

# Challenges faced by women entrepreneurs



Research investigating women's experiences of starting and running businesses (generally, rather than specifically in industrial research) suggests that although their motivations are very similar to those of male entrepreneurs, many of the barriers and constraints that they experience are gender-specific (Carter and Allan, 1997). Indeed, gender differences are apparent in many aspects of entrepreneurship. When women enter self-employment, they do so with fewer financial assets, less experience in management and their enterprises tend to be under-resourced.

Women entering self-employment generally lack both hard resources (finance, assets etc) and soft resources (management experience, training etc). They experience difficulties accessing finance both for start-up and business growth. Women tend to use only one third of the starting capital that men do, irrespective of sector, and money to finance growth may be less available to women owned firms largely due to women's difficulty in gaining access to financial networks.

As a consequence of these and other factors, business ventures owned by women tend to under-perform across a variety of different business measures. Not only is it arguably more difficult for women to start in business, but their growth rates tend to lag behind those of equivalent male-owned firms. Women's businesses employ fewer staff, are less likely to grow substantially in employment (more than twenty employees) after twelve months in business, have a lower sales turnover, and are valued at a lower level than male owned businesses. Men are significantly more likely to own other businesses (19.6% compared with 8.6% for women) and also to have strong growth ambitions in so far as they want to expand their businesses 'as far as they could' (43%, compared with 34% of women) (Rosa et al, 1996).

A Danish longitudinal analysis of new enterprises started in 1994 shows, however, that in all sectors except the wholesale trade, women entrepreneurs have a higher survival rate than men entrepreneurs (Nielsen, 2002), which may mean that measuring success by growth may not always be correct.

Although there has been a great deal of research focusing on technology based SMEs and particularly those that have spun out of academic institutions and large research establishments, little account has been taken of the gender based factors associated with the **high-tech based entrepreneur**. Similarly, although there has been a great deal of research investigating women's experiences of business ownership, this has been conducted from samples derived largely from traditionally 'female-type' sectors. Little is yet known about women starting and owning technology based ventures or those moving into entrepreneurship from an academic background in science, engineering or technology. As a special sub-group of entrepreneurs, they are likely to differ from women entrepreneurs operating in other sectors.

In particular, their pre-venture experience of the labour market will be different. Women working in science and engineering in the private sector and in academic institutions have often been found to experience lower levels of pay and remuneration. This may on the one hand reduce resources that they can take into business ownership, but may also spur them into venture start-up in order to avoid institutional inequalities.

The ability of women researchers to access institutional (bank) finance may be somewhat improved by their experience and educational background compared to women starting other businesses. However, the type of ventures that they start in many cases requires significantly more resources than start ups in the traditional sectors usually favoured by women entrepreneurs, such as retailing and low-order services. It is likely that they will require venture capital to start and sustain their business. Current estimates suggest that in the US, less than 5% of the \$73 billion venture capital pool is awarded to women-owned firms.

Greene et al (1999) suggest three reasons why women experience difficulties in raising equity capital: women choose not to seek this type of external investment; women encounter structural barriers which preclude their access to equity capital; and women lack the knowledge and capabilities to obtain equity capital. In addition, it has also been argued that women choose to start their businesses in sectors or locations that do not match the preferences of external lenders (Brush et al, 2001). Women operating technology based ventures may provide capitalists with business ideas in a preferred sector, but may still have to overcome structural barriers when accessing this type of finance.

Based on existing data, it is difficult to determine causes and effects of this imbalance. When interviewed, women entrepreneurs confirm great difficulties in accessing venture capital. Venture capitalists on the other hand claim that they receive a very low number of investment requests from companies founded or headed by women. The proportion of woman-lead companies that receive venture funding is lower than the proportion of women among entrepreneurs.

## What should be done?

One trend among venture investors might turn out to be conducive towards finding a solution. Venture investors are increasingly looking for management teams in the companies in which they invest. Too many negative and costly experiences have proven that time for the 'strong and lonely cowboy-type entrepreneur' is running out. The skills required by any company - and particularly a capital intensive, high-tech venture - to be successful, by far exceed the capabilities of any single person. Therefore, investors more and more often insist on a capable management team, and in many cases supplement the entrepreneur with one or two additional team members as part of the investment package.

The many arguments for the higher rate of productivity and innovation of teams with diversity, including gender diversity, which are cited elsewhere in this report, are particularly true of management teams in new ventures. This means that there is a reason to trust that venture investors will increasingly tend to point to the need for women to be members of management teams. By the same token, prejudices among venture capitalists (VCs) against women entrepreneurs might be overcome, as they also tend to be part of teams rather than stand alone propositions. The fact that women do not seem to apply to venture funds needs to be addressed. It will be relatively easy to give women access to manuals and instructions on how to approach VCs, and such skills should be included in university based

entrepreneurship programmes, (in some instances, this is already the case). The inclusion of mentors in first meetings with VCs is another obvious way to overcome hesitations.

Part of the solution might be evolving within the financial sector itself. One of the areas where female professionals have achieved a relatively high penetration in most countries is within financial services. This means that quite a few of the analysts, investment bankers, investment advisors, managers within institutional investors and private equity firms, and indeed investment directors in VC firms, are now women and the number is clearly growing. It seems fair to assume that this will help provide a bridge to the disconnected.

Another positive development is the growing number of virtual networks, like 'High-TechWomen.com' and 'DigitalEve.com', together with an increasing number of websites dedicated to providing women with business advice. These activities provide evidence of women's desire to network and make the most of new technology to achieve their business objectives.

However, there is a need to catalyse the processes already in motion (in particular see paragraphs above). If the number of women entrepreneurs who receive venture funding does not soon show a dramatic increase, there needs to be an awareness-raising exercise. It should target VCs, as well as young women scientists, technologists and engineers, making them familiar with VC expectations and with the present reasons for the disadvantages they face. As Brush (1997:22) states:

... women are less welcome in social networks ... and are left out of some of those loops, meaning they do not have access to as much information. So social structures and the way that women socialise influence the human and social capital endowments with which they start their businesses.

There is a clear need for improved statistics and more research on women entrepreneurs in research-intensive sectors. The focus of attention should be on companies in 'high potential' sectors. The evidence we have suggests that enterprises starting off with a combination of male and female founders have an increased probability of success. Individuals and organisations involved in supporting entrepreneurs, such as venture capitalists and finance houses should be educated and trained to better understand the needs of women entrepreneurs and to be able to support them more effectively.

## Action points

- Throughout Europe, sex-disaggregated statistics are needed on the participation of women entrepreneurs in the high technology sectors.
- Research should be commissioned to assess the impact of women's perceived own limitations, societally imposed limitations and structural limitations imposed by framework conditions.
- Women's successes in high-tech business need to be made more visible.
- Business networks should be identified that could provide mentors and coaches to women entrepreneurs in particular.

- Grants need to be provided for science and technology graduates that allow specialised part-time, distance learning business education.
- Universities need to be encouraged to provide obligatory minimum tuition in business skills to all science and technology students at undergraduate level.
- Specialised (incubator) facilities need to be provided for undergraduate S&T students who wish to try out innovative proposals while they are still in undergraduate programmes.
- Public funds should be provided to match private sources of finance for entrepreneurs.
- Catalyse the processes already in motion.

### The number of women in top jobs grows - at a snail's pace

Women hold 15.7% or 2,140 out of 13,673 corporate officer positions in the Fortune 500 companies. Up from 8.7%, in 1995 when Catalyst first started counting and 12.5% in 2000. Source: Dennise Duclaux, Nov 19, 2002 (Reuters)

### Top five barriers to women's advancement in organisations %

Women Stereo types and preconceptions of women's roles and abilities 66% Lack of senior or visibly successful female role models 64% Lack of significant general management or line experience 63% Commitment to family or personal responsibilities 62% Lack of mentoring 61% (Per cent who strongly agree/agree) Source: Catalyst (2002) Women in Leadership: A European Business Imperative ([www.catalystwomen.org](http://www.catalystwomen.org))

Burkhardt & Greif (2001) analysed the participation of women in regard to patents in Germany 1995-1999 and found clear gender differences:

- The number of women participating in patent applications increased by about 60%, twice as high as the increase of the total.
- However, number of women involved remains very small: they were only involved in 7.5% of all patents and only 4.3% of all patents registered referred to women.
- While companies registered 72% of patents, universities and research institutes registered 4% and individual persons 24%. Women's participation in patents from industry is much lower than of public research.
- While 31% of all 'women patents' were in chemistry, chemistry only accounted for 11% of all patents.
- Women are more involved in group patents: only 18% of all patents involving women were registered by a women alone, by comparison 50% of patents involving men were registered by single man. Source: Burkhardt, D. and Greif, S (2001) Frauen im Patentgeschehen in der Bundesrepublik Deutschland, Ergebnisbericht im Auftrag des Bundesministeriums fuer Bildung und Forschung (BMBF)

### Women Inventors in the Nordic Countries

- The goals of QUIN:
- to make female innovators visible and noticeable to society i to give female innovators contacts with other female innovators in other countries
  - to encourage women to develop their creativity and realize their ideas - both social and technical ones - for the benefit of society. Source: Maila Hakala, August 2002, <http://www.quin.biz>

Source of info: Women in Industrial Research - A wake up call for European Industry

**The NorthEast Euro Info Centre**

The Rivergreen Centre • Aykley Heads • Durham • DH1 5TS

Tel: 0191 383 3717

[www.northeasteic.com](http://www.northeasteic.com)