some remain at the start-up stage. Nevertheless we chose to consider all of the above as businesses.

Another measurement of a company's size is its revenues. Total median revenues were \$100,000 per year. This represents total median revenue of about \$50,000 per job. This low revenue per job indicates that these are generally small and not particularly productive companies. It also indicates that a significant portion of these companies are not creating jobs. The chart (figure 3) shows the distribution of companies by revenue. The average maximum annual sales per company were around \$2,000,000, with revenues around \$100,000 per job. As in most industrialized societies, a high proportion of these companies are micro-enterprises, but a third of designer-producer companies showed sales in excess of \$500,000.

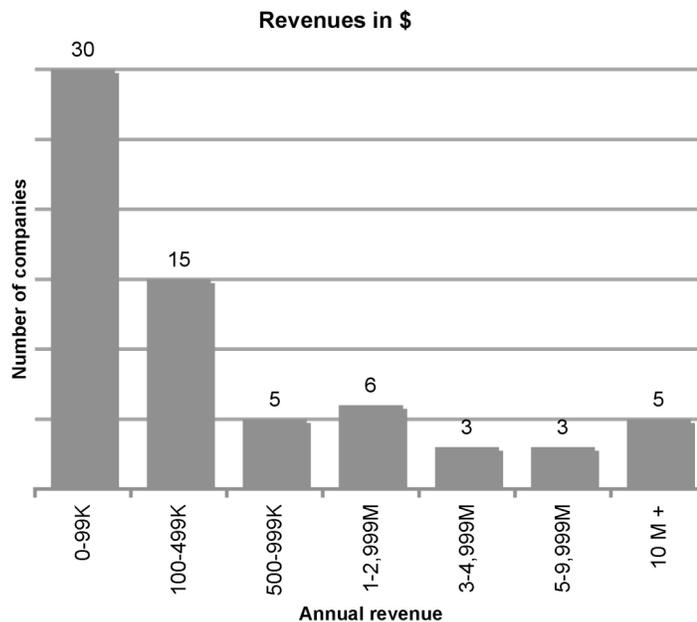


Fig 3. Annual revenue per company

When compared to the manufacturing sector in Québec (Statistiques, 2007), designer-producers companies fared well, creating slightly more jobs per establishment and with slightly higher revenues per employee. When compared to other companies in the sector of choice of designer-producers, their results were somewhat similar to their peers.

### **Company longevity**

One of the main questions this study seeks to answer is whether designer-producer companies are successful. We wish to know how they compare to other companies in Québec. At the beginning of this section, we examined and then defined the notion of

success in terms of a company's longevity. In 2008, the MDEIE<sup>5</sup> published a study entitled "*Taux de survie des nouvelles entreprises au Québec*"<sup>6</sup> (Desbiens et al., 2008). Unfortunately, we were unable to compare our results directly with results from the MDEIE study. We did not have access to the data it used, and it was difficult to ask owners about data from their companies' T4 slips (fiscal employment slips) for past years. In addition, we would have had to compare data from the same cohorts and ensure that we had identified all companies of a single and same cohort.

Whereas the authors of the survival rate study define a company as "an economic and social structure having at least one employee working in an organized manner to produce goods or services for its customers" (Desbiens et al., 2008: 88), we did not consider employment as a necessary criterion for inclusion in our sampling. However, we did use this definition in determining the survival and continuity rates of designer-producer companies, so we could better compare them. We have vested significant efforts in identifying the largest possible number of designer-producer companies. It seems likely, however, that companies that shut down abruptly for lack of funding, markets, or perseverance may be underrepresented in our sample. Since these false start-ups rarely generate jobs, we estimate that this has had little impact on the survival rates we have calculated.

In examining the survival rates of all manufacturing firms in Québec, we found that half of them ceased their activities after three years (Desbiens et al., 2008: 43). If we examine the same rates for designer-producer firms, we note that these companies survive, or endure, for a long time. Three quarters of the companies are still operating after nine years (figure 4).

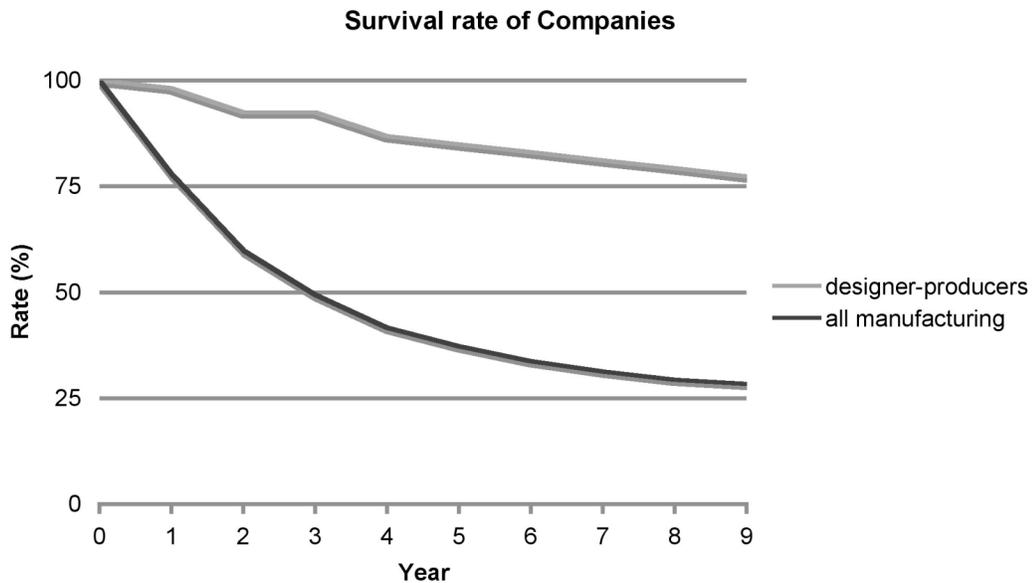


Fig 4. Comparative survival rate of companies in Québec

5 Ministère du Développement Économique, Innovation et Exportation

6 Survival rates of new businesses in Québec

## ***Economic impact***

Do the companies we studied have a significant economic impact? Obviously they do for the thousands of people who depend on them for their bread and butter. We estimate at approximately 13,000<sup>7</sup> the number of job-years created by the 74 firms we surveyed, and nearly 19,000 if we extend our results proportionally to our entire population of companies. It is both a little and a lot. A little, given the millions of job-years represented by the Québec job market, and a lot when one considers the small number of designers trained here and the 125 companies identified in our study.

These jobs are, for the most, productive, wealth creating, unsubsidized jobs, and they have a multiplier effect within the economy.

We compared the number of direct jobs created by designer-producers with those created by designer-consultants. Using the MDEIE directory of industrial design consulting firms (Répertoire, 2009), we were able to total the number of employees represented by this sector. All told, there were 370 jobs for 140 consulting firms or self-employed consultants.<sup>8</sup> Even if we extrapolate these jobs over thirty years,<sup>9</sup> it is clear that designer-producers create at least as many jobs in Québec as do designer-consultants. This is not the only measurement that quantifies the economic activity and impact of designers, but it affirms that the practice of designer-producer is as important as that of designer-consultant in terms of job creation. Both practices, therefore, deserve the attention and support of educational institutions and governments.

There are other impacts of designer-producer companies. Inasmuch as they produce innovative and original products, these companies contribute to the cultural identity of Québec and Canada. The economic value of innovation and its relevance as a business strategy has often been debated, especially in societies in which money and the price of objects are first-order criteria. Despite our passion for design, the answer is not always obvious or rational. What is indisputable, however, is that all societies, to varying degrees, express and identify themselves through the objects they produce. It is a source of pleasure and pride for them. This, then, is an undeniable contribution of the companies we have described.

## **Discussion**

Despite the small size of our sample and the difficulty of comparing the data we collected, nothing leads us to believe that companies formed by designers are less successful or less performing than others. We even dare assert that, in the manufacturing game, designer-producers fare particularly well and have greater staying power than other companies. We offer a few explanations for this.

- Design has been established as a factor of success for public companies by previous studies (Design Council, 2004) and books (Martin, 2009). Whereas several studies have shown that design benefits differentially the companies that use it (Abdel-Malak et al., 2008), our sample used design to the greatest extent of all.

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7 Job-years =  $\Sigma$  (jobs apex x company duration / 2)

8 We excluded one company that was clearly not an industrial design consulting firm, and two professors of design.

9 340 jobs x 30 years = 11,100 job-years

- For many companies, developing a new product is a costly, risky, and lengthy process involving no revenue and many expenses. For designer-producer companies, such expenses are minimal and are usually associated with the cost of making prototypes. The ability of these companies to last, if only for the time it takes to develop their first products, is greater than that of comparable manufacturers. Designer-producer companies nearly always survive the product development phase. Designers are particularly well suited to making prototypes, building trademarks, and producing their company's image.
- Their founders may unduly keep some companies alive. In many instances, these companies act as avatars for their creators, fulfilling an emotional need to exist as a designer. Whether they generate revenue or not seems secondary to their owners.
- A large proportion of our subjects had university training in design (82%) and the occurrence of entrepreneurs in their families (80%) was very high (Desrosiers, 2009: 15-16).
- It may also be that the project-based training of designers, and thus “the abilities to reconfigure a firm’s resources and routines in the manner envisioned and deemed appropriate by its principal decision-maker(s)” (Zahra et al., 2006: 918), are particularly conducive to starting and maintaining a successful manufacturing business.

We propose that the answer to the manufacturing success of designer-producers lies somewhere within these explanations.

## **Conclusion**

Designers create successful and relatively durable companies that generate economic and cultural wealth. Such companies are heavily concentrated in the areas of decorative objects and furniture, and make original products that stand up well against international competition and contribute in concrete ways to collective wealth. Designer-owned companies vary in size and represent different levels of risk. They constitute attainable and achievable projects. These companies generate more direct jobs than all design consulting firms in Québec put together. Despite this remarkable track record, the practice of designer-producer has been overlooked by design history and education in Quebec.

Whether as in-house designers, as consultants, or as designer-producers, designers could benefit from a more refined and developed ability to recognize business opportunities and the societal changes that underlie them. The university training that designers receive greatly shapes their professional identity. If this training supports and promotes an antiquated, incomplete, and borrowed image of a profession that itself is in constant evolution, this will only lessen the opportunities available to graduates. In Quebec, today’s designers are not only apt at creating new products for business ventures; they are also very capable of creating the ventures themselves.

It is important for the training of designers to be relevant and to better prepare them for the contemporary challenges of economic competition. Insofar as we have shown that designer-producers are an economically viable creative force and that they are numerous, there is ample reason for including notions of entrepreneurship and business in the training of young designers. This single action will, in turn, affect the perception that this profession has of itself.

It would be desirable to compare our observations with those made elsewhere, especially in economies that are the most dynamic and creative in terms of design. Such further research could help to determine the necessary knowledge to better equip future cohorts of industrial designers.

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## **Author Biography**

### **André Desrosiers**

André Desrosiers is a designer, contractor, industrialist, editor and professor. After graduating from the Université de Montréal's School of Industrial Design in 1980, he worked as a designer for several design firms on a wide variety of products. Soon after, he launched his own manufacturing company. He has taught industrial design at the University of Montréal, and is currently a guest professor at the School of Environmental Design of the Université du Québec à Montréal. His domains of expertise and interest include Quebec industrial design, intellectual property and the relationship between designers and business.