"ENTREPRENEURSHIP & NEW VENTURE CREATION" KEY ELEMENTS OF THE ENTREPRENEURIAL ECOSYSTEM FACILITATING THE GROWTH OF ICT ENTREPRENEURS IN ITALY

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Abstract

This exploratory study examines the perceptions of Italian entrepreneurs about their experiences with their own new venture creations in Italy. The study utilizes the Ecosystem approach to examine the drivers of entrepreneurship. Integrating the theory from economics, sociology, and psychology, we argue that both the individual personality traits and the environment impact entrepreneurial activity. We used a mixed method approach with in-depth interviews and surveys, followed by interviews with the Control Group. The findings suggest entrepreneurial spirit in Italy is high, and the socio-cultural environment is perceived as encouraging entrepreneurship. The business environment challenges confronting ICT entrepreneurs are related to government policies and programs, access to finance, perceived need for support towards knowledge and skill building and, finally, to exploring International markets. Theoretical and practical implications are discussed along with directions for future research.

Keywords: Entrepreneurship, Italy, new venture creation, ICT

Introduction

Italy has a diversified industrial economy. The great strength of its economy lays in its vibrant small and medium firms, specializing both in high quality consumer goods and in high tech design and engineering products.

Unfortunately, the global crisis has highlighted Italy's long-standing weaknesses. Its economy is currently suffering from a combination of intertwined difficulties that are fuelling each other: a poor underlying growth rate, high public debt, and limited lending power of its financial institutions.

The average number of enterprises per thousand inhabitants is an important indicator of the degree of diffusion of private initiatives It, however, is also an aspect of the fragmentation of economic system: in Italy there are about 64 companies per thousand inhabitants, among the highest value Europe, reflecting mainly a prevalence of small enterprises (ISTAT 2012).

The Italian economic system is characterized by the presence of a multitude of SME (95% of Italian Companies have less than 10 employees), many founded in the period of the "Economic Miracle", when everything had to be rebuilt and many people had lost everything. Today this system, characterized by the claim "Small is Beautiful", is facing many challenges: the economic crisis, globalization, credit crunch, changes in the world trade and

so on[318]. All this requires a new class of entrepreneurs competent, able to meet customer's needs, willing to travel abroad, which will take over the family business or start your own.

Knowledge intensive entrepreneurship

The term "Knowledge Intensive Entrepreneur" lacks a very rigorous definition.
For the purpose of the study, we have used the following working definition: "Knowledge Intensive Entrepreneur is defined in dynamic terms as the entrepreneur of normally small and medium sized enterprise (SME) that focus on the discovery, innovation or interpretation of knowledge. Such individuals typically maintain a business focus while continuously innovating."
Our focus on Knowledge-intensive ICT entrepreneurship is based on our understanding of its relevance: (i) as a major factor affecting innovation; (ii) as a core transformative mechanism for translating knowledge into growth, (iii) as a stock of capital or factor of wealth generation which can be used in the production of other goods; (iv) as important dynamic property of different systems of innovation and institutional setting.

Theoretical model

The development of entrepreneurship in a particular milieu depends not on a single over-riding factor but rather on a 'constellation of factors' at the individual, societal and national levels (Tripathy, Business Communities of India – a Historical Perspective, 1984).In order to understand the factors that support or hinder an entrepreneur, we have used the Entrepreneurial Ecosystem framework model in our research, instrumental in gaining insight into factors (individual, society, state) which enable growth performance among the entrepreneurs in the knowledge intensive ICT Sector.

The term "entrepreneurial ecosystem" (EE) refers to a combination of factors that play a role in the development of entrepreneurship.

INDIVIDUAL	SOCIO-CULTURAL	STATEGIC/GOVT. PILICIES AND PROGRAMS	ACCESS TO FINANCE	KNOWLEDGE & SKILL BUILDING	INTERNATIONALIZATION
Education	Socialization	Infrastructure	Self finance	Business skills	International approach
Motivation	Risk-taking	Government policies	Bank credit	Training centers	International knowledge
Skill set	Family background	Incentives programs	Interest rates	Counseling services	Government agencies facilitations
Role models	Attitude	Taxation	Angel investors	Research & development	Access to financial resources
Opportunity	Support	Inflation	Venture capital	Business Incubators	Foreign languages abilities
Ability to manage		Min. entry barrier	Private equity	Networks	Intercultural skill
		Corruption			

Figure 1 – TheEntrepreneurial Ecosystem

[318]2012 has been characterized by a very serious economic crisis: according to CERVED, bankruptcies have reached the highest level since 2006 (over 12.000 companies, especially SMEs), with an increase of 7,4%respectto 2010.According to Crivis D&B,the same trend has characterized 2012-IQ, with 3.001 bankruptcies.

In order to gain insight into the Entrepreneurial Ecosystem, the research group evolved the following six framework conditions that foster entrepreneurship, which have been found to be applicable in Italy and the BRICs.

1) *Individual Personality Traits:* refers to the personal qualities of an individual pre-disposing him/her to entrepreneurial activity. The development of these traits could arise from early socialization, parenting, socio-cultural norms, early education and familial care etc, which are the components of the general environment.
2) *Socio-cultural Context:* refers to the social and cultural norms that influence individual's behavior and attitude towards entrepreneurship.
3) *Government Policies and Programs:* refers to the extent to which government policies as reflected in tax or regulations are capable of facilitating new venture creation, and presence of adequate government programs in assisting firms in their startups, survival and growth
4) *Access to Finance:* refers to availability and affordability of various types of finance such as bank loans, equity, venture capital, angel funding, subsidies and grants.
5) *Access to Information, Opportunity for Knowledge and Skill-building*: refers to the availability of information on business opportunities and access to data required by entrepreneurs for managing their business. Also includes availability of opportunities for acquiring knowledge and learning that helps them in developing relevant skills required for managing their businesses.
6) *Internationalization*: refers to entry into the international market and meeting the challenges of existing players. For this an entrepreneur should have access to knowledge on international markets, procedures, have partners in the international markets for exports, imports, foreign direct investment, international subcontracting and international technical co-operation. They should also have access to appropriate training, and support services.

The model on Figure 1 comprises the various determinants as mentioned above which can facilitate and support the growth of an entrepreneur and thus influence entrepreneurial performance. Within each of the six main variables of this model, several sub-variables are identified to elaborate on the overall framework.

While the entrepreneurial ecosystem framework is presented here in a linear fashion, it is explicitly recognized that there are complex relationships among the different main variables and their sub-variables. They tend to reinforce each other, and weakness in one area often has a negative impact on other areas.

Research questions

The study is guided by the following three broad research questions:

'What factors influence the support and development of ICT new venture creation in Italy?'

Methodology

The study utilizes an exploratory, theory building approach (Strauss & Corbin, 1998; Eisenhardt, 1989; Yin, 2003). A mixed method approach of data collection strengthens the study by providing both quantitative and qualitative perspectives on the phenomena being examined (Miles & Huberman, 1994).

Primary data collection was done through:

- 21 in-depth interviews with Entrepreneurs of small, medium and large scale enterprises;
- 65 on-line questionnaires sent out to the entrepreneurs of small, medium and large scale enterprises.

Interviews

The data collection involved conducting in-depth interviews with 21 small- to medium-large sized enterprises operating in the ICT sector in Italy. Each entrepreneur was responsible for founding and heading their organization. The interview questions were designed to examine the entrepreneurs' perceptions of the factors that influence the support and development of their entrepreneurial activities. The interview questions incorporated aspects of the six factors of the Entrepreneurial Ecosystem Framework in order to compare these factors across the BRIC countries and Italy.

Face-to-face, semi-structured, interviews were conducted with each participant in the language of the interviewees' preference (Italian/English). The focus of the interview was to identify the factors that facilitated or hindered startups as well as factors that supported the venture growth. Each interview took about 60-90 minutes. The findings shall follow.

Survey

The "survey" data was collected from 65 ICT entrepreneurs across small and medium enterprises (SMEs) in Italy. The selection of firms was based on the definition of ICT sector developed by OECD and includes the ICT sector industries based on products and services under these 4 branches- ICT manufacturing, ICT services, telecommunication and digital media.

A structural questionnaire composed mainly of closed-ended and rating questions was used as a data collection instrument. The questionnaire was pretested in order to ensure that the survey content and measurement scales were clear, valid, and appropriate. Based on the pretest responses, some demographic items were modified. The owner/founders of the firms were the target respondents of the survey to ensure the validity of the data collected since the study is based on personal experiences of the entrepreneurs affecting his/her growth potential.

We used the selective database of member ICT companies of Confindustria Monza-Brianza, Innovhub, Milan Chamber of Commerce and Fondazione Distretto Green High Tech Monza Brianza to send out the online questionnaire for the respondents to answer. Along with this, Social media was also used to reach out to the entrepreneurs.

To maximize the response, personalized cover letters were sent, with promise of feedback and confidentiality. In total, 400 ICT entrepreneurs across SMEs were randomly selected and identified as meeting the selection criteria. Questionnaire link was sent out to the entrepreneurs along with e-mail reminders and in some cases also telephonic reminders. Finally, we received 65 questionnaires which were relevant for the inclusion in the sample, resulting in a response rate of 16.25%.

For the selection of micro, small and medium enterprises for our research, we accept the definition of micro, small and medium enterprises – as stated by european commission, enterprise & industry

Revised SME definition as from 1 January 2005-

Enterprises qualify as micro, small and medium-sized enterprises (SMEs) if they fulfill the criteria laid down in the Recommendation which are summarized in the table below. In addition to the staff headcount ceiling, an enterprise qualifies as an SME if it meets either the turnover ceiling or the balance sheet ceiling, but not necessarily both.

Enterprise Category	Headcount	Turnover or	Balance Sheet Total
Medium-sized	< 250	≤ € 50 million	≤ € 43 million
Small	< 50	≤ € 10 million	≤ € 10 million
Micro	< 10	≤ € 2 million	≤ € 2 million

Research findings

Results of the findings are shared with respect to each variable. First the findings of the interviews are presented, followed by findings of the survey questionnaire. These findings are then co-related with the findings of the Control Group.

Interview Sample

The demographic details of the 21 entrepreneurs interviewed

Variable	Score
Age (20/35, 35/50, >50)	20 < 1 < 35 35 <14< 50 6> 50
Sex (M/F)	100% M
Marital Status (Married/unmarried/divorced)	76% married 19 % unmarried 5 % divorsed
Educational Background (Graduate - Master, PhD, MBA, Diploma, Engineer, Law)	47**%** Graduates Out of that - 0 Master 2 PhD 1 MBA 7 Engineers 2 Diploma 1 Law Degree
Prior work experience (Yes/No)	81 **%** Yes 19 % No
Family Background (family business)	89 **%** no family business
Scope of business (National, Europe, International)	**57 %** National 10 % Europe 33 % International
Business Turnover (< 2mln, < 10 mln, < 50 mln, > 50 mln)	**10 %**, < 2 mln 58 %, < 10 mln 19 %, < 50 mln 13 % >100mil

Interview Findings

Individual and personality traits

The motivating factors for starting a business, as indicated by the participants, include:

- **Personal Autonomy** – 80% of entrepreneurs interviewed shared that a chance to work independently and freedom to realize their ideas and dreams as a key driving factor for being an entrepreneur.
- **Prior Work experience -** Majority of the entrepreneurs shared that they have had the experience of 10-15 years in a similar sector, giving them an impetus to start their own business.
- **Desire to be self-employed -** Most entrepreneurs reported that they had reached a stage in life where had the desire to be self-employed rather than being an employee and that they felt more comfortable working on their own projects in their own way and by their own direction. 2 entrepreneurs identified dissatisfaction with their previous situation, which had influenced their decision to start up a business. Half the sample shared that their motivation to start the business was also to avoid uncertainties related to employment.
- **Being able to self-finance -** having worked for some years, most entrepreneurs felt that they could put in their personal savings to start the business
- **Better income prospects -** most entrepreneurs interviewed shared that although monetary reasons were not the prime motive to start a business, they definitely felt that becoming an entrepreneur could offer them better income prospects

- **Enjoyment -** About one-third of the entrepreneurs indicated that their business arose out of their enjoyment of IT-related products and industries.
- The broader picture seems to bring out personal motives as the main reason for choice. A strong individual attitude is indeed a common factor in explaining our sample's behavior.

Socio-cultural contexts (supporting/hindering)

Barring three, all entrepreneurs interviewed are first generation entrepreneurs. During the exploratory interviews with the entrepreneurs, it emerged that moral support received from their family was extremely valuable for them and it played a significant role in their decision to become an entrepreneur. Though, some entrepreneurs shared that their parents having worked as employees, they were initially very apprehensive about risk-taking and had the fear of failure, but were overall encouraging and supportive. Most entrepreneurs explicitly valued the support of their spouses. Thus, we see social and familiar scopes undoubtedly play a significant role in supporting entrepreneurship.

It has been seen that 80% entrepreneurs started their venture around when they were in the age range of 35-50 years. The argument can be interpreted to suggest that individuals are increasingly likely to become entrepreneurs in their mid-career life. Also, another component that can be co-related with the age is experience. It has been seen that most entrepreneurs started their venture only after gaining the required experience. Since experience explicitly embodies learning, greater experience promotes entrepreneurship by equipping the entrepreneur with skills needed to exploit opportunities.

It has been also observed that entrepreneurs often obtain idea for new ventures from their previous jobs. About more than 60% of the entrepreneurs interviewed reported that they had replicated or modified an idea they had identified in their previous employment.

Another important observation is that more than 50% of the entrepreneurs started in partnership with sometimes more than 2 partners, having diverse experiences. This is suggestive that diversity of experience might also facilitate entrepreneurship, by bringing together broader set of skills and experiences.

The interviews reveal that Networks in Italy are very important for entrepreneurs, especially in obtaining advice and feedback and for several other types of resources. New ventures formed by partners, instead of a single owner, thus provide access to a wider social and business network on which to draw, along with providing a diversified pool of competences.

In general, there is a diffuse feeling that culture in Italy supports entrepreneur.

Government policies and procedures

70% of the entrepreneurs interviewed shared that the administrative procedures and formalities that are to be fulfilled at the time of start-up are time-consuming and bureaucratic. To cope with this, they usually hire the services of a Consultant or rely on their personal contacts to get things done. In the absence of the two choices, it is burdensome to deal with the business registration procedures.

In order to reform the system, the European Commission has launched in 2008 the Small Business Act, asking its member states to speed up and reduce the costs of starting a company. It also asked that licenses, permits, authorizations required to start a business should be shortened to a maximum of 1 month.

Italy belongs to the Group-of-Eight (G8) industrial nations, the European Union (EU), and the Organization for Economic Cooperation and Development (OECD), and is working towards simplifying and reducing the time and costs involved to start up a business. Currently

in Italy there are many specific provisions (both national & regional) for fostering the creation of small firms and self-employment

Despite the Government efforts in improving the scenario, most entrepreneurs consider the current reality far from satisfactory.Appropriate tax measures can contribute to the development, growth and survival of firms.All entrepreneurs interviewed expressed that they face a high tax burden. Especially for a start-up, this burden is perceived as excessive. They are aware of the fact that some fiscal benefits are available for the first years of working; yet they are perceived as small and insignificant.

The structure of the tax system, including income and corporate tax, labor tax and VAT, influences the ability of firms to expand. The complexity of tax systems is in itself an administrative burden for entrepreneurs. Despite European commission recommendation, the tax burden in Italy continues to remain very high.

Access to finance

90% of entrepreneurs interviewed shared that they self-financed themselves. Some also took financial support from family and friends. Only one entrepreneur, out of the 10 interviewed, said that they took bank loan for running their day-to-day administrative expenses. This was possible only because the partner had a senior level contact with one of the leading banks in Italy so could access financial support from the bank. Another entrepreneur since he had acquired a company participated in public funding call and was fortunate to having received some small funding related to the development of a specific project

Others shared that access to finance remains a major barrier for start-ups in Italy. They have difficulties securing bank loans or finding risk-capital. Banks want a positive track record and collaterals – which new firms, particularly those in the knowledge intensive sector, generally do not have. Start-ups also experience serious difficulties in covering their working capital needs. Last 2 years there haven't been at all Venture Capital funds. One of the entrepreneur interviewed shared that he had the opportunity to present his business idea to VC and the technology innovation was really liked by them, but he was denied funds on the grounds of being too small and having a very small team. Another critical point in the relationship between entrepreneurs and the banking system is the difficulty for a new entrepreneur to keep up with the payment of suppliers, especially in the initial phase, when the cash-payment cycle is not yet up to speed.

Opportunity for knowledge and skill building

75% of entrepreneurs interviewed started their ventures after having worked 10-15 years in a technologically similar industry. After having gathered skill and experience, they felt the need to invest their time and energy in working for themselves. Only one entrepreneur started his company immediately after passing out of the University. He shared that the education did provide him the technical skill, but not the management skills because of which he made grave mistakes, which affected his business growth. Another entrepreneur, owner of medium sized company shared that he self-taught himself by reading extensively on management concepts, principles and practices and applying the learning to his business.

Majority of the entrepreneurs shared that they did not receive the desired support from the industry associations or university lead incubators, fulfilling their knowledge and skill building needs. One of the entrepreneur shared that he sought R&D support from one of the University lead incubators, but they took more than 2 years and finally he gave it up. Another entrepreneur shared his positive experience with the Italian industry association, who provided him an opportunity to present his business model at the United Nations and in association with French embassy, introduced him to some Venture Capitalists in France.

Overall, 20% of entrepreneurs shared that they received some minimal support from Italian Business Associations.

Most entrepreneurs feel that – also thanks to the European commission reforms aimed at promoting entrepreneurship - there are various professional bodies (technical institutes, incubators, international/national projects, government organizations, business association) who are working to provide information and technological support to the entrepreneurs, but unfortunately in reality, small entrepreneurs don't get the help and support that is desired.

To sum up the argument, setting up a business calls for drive, creativity and persistence, whereas developing a business gradually requires more managerial skills, such as efficiency, effectiveness and reliability. Considering that both personality and management skills are key elements for success, personal skills relevant to entrepreneurship should be taught from an early stage and be maintained up to university level, where the focus can concentrate on building management capacity. Italy, being part of European Commission is now committed to promoting the teaching of entrepreneurship in their education system.

Internationalization

60% of entrepreneurs interviewed shared that, despite understanding the advantages of embracing globalization and the risks of not doing so, they still remain focused on their national markets. The main reasons reported are lack of financial resources, language barrier, lack of knowledge to analyze foreign markets, but most of all lack of skills or skilled human resource to tackle internationalization.

30% of the entrepreneurs interviewed (the most well-established) are operating in the global markets and have an international orientation.

An important observation made highlights that the level of internationalization is closely related to the following factors: company size, the pro-active approach of the entrepreneur himself, and his readiness to expand to global markets.

In order to support the entrepreneurs in internationalization, there are local and regional networks in Italy supported by government and industry to advice entrepreneurs and help them develop new markets. There is focus on promotion of regional networks or clusters in order to help entrepreneurs mutually share their experiences and knowledge.

Survey Sample

The "primary survey" data was collected from 65 ICT entrepreneurs across small and medium enterprises (SMEs) in Italy (described in detail in the section METHODOLOGY)

Survey Findings

Individual and personality traits

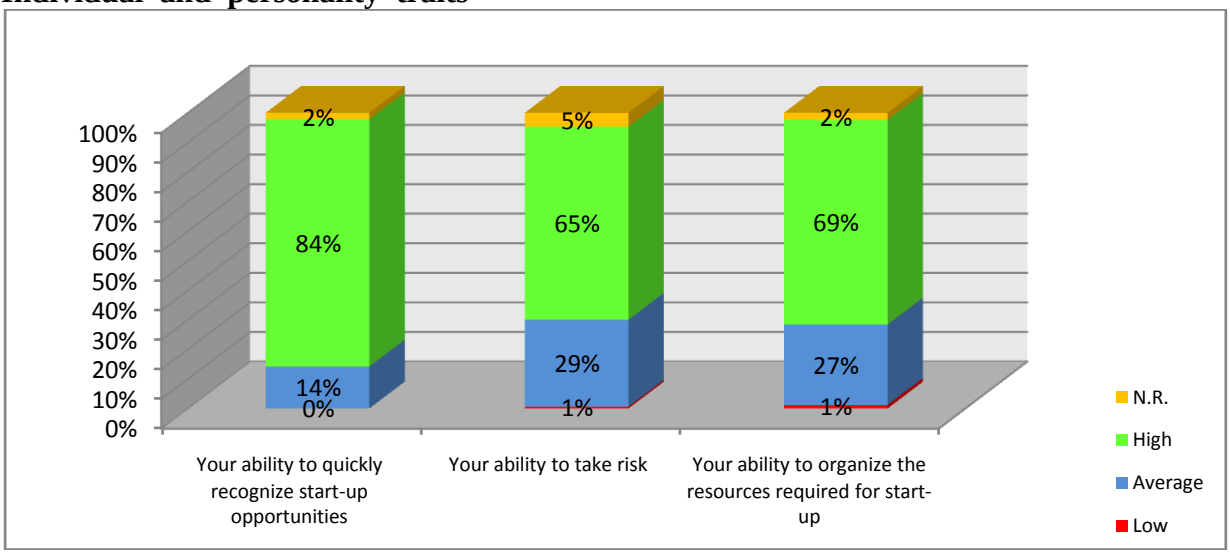

Figure 2: Explains individual & personality traits supporting entrepreneurship

Most favourable factors - Ability to recognize start-up opportunity, ability to take risk and ability to organize the resources for start-up

Least favourable factors - No specific

Conclusions - To sum up the argument,findings revealthat entrepreneurs in Italy possess individual and personality traits favoring entrepreneurship. The findings are in line with recent reviews and evaluations of entrepreneurship personality research suggesting that personality traits of entrepreneurs are important for entrepreneurship.

Socio-cultural context

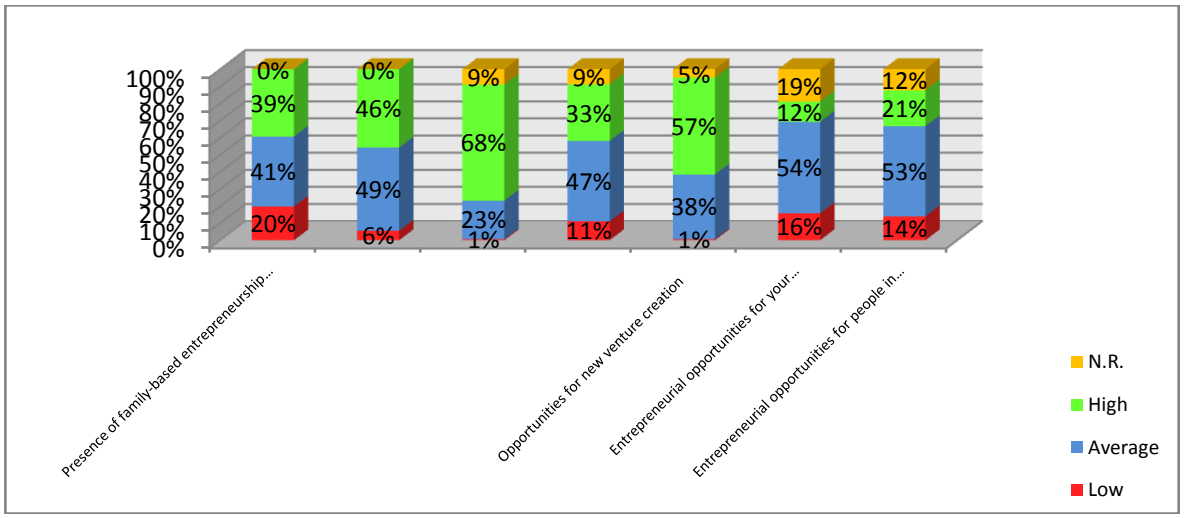

Figure 3: Explains the socio-cultural context encouraging entrepreneurship

Most favourable factors - Culture promotion venturing & risk taking, encouraging creativity & innovation, family support

Least favourable factors - Entrepreneurial opportunities for women and people in certain age categories

Conclusions - Findings reflect that in Italy - the 9th largest economy in the world, with 98% of the firms being small and medium enterprises - the socio-cultural environment seems to supporting entrepreneurship by encouraging risk taking, creativity and innovation.

The same has been reinforced in the *GEM 2008 Report for Italy*.

State/govt. Policies and programs

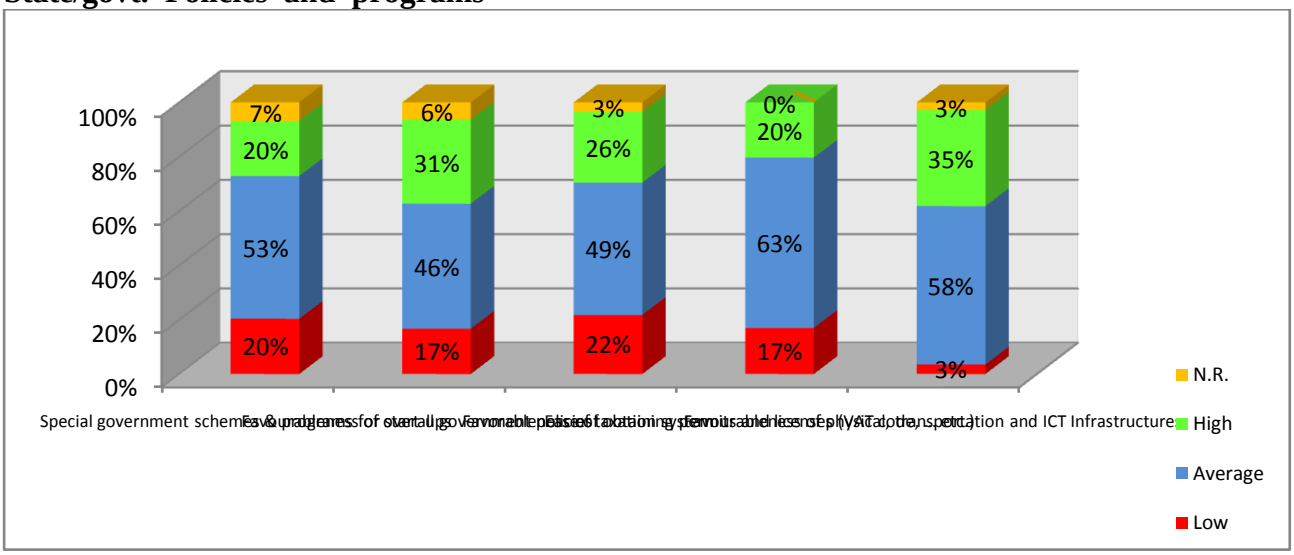

Figure 4: Explains policy and program support offered by State to new firms

Most favourable factors - Physical and ICTinfrastructure

Least favourable factors - Special government programs and schemes for start-ups, tax system, ease of obtaining licences and permits

Conclusions: government has reinforced Italy's commitment towards further interventions aimed at rapidly simplifying and reducing time and costs involved to start up a business, as well as at eliminating present digital divide. Administrative procedures for enterprise creation are receiving substantial attention. Policy wise, in 2010, Italy has taken a number of policy measures aimed at improving the environment for SMEs and at reducing the administrative burden resulting from their interaction with the administration. Despite the Government efforts in improving the scenario, most entrepreneurs still consider the current reality far from satisfactory.

Access to finance

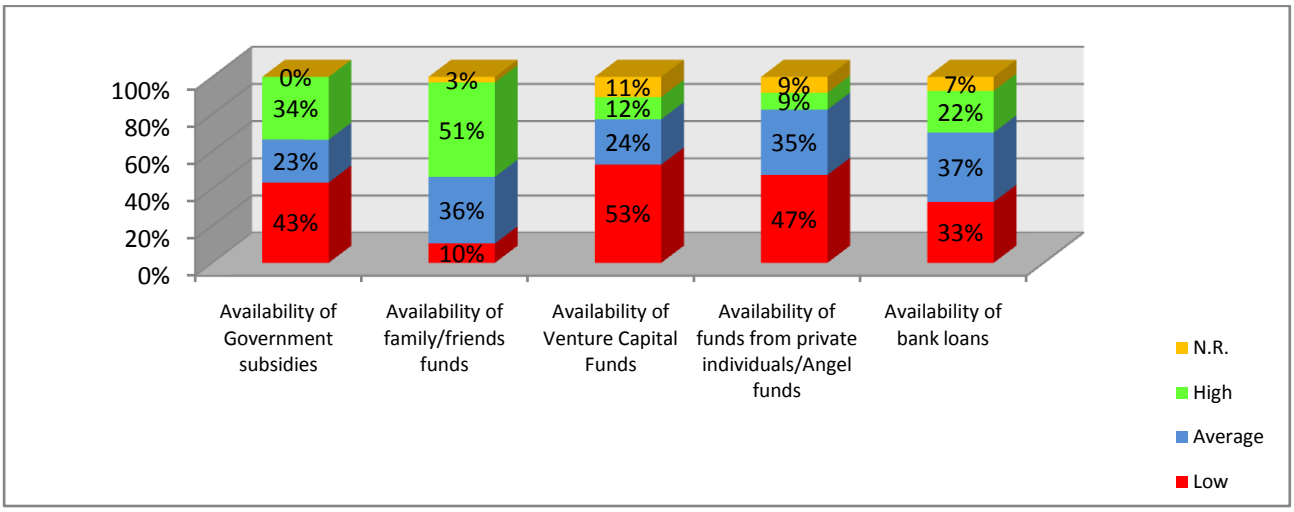

Figure 5: *Explains the ease of Access to Finance*

Most favourable factors - Availability of funds from family and friends,venture capital and angel investors

Least favourable factors - Availability of bank loans and government subsidies

Conclusions - As revealed by our findings, in Italy financial institutions (commercial banks in particular) generally do not develop specialized competencies and procedures to deal with the financial needs of this category of entrepreneurs.

Most high-tech ICT start-ups perceive that it is not easy to have access to funding from private equity, i.e. venture capital funds and angel investors. Presence of credit constraints from banks is very worrisome, due to the key role allegedly played by these SMEs in assuring innovation and growth in the economic system. Even though the findings should be interpreted with caution due to the relatively small size of the sample, nevertheless they provide an important insight into the existing financial scenario.

Access to information, opportunity for knowledge & skill building

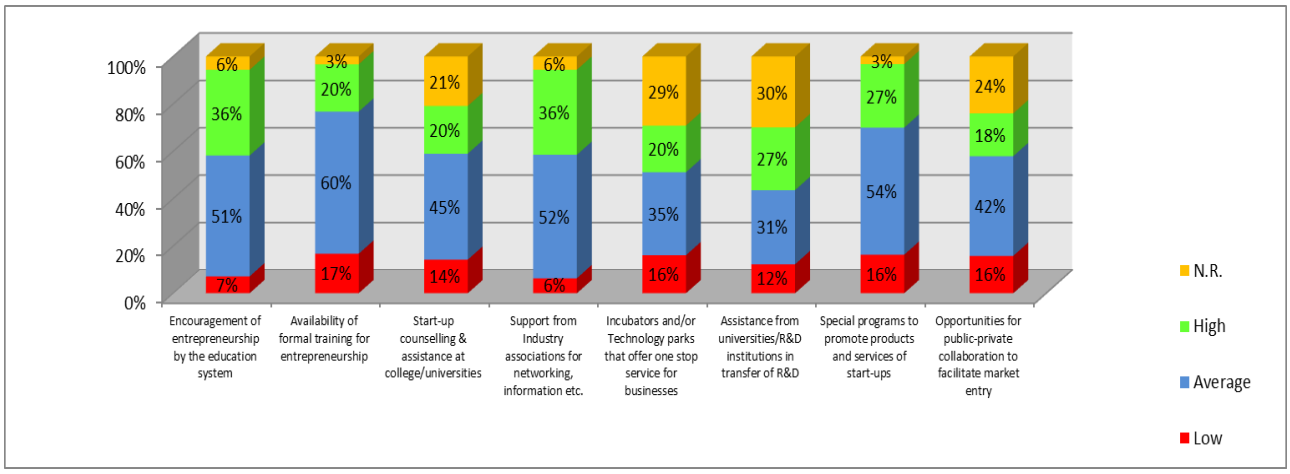

Figure 6: Explains access to information, opportunity for knowledge and skill building provided by different sources

Most favourable factors - Support from industry associations and to some extend education system encouraging entrepreneurship.

Least favourable factors - Availability of formal training on entrepreneurship, support from Universities, incubators and technology parks.

Conclusions - Development of scientific and entrepreneurship skills must be present in the curriculum at educational institutions, especially if Italy wants entrepreneurs driven by opportunity recognition, as opposed to necessity. Italy, being a EU member, is committed to promoting the teaching of entrepreneurship in their education system. However, there is a need of promoting these initiatives more systematically. Italy being an innovation-driven economy (according to the GEM classification of countries), successful SMEs entrepreneurship depends heavily on innovation and R&D. Young technology based SMEs need increased support and collaboration for R&D and innovation from Universities,technology parks, business incubators (OECD 2009, Science, Technology and Industry Scoreboard).

Internationalization of smes

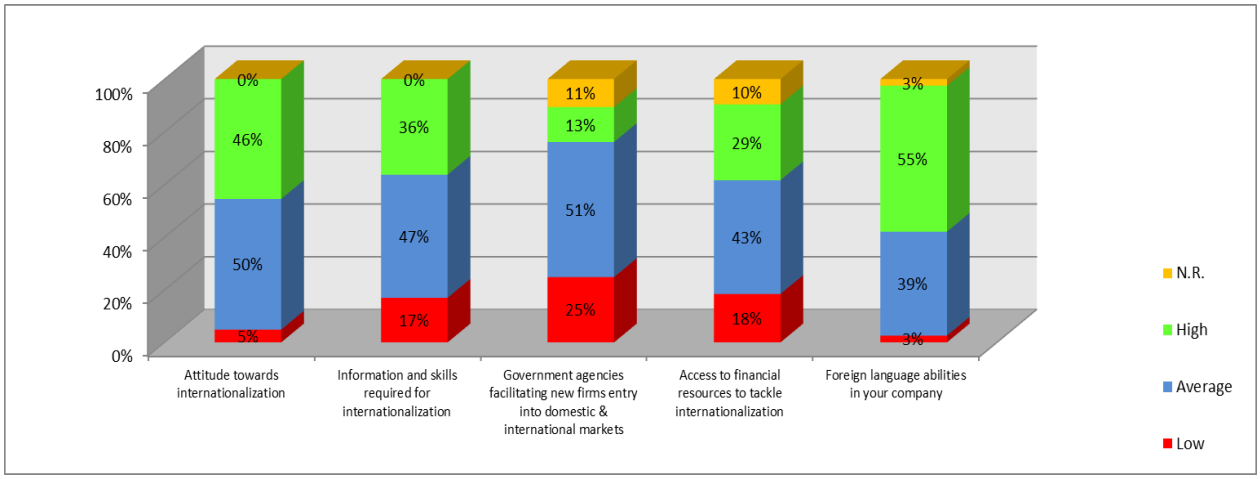

Figure 7: Explains factors supporting Internationalization

Most favourable factors - Personal attitude towards internationalization and knowledge of English language

Least favourable factors - Support from government agencies facilitating new firm entry and access to financial resources

Conclusions - SMEs encounter significant challenges in obtaining resources, foreign market knowledge, over-seas contacts and business opportunities and achieving organizational viability for developing foreign business (Zaheer 1995; Zaheer 2005; Crick 2007; Barnes 2006; Kneller & Pisu 2007). According to the European Commission Small Business Act factsheet 2010, as far as indicators measuring internationalization are concerned, Italian SMEs bear higher costs more and it takes them longer to export and import goods than for the average EU SME.

Reflecting the widespread recognition of the importance of internationally-active SMEs in subnational/regional, national and global economies, Italian government and business support organizations are taking policy measures to support and enable SMEs in the internationalization process.

Control Group Sample

The local experts were chosen to serve as the Control group in order to validate the findings from the interviews and survey held with the entrepreneurs. Control Group represented the following categories: Incubators, Venture Capitalists, Business Associations, Banks and University Professors.

Control Group Findings

Business support organizations (chambers of commerce, entrepreneurial associations)

The Italian Chambers of Commerce and other business support organizations carry out functions of general interest within the private business system. Most of them offer enterprises a full range of services to facilitate support for setting up a business, market intelligence, skill training, stimulate companies and businesses in innovative efforts and supporting businesses in Internationalization.

Interview findings with the senior staff of Business Support Associations reveal that their role is more important in small cities than in major cities. In the smaller cities entrepreneurs are more open in accessing the services offered by the associations. The relationship amongst the entrepreneurs is also mutually rewarding. They are active in organizing events, suggesting training courses and so on. In major cities this relationship is quite closed, entrepreneurs perceive it less important. Nonetheless business associations are far more networked in larger cities and have the resources to support entrepreneurs in a variety of ways.

Interviewees perceive entrepreneurs not willing to access services and open to advice for improving their competency and skills. Associations are widely networked not just in Europe, but also in growing BRIC economies to offer support and business acumen for internationalization. As far as credit is concerned, the scenario has been grim in the recent past, but the trend is improving and associations are playing an active role in assisting entrepreneurs in seeking public as well as venture capital funding.

Incubators

Interview findings with the senior managers of University Incubators in Italy are –

In Italy, there are mostly University based incubators. The PNI Cube Association is a network of all university based incubators in Italy. There are also Regional incubators, Private commercial incubators and Company-Internal incubators.

Reflecting on lack of support perceived by entrepreneurs in general, the interviewees responded that unfortunately the support necessary for the survival and growth of ICT firms is provided by only a few large and leading Incubators like I3P, whereas most of the Incubators function in the role of providing only the office space and logistic support.

Second, incubators are able to provide limited support for access to funding. Third, Regional incubators tend to have a geographical focus since their mission is to support new businesses locally. Fourth, many a times entrepreneurs are not competent and not clear on their business ideas.

All these factors need to be looked into by the policy makers to make the Incubation services reachable and be more relevant for the entrepreneurs.

Venture capitalists

Interview findings with the senior management of Italian Venture Capital Firms –

From the macro point of view is now no doubt that the scenario of venture capital in Italy is, in relative terms, one of the least developed in Europe. This does not mean that there are no interesting opportunities in Italy. There are a large number of VC firms investing in early stage entrepreneur ventures with a fairly good success rate.

Accordingly to the latest figures by Italian Venture Capital Association (AIFI) in the first half of 2012, the Italian private equity and venture capital funds registered investment activity characterized by 147 new operations for a total amount of 868 million euros, though down 43% compared to same period of 2011. So, venture capital has suffered due to the lack of funding available, translated into fewer investments. On an average we are able to invest in only 1% of the business plans we receive in a year.

Along with this, the problem lies at the end of entrepreneurs as well. A lot of projects we receive are not economically viable, entrepreneurs lack vision and ambition. Our focus is on helping talented entrepreneurs build remarkable companies and are not afraid of investing in pre-revenue companies - and often provide the companies firstearly stage funding support.

So, the venture capital industry needs more policy focus and fund support to be able to support early stage entrepreneurs.

Banks

Interview findings with the senior management of Italian primary banks are summarized below.

Unfortunately, the individual personality traits (that, they affirmed, are very important for the business success) have less and less relevance in granting of credit, as Basel 2 and Basel 3 regulations require only objective criteria for determining the rating, which in turn affects capital requirements and, lastly, the profitability of financial institutions. Some practitioners believe that their industry is characterized by "hyper-regulations". Also with regard to the socio-cultural context the new regulations have strongly reduced the importance of "soft" characteristics.

Banks offer a range of standard products, and are able to tailor to the real needs of companies very minimally (only some financial institutions have specialized teams for looking into the specific needs of the companies and are able to offer a package of "tailored" services). Moreover banks don't offer support in order to obtain governments aid.

Often Italian Banks have branch operations in other countries, but these do not serve Italian clients residing in Italy. Their operations abroad offer only networking services with professionals, consultants, lawyers but don't offer any effective support for internationalization process, which is vital for the survival of Italian companies.

In order to meet companies' new needs and accompany them in a growth path in this "new world", financial institutions need to respond to a big challenge.

University professors

Interview with the University Professors reflect -

Strongly in agreement with the findings of the study - Resolving some structural weaknesses in the country´s economy could give potential entrepreneurs an incentive to start creating jobs. For example, Italy´s rigid labor regulations currently hinder the growth of new businesses´ payroll, according to the latest Global Competitive Report, which ranked Italy 118th in the world for its labor market efficiency. Financial markets are not sufficiently developed to provide needed finance for business development (ranked 101st in the Global Competitive Index), and to make matters worse, Italian angel and venture capitalists prefer to invest in other countries. Italian entrepreneurs have also long suffered from the effects of a stifling and sometimes corrupt bureaucracy, high taxes and overregulation in general, all of which increase the costs of entrepreneurial activity. Probably in part reflecting these barriers, only a minority of respondents to the 2009 Eurobarometer Survey on Entrepreneurship in Italy (4%) said they were considering starting up a business.

Changes won´t happen from one month to the next. Cultural capital for entrepreneurs will take a time to build, probably longer than the policy changes. For cultural changes to take place, education is key. Development of scientific and entrepreneurship skills must be present in the curriculum at educational institutions, especially if Italy wants entrepreneurs driven by opportunity recognition, as opposed to necessity.Finally, building a policy environment more conducive to entrepreneurship is an urgent task for Italy.

Conclusion

Discussion & limitations

This paper reports the findings of 21 in-depth interviews with entrepreneurs of small medium and large enterprises and a study on 65 entrepreneurs in the knowledge intensive ICT sector in Italy with respect to six framework conditions, based on the Ecosystem Model, which comprises of several determinants which influence entrepreneurial performance. Within each of the six framework conditions, several subcategories were identified to broaden the overall framework and make it more explicit for analysis. The overall aim was to analyze the interaction between the key factors which contribute to the success of Knowledge Intensive Entrepreneurs, with particular reference to the ICT sector in Italy.

The key findings of this study reveal that the entrepreneurial spirit in Italy is high, and the socio-cultural environment is perceived as encouraging entrepreneurship. The business environment challenges confronting ICT entrepreneurs are related to the government policies and programs, where entrepreneurs indicate administrative formalities towards new venture creation as bureaucratic, time consuming and expensive. Tax burden is felt as high. Access to finance is largely dependent on self-financing or using informal sources of funding. Banks refrain from funding SMEs. Entrepreneurs are aware of the possibilities connected with venture capital funding for SMEs in the knowledge intensive ICT sectors, yet few of them have direct access. ICT Entrepreneurs reflect a positive attitude towards internationalization, but face practical difficulties in having access to knowledge, relevant contacts, training, business support services etc. Last, the education system in Italy needs to stimulate the entrepreneurial mindsets amongst young people and provide knowledge and skill building support to young entrepreneurs through its universities, science parks and incubation centers.

The above findings are in line with recent studies by World Bank Ease of Doing Business Report 2011, Global Competitiveness Report 2010-2011 World Economic Forum, OECD Eurostat Entrepreneurship Indicators – performance for Italy or GEM Report 2008 for Italy.

Italy’s economy is driven by a vast resource of micro and small firms. The share of micro and small firms in the overall number of firms is substantially higher in Italy than the EU average. In the light of the current economic challenges confronting Italy, it needs to decisively tackle the structural weaknesses and improve the business environment in order to

promote and support entrepreneurship. These reforms are essential for Italy to succeed in the immense challenge of simultaneously putting public finances on a sounder track, reviving and modernizing its economy, restoring competitiveness and finally promoting entrepreneurship.

Our findings have implications for both theory and practice. For researchers, the study provides empirical evidence on the determinants of entrepreneurship. For entrepreneurs, the findings provide an insight into various factors that play a role in sustenance and growth of their ventures. For policy makers, it proposes a vision of co-existence and inter-dependence of factors enabling and disabling entrepreneurship.

The study does have limitations. The sample size is small and is not representative of all regions across Italy. The sample has not been analyzed based on performance of ICT entrepreneurs backed by services like having access to Venture capital funding or in incubation as against those not backed by these services. The ecosystem model comprising of six framework conditions is not exhaustive to cover all aspects of the entrepreneurial environment. The study provides a macro view of the factors supporting ICT entrepreneurs, without giving a micro account of specific sub-variables. These are all dimensions that can be taken up in subsequent researches.

Despite the limitations, the study at this stage contributes to the understanding of the determinants of entrepreneurship which support and harness the growth on knowledge intensive ICT entrepreneurship in Italy.

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