Island Entrepreneurs: Insights from Exceptionally Successful Knowledge-Driven SMEs from 5 European Island Territories

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Island Entrepreneurs: Insights from Exceptionally Successful Knowledge-Driven SMEs from 5 European Island Territories

Abstract: Developing successful, indigenously-owned, small scale, export-oriented, manufacturing firms from small island locations is difficult but not impossible. This paper describes key outcomes of a research project which is reviewing a selection of such successful firms from 5 European island territories. Operating in the information and communication technology sector allows small island firms to compete successfully in export markets. They often do so by depending on the wide, ‘extra-island’ contacts and experiences of their ‘global-local’ entrepreneurial founder-owners, who often leverage start-up funds from private and personal sources. The absence of notable local market opportunities induces island entrepreneurs to ‘export or perish’, obliging a competitive strategy from inception.

Introduction

There is general agreement that small and medium sized enterprises (SMEs) contribute vigorously to economic growth and to the creation of sustainable employment, a contribution all the more readily evident in the context of massive lay-offs from large firms and especially appreciated in epochs of long term structural unemployment. It is commonly understood that SMEs have a general capacity for flexibility and innovation, enabling them to respond more quickly to structural changes and to adapt just as rapidly to changing consumer taste and demand. SMEs play an even more pronounced role in the case of small island territories, since the typical average enterprise size is even smaller than elsewhere (Granovetter, 1984).

This paper will first outline the extensive structural handicaps generally affecting the set-up and operation of SMEs in small island territories. It will next discuss the research methodology of, and basic data collection from, a pilot project-in-progress which seeks to showcase the exceptional success of a clutch of SMEs from 5 small island territories located on the European periphery. A discussion of the characteristics of these SMEs follows, focusing in particular on a group of ‘hi-tech’, knowledge driven firms. The ensuing comparative analysis identifies 10 issues which may lie at the basis of their success.
Structural Handicaps

Small size and geographical isolation are often viewed as sources of economic vulnerability which might adversely affect economic growth and firm performance (Bertram, 2004: 344). The challenges claimed to be faced by local small firms based in such small island territories are, to say the least, daunting:

- The size of the domestic market is small and, in the case of archipelagos, also fragmented and dispersed;
- There are high transport costs, especially handling, freight and insurance expenses, partly because of a tendency towards oligopoly and imperfect competition;
- There is an inability to achieve and exploit economies of scale in the local market: as a result, costs such as health, housing, energy and education tend to be higher per capita;
- There are often very limited linkages to the local, small economy, which may tend to be significantly dependent on, and biased towards, the production of a single crop, product or service;
- There may be a lack of skilled labour power or expertise which, where available, tends to relocate to larger and better paying urban agglomerations;
- There may be a lack of local business knowhow or acumen which, where available, is likely to move away in search of better returns on investment and larger markets;
- There may be a dearth of effective and competitive support and infrastructural services, such as telecommunications and venture capital.

Sources: Armstrong et al. (1993); Briguglio (1995); Dolman (1985); Doumenge (1985: 86); Encontre (1999); Fischer & Encontre (1998) and Payne (1987).
This is not to say that islands have no advantages to offer as competitive manufacturing platforms: Greenwood & McCarthy (2000: 179) cite lower occupancy costs, a more stable labour force and reduced labour costs; while Easterly & Kraay (2000) claim that the alleged problems of small island economies can be addressed through suitable policy measures. Still, the economic challenges facing islands are so widely recognised that a number of international or regional organisations – including the United Nations1, the European Union2 and the Commonwealth Secretariat3 - remain today in general agreement that small territories, especially small island regions, share a set of characteristics which poses specific development problems. Such characteristics are fairly similar to those borne by peripheral rural areas which lose out from agglomeration economics and demographics (Polèse & Shearmur, 2002) or by remote rural, land-locked or mountainous regions (Read, 2005; Srinivasan, 1986).

Island Disadvantages

John Donne’s oft-quoted dictum: ‘no man [sic] is an island, but a piece of the continent, a part of the main’ (Donne, 1624) suggests that islands are isolated and disconnected locations, and therefore not only on the fringe of goings on, but also ill-equipped to be competitive because of defensive self-absorption. Indeed, the difficulties associated with the development of successful, indigenously-owned, small scale, manufacturing enterprises from small island locations has been highlighted in case

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2 The European Union recognizes that ‘island regions’ – along with rural, mountainous, cross-border or low-population density areas - suffer from structural handicaps linked to their island status; and has spelt these out to include “remoteness, insularity, small size, difficult topography and climate, and economic dependence on a few products”. These handicaps are imputed to be permanent and therefore chronic inhibitors towards social and economic development. See Declaration 30 adopted by the Conference which adopted the Treaty of Amsterdam (1999) and, since June 18th 2004, also enshrined in the Treaty establishing the EU Constitution (Article III-116).
3 The economic vulnerability of small (often island) states has been championed by the Commonwealth Secretariat since 1985. Key publications include: Atkins et al. (2000); Briguglio & Kisanga (2005); Charles (1997) and Wignaraja et al. (2004).
study research (Baldacchino, 1999, 2002). Local business-persons often peddle low-risk mercantilism (meaning wholesale and retail trade with low local productive value added) or otherwise engage in service activities which do not suffer from scale economies (Baldacchino, 1995, 1998). Michael Porter (1998: 171) has gone as far as to refer to an industry cluster which becomes gripped by complacency and an inward focus as insular, probably on the assumption that islands are “closed and inward-looking systems” (ibid.). A knowledge economy context continues to raise the stakes. Within the parameters of the global knowledge economy, as the world heads inexorably towards becoming a network of prosperous city-regions (Ohmae, 2001: 33), there is even less scope for places or firms to try and survive as ‘islands’ of productive industrial activity. It therefore comes as no surprise that research on island entrepreneurs is often heavily laced with pessimism (e.g.: Fairbairn, 1988; Saffu, 2003). Finding a product with ‘cutting edge’ technology intended mainly for export that is developed by a small island-based business in a small-scale operation can only be described as exceptional.

The NISSOS Project

The NISSOS Project is searching for such exceptionalities and looking at the transferability of their economic story via vocational education and training. NISSOS is a 3-year pilot project, conceived and designed by the author of this paper who now serves as the project’s academic advisor, and is supported by the European Commission through its Leonardo da Vinci vocational training program. NISSOS is developing a training module and a learning pack intended for students in post-secondary vocational

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1 Nissos is the Greek word for island and is also an acronym for: Network of Islands for Small Scale Organizational Success. For more about the NISSOS project visit: [http://www.nissos.net](http://www.nissos.net)

education and training (VET) which is sensitive to, and based on, the ‘best practices’
and experiences of those few but successful, small scale, locally owned, export-driven,
technology adaptive, manufacturing units in small island territories. The 11 partners are
co-ordinating inter-disciplinary research into those exceptionally successful firms
which match these criteria of success from 5 island territories in Europe: the Åland
Islands (Finland), Iceland, Malta, Saaremaa (Estonia) & the Scottish Isles (United
Kingdom)\textsuperscript{6}.

Deciding on the meaning of success was not easy and remains essentially
subjective. Some standard criteria – like years of establishment, levels of annual
turnover or of employment – were not chosen. Eventually, success was defined by the
project partners in terms of \textit{five} variables which were felt to best capture a sense of
local entrepreneurship and a local maximization of the value added derived from any
production process. Adopting these five variables also meant that the number of firms
from the participating islands to be examined as success stories would be few and
therefore no sampling would be necessary. Only those firms which fulfilled all five
variables in the participating island regions were adopted. The variables are:

\begin{itemize}
\item[(1)] \textbf{local ownership}, meaning majority or exclusive control of the firm
is vested in individuals who are resident islanders;
\item[(2)] \textbf{small size}, meaning firm has up to 50 employees or outworkers;
\item[(3)] \textbf{manufacturing}, meaning firm is producing a commodity that
usually has weight, volume or form, which can be separated from its producer
in the act of sale or purchase;
\end{itemize}

\textsuperscript{6} Of course, the \textit{exact} number of such firms is difficult to propose, and will change with time. We are
referring to firms that operate in dynamic markets. Data in Tables 1 & 2 is correct as at summer 2004.
(4) **export orientation**, meaning the bulk of the firm’s manufactures are destined to off-island markets and clients and have been so for at least three previous consecutive years; and

(5) **technology adaptation**, meaning that any key technological processes used by the firm in the manufacturing operation have been customized, if not invented, by the local operators.

**Methodology**

The partners first identified 144 firms which corresponded to the success criteria. This was no easy task, since official statistics do not identify firms in accordance with such descriptors; while data on firms by island had to be painstakingly compiled by the project partners in the case of a ‘non-jurisdiction’ like the Scottish Isles. Dealing with discrete small numbers, and personal contacts with economic specialists, state or regional officials and business associations facilitated this process.

Åland turns out to have a relatively large number of such successful firms on a *per capita* basis, and Malta the lowest; suggesting that smaller island populations may be more inclined, or obliged, to spawn and support such firms (Baldacchino, 2005a) (see Table 1):

**Table 1: Island Regions and Successful Firms involved in NISSOS Project**

<table>
<thead>
<tr>
<th>Island Territory</th>
<th>Population</th>
<th>Land Area (sq. km)</th>
<th>No. of populated Islands</th>
<th>Jurisdiction</th>
<th>No of Firms*</th>
<th>Firms* per 10,000 popul'n</th>
<th>Their Mean Work Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Åland</td>
<td>26,000</td>
<td>1,430</td>
<td>21</td>
<td>autonomy within Finland</td>
<td>25</td>
<td>9.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Iceland</td>
<td>290,000</td>
<td>103,000</td>
<td>4</td>
<td>sovereign state</td>
<td>42</td>
<td>1.5</td>
<td>26</td>
</tr>
<tr>
<td>Malta</td>
<td>400,000</td>
<td></td>
<td>3</td>
<td>sovereign state</td>
<td>33</td>
<td>0.8</td>
<td>22.5</td>
</tr>
<tr>
<td>Saaremaa</td>
<td>36,000</td>
<td>2,900</td>
<td>7</td>
<td>county</td>
<td>19</td>
<td>5.3</td>
<td>23.3</td>
</tr>
<tr>
<td>Scottish Isles</td>
<td>100,000</td>
<td>10,110</td>
<td>87</td>
<td>spread over 6 local authorities</td>
<td>25</td>
<td>2.5</td>
<td>10.5</td>
</tr>
</tbody>
</table>

* These being locally [island] owned, mainly export-oriented, manufacturing firms with up to 50 employees and with locally developed or adapted technology.
The five sets of islands support a broad range of manufacturing activity, which can be organized in terms of four economic sub-sectors (see Table 2). The majority of successful firms (82 out of 144: 57%) have developed a manufactured product whose core raw material input is mainly or totally sourced from the island proper: this reduces import bills and the accompanying transportation and insurance premiums. Most products also have a clear, often strong, identification with the history and culture of the island on which they are produced. Such branding facilitates a selective, niche marketing of the product and permits a synergetic association with the tourism industry – important in all five island territories being investigated. Tourist clients also help to forego any export costs of the manufactures by absorbing them themselves (Baldacchino, 2005b).

Table 2: Economic Sub-Sectors of 144 Successful Firms from 5 Island Regions (Total number of firms in each sub-sector per country is in brackets)

<table>
<thead>
<tr>
<th>Island Territory</th>
<th>Natural Craft</th>
<th>Natural Agro</th>
<th>Chemical Plastic</th>
<th>IT / Hi-Tech Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Åland</td>
<td>wood panels</td>
<td>processed meat</td>
<td>sausage skins</td>
<td>purifier units</td>
</tr>
<tr>
<td>Furniture</td>
<td>fish processing</td>
<td>air cleaning systems</td>
<td>IT / software</td>
<td></td>
</tr>
<tr>
<td>sheet-metal (9)</td>
<td>sour apples (7)</td>
<td>plastic printing (5)</td>
<td>welding</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>electrical systems (4)</td>
</tr>
<tr>
<td>Iceland</td>
<td>cod/shark liver oil</td>
<td>sulphur resistant pipes</td>
<td>Artificial-Intelligence Games</td>
<td></td>
</tr>
<tr>
<td></td>
<td>cattle food</td>
<td>plastic tubes</td>
<td>Virus Software</td>
<td></td>
</tr>
<tr>
<td></td>
<td>candy</td>
<td>fishing nets</td>
<td>electrical equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>poultry processing</td>
<td>fibre-glass boats</td>
<td>fish industry equipment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>fish processing (20)</td>
<td>fish scales (9)</td>
<td>digital EEGs (13)</td>
<td></td>
</tr>
<tr>
<td>Malta</td>
<td>decorative glass</td>
<td>olive oil</td>
<td>plastic pipes / cables</td>
<td>IT packages</td>
</tr>
<tr>
<td></td>
<td>gold/silver filigree</td>
<td>wine / sausages</td>
<td>paints / detergents</td>
<td>Software support</td>
</tr>
<tr>
<td>Furniture (6)</td>
<td>sun-dried tomatoes</td>
<td>printing / packaging</td>
<td>solar panels (6)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>liqueurs (6)</td>
<td>injection moulding (15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saaremaa</td>
<td>wooden boats</td>
<td>fish processing</td>
<td>rubber products (2)</td>
<td>aluminum boats (2)</td>
</tr>
<tr>
<td></td>
<td>wooden houses</td>
<td>berry processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>lime / agar (8)</td>
<td>meat processing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>fur products (7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scottish Isles</td>
<td>Stone preserves</td>
<td>toiletries / soaps (2)</td>
<td>electrical instruments</td>
<td></td>
</tr>
<tr>
<td></td>
<td>woolen knitwear / fabrics</td>
<td>beer</td>
<td>flexible circuits</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jewelry</td>
<td>whisky</td>
<td>observation devices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>pottery / drums</td>
<td>smoked salmon (7)</td>
<td>transformers (4)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Furniture (12)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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The second research phase consisted in targeting two successful firms from each island region operating in different economic sub-sectors. One would be based on a manufacture developed around locally available raw material inputs (the natural craft or natural agriculture sub-sectors identified in Table 2 above); the second would be a technology driven firm (IT/ high-tech/ engineering sub-sector in Table 2 above). Detailed enterprise data for this purpose was collated from a semi-structured 65-question template questionnaire developed by the NISSOS partners during Spring 2003, and following a review of the literature. It includes: quantitative, descriptive data about the firm; an account of the stakeholders’ position with respect to the firm; the enterprise’s specific competences (production considerations, marketing orientation, operational effectiveness); the enterprise’s ‘internal’ architecture and technology dependence; its human resource policies; firm reputation and product branding; the firm’s institutional relationships (with banks, state departments, development corporations) and its ‘goodness of fit’ with its environment. (The questionnaire template is attached as an appendix.)

Being semi-structured, the survey template often served as a basis for an extended conversation conducted in the local language. It was first pilot-tested on the five small successful (as defined) craft-based firms in summer 2003 (for a discussion on findings, see Baldacchino, 2005c). Later in 2003, the slightly revised template was administered by the island-based project partners to five other small exceptional firms, operating this time in the high-tech sector. Three of these (Consilia, Frisk & Shireburn) operate in the burgeoning market for internet-related services; one (Baltic Workboats) produces customised small aluminium sea-craft; the other (Gaeltec) produces electronic instruments used in the medical field. Data was mainly derived by site visits to the firms, interviews with the founder or chief executive officer, and
corroborated by means of informal discussions with employees. The site visits were undertaken by the same officials involved in the NISSOS partner meetings, and with the assistance of students of business studies in the case of Åland, Estonia and Iceland. Follow-ups and phone calls have been held with the firms in order to secure missing information, or to clarify previously gathered data. All 10 firms selected to participate consented to support the research. Given the small island society context, the entrepreneurs, some of the employees and interviewers were known (at times, very well known) to each other prior to the research exercise.

A summary of the collated data pertaining to the five, knowledge-driven firms which form the key focus of this article is available as Table 3:

Table 3 here

Discussion

One swallow does not make a summer; and it would be foolish to propose anything but tentative observations from an analysis of five firms, one from each island region. These observations are organized under ten distinct, though inter-related sections, each highlighting one characteristic which may prove critical towards a more informed understanding of the underlying causes behind small business success in small islands.

a) – Two Routes towards Firm Establishment
With one exception, the firms owe their existence to the ideas, energy and financing provided by the founder-owner, possibly along with an immediate family member or a close friend with complimentary skills. The respective entrepreneurs and innovators set in motion an operation that did not require a huge outlay of capital, and therefore did not oblige a resort to outside financing that could have compromised the ownership of the operation. Baltic Workboats, in contrast, had to rely on a combination of proven management skills and external financing to be able to get going. This case represents a different, non-traditional route to the emergence of small firms: the chief executive, the plant, some of the employees and the business contacts were sourced from other, hitherto state-run operations which had folded up in previous years. Such conversions lie behind the setting up of various small firms in Eastern and Central European countries, following the aftermath of the collapse of the Berlin Wall and the Soviet Union with its centrally planned economy.

b) – Existing Firms acting as Incubators

In all five cases, spawning the idea for the eventual business product and the idea of setting up a new business for its development emerged intrapreneurially, while the eventual founder/owner was still in the employ of some other company (Hellmann, 2002). This feature sheds light on how the origins of entrepreneurship and product innovation are not necessarily associated with self-employment. Existing firms become, often willy-nilly, incubators of other firms, some of which may end up becoming their competitors. Business development then becomes in part a strategy of weaning away from one’s employment status, carefully negotiating the manner in which one’s former employer and the associated resources may be put to good use in one’s eventual own business. The intellectual ownership of the product idea is a crucial component of such
negotiations; but technical support, marketing support and venture capital may also be vital issues to be considered.

c) – Competitive Manufactures

Being small and based on a peripheral island may not confer advantages; yet, nor does it appear to be a disadvantage in exploiting the opportunities presented by the growth of modern information and communication technologies (ICTs). The internet has witnessed and spawned a completely new range of services and software. The latter are, in a sense, manufactures since they are tangible and can be bought and sold via operations that are distinct from those involving their actual production. Still their virtual nature, their weightlessness and portability remove any disadvantages that small firms on small islands might have to bear in relation to transportation costs. Consilia, Frisk and Shireburn have successfully located themselves in the global ICT market. Furthermore, Frisk enjoys the advantage of having not just adapted but created its main product: anti-virus software. It was a leader in this sector and has managed to maintain itself in this market. Shireburn has plugged into the captured market of Lotus Notes® users. Meanwhile, although Gaeltec’s main product (electronic transducers) is a conventional one in terms of occupying physical space and having physical weight, its miniature and lightweight nature makes it exportable via conventional mail: a huge saving on transport expenses.

d) – Driving Overseas Client Support

The one main disadvantage of being an ICT-service provider located on an island may relate to after-sales customer support. The costs of travel, accommodation
and human resources which may have to go into servicing software used by one’s clients (who would be mainly located overseas) can be very large relative to the ICT product’s cost. Frisk and Shireburn have solved this issue to their satisfaction: Frisk’s very particular software does not require any servicing; while Shireburn uses digital subscriber line (DSL) technology to assist its foreign clients: since 2001, it has only made two overseas sales calls in person. Meanwhile, given its particular services, Consilia may find that clients located ‘away’ are more difficult to satisfy.

e) – Securing Overseas Clients

Indeed, managing to identify and maintain clients abroad is always a challenge to SMEs, and all the more so to firms which are located in relatively remote locations. This condition may oblige specific tactical measures. Consilia’s boss lived and worked in Stockholm, Sweden, for many years. That is where he sourced his business contacts which he eventually brought back along with him when he returned to the Åland Islands. The loss of such clients in 2003 reveals the dangers of too excessive a dependence on a few contacts; the latter may need to be replenished via regular visits to the metropole. Shireburn’s founder spent a decade studying in the United Kingdom and spun off his business venture with the assistance of a brother who worked in an accountancy firm in the City of London and provided contacts to potential clients. London was also the occupational base of the founder of Gaeltec, and the location which allowed him to develop the required expertise. In the case of Baltic Workboats, the firm enjoys the expertise of a Finnish marine engineer who has moved to Saaremaa. It is only Frisk which can depend exclusively on the internet for its marketing requirements; and this is a function of the very particular nature of its products.
f) - Manoeuvring as Glocal Citizens

Working in cosmopolitan centres, and with multinational firms, helps one to get a feel of global markets and to nurture and plug into useful contacts and cutting-edge technologies that can prove crucial for business survival. However, the lure of the island is strong. Central to the ‘quality of island life’ is its rich ‘social capital’, defined as “networks, together with shared norms, values and understandings that facilitate co-operation within and among groups” (Helliwell, 2003: 9). This is in sharp contrast to the frenetic, stress-laden and competitive environment of the city and can be strong enough to draw would-be entrepreneurs back to their island, and to encourage others to immigrate. It is the ability to become “glocal” (after Courchene, 1995) - combining the desirability of the island milieu with the necessity to be globally competitive - that is a major, but not impossible, challenge. Both island roots and off-island routes need to be privileged (Clifford, 1997). This detail cannot be stressed enough: interviewed island-based entreprenuers were convinced that they were likely to enjoy larger turnovers if their businesses had been located in metropolitan areas: but they remain determined to keep their firm located ‘on the island’ because of the ‘quality of life’ factor.

g) – Island Branding… but not too Close

Branding and customer loyalty are also important considerations; only Baltic Workboats is still in the process of branding their product, and it intends doing soon, using an English name. In all such cases, however, and in contrast to other firms operating in lower-technology manufacturing (such as craft or agro-industry), there is no attempt to brand the product closely to its island provenance. The entrepreneurs fear that such an association may reduce the perceived quality of the product they are
offering in the eyes of their foreign clients; although a whiff of exoticism may contribute to make their product somewhat more attractive. Frisk provides the software to the Icelandic national geneaeology database and web-site\(^7\) (with access limited to Icelandic nationals), but this has no direct relationship with its anti-virus export product and is mainly a form of sponsorship-in-kind to the Icelandic community.

h) – Targetted External Supports

Institutional support to the ventures under consideration varies. It appears that, in spite of all the attempts at coming up with effective state support to SMEs, especially in their drive to source export markets, from around Europe, many entrepreneurs remain quite sceptical of any such function. Institutional support is nil or marginal in three of our five cases; if not negative because of an obligation towards overwhelming paperwork. In the Iceland case, the firm alleges that the local state actually prefers to source foreign supplies of the same product rather than go for the local version: perhaps an example of the prophet not being respected in one’s own land, and even more glaring when one hails from a small island where everyone knows, or can get to know, everyone else? This low penetration rate of state assistance programes to SMEs is also borne out by the literature \(e.g.:\) Curran & Blackburn, 2000, in relation to the United Kingdom). The Malta case identifies state support via export incentive schemes, lower corporate tax and training support: Shireburn Software was hived off the mother company also for the purpose of tapping such grants. In Iceland, institutional support is focussed mainly on firms operating in rural areas; since the bulk of IT-firms are located in and around Reykjavik, they are therefore excluded. Gaeltec stands out for reporting

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\(^7\) [http://www.islendingabok.is/IServlets/index.jsp](http://www.islendingabok.is/IServlets/index.jsp) - and, as extra security, only available in Icelandic. (Accessed: 9\(^{th}\) April 2005).
the most comprehensive institutional support package. Highlands & Islands Enterprise, as its predecessors, has supported Gaeltec’s construction costs, trips abroad and a variety of other promotional measures.

i) – Seeking & Securing International Standards

The concern with product quality is met mainly via the satisfaction of external clients. After all, practically all the competition being faced by these ‘high-tech’ firms is coming from off island already. Only one of the five firms under study can source any of its required technological inputs locally. It is next to impossible to conceive of a cluster of locally based, supportive firms as could occur in other, larger locations (e.g.: Chen, 1999). International awards and recognition by the UK-based Financial Times (in the case of Shireburn) are important signifies of a successful and reliable product and associated, crucial ‘after sales’ customer service (see King, 2004). A Russian and a European ship register have both certified Baltic Workboats’ craft as meeting international standards.

j) – A Professional but Loyal Workforce

The human resources required to develop and maintain such up-market products cannot be short of professional. All five firms explain that their employees, while all trained in-house, have been sourced from suitable post-secondary institutions and include a number of graduates. Many have been trained or sent on work experiences off island. Many are bilingual or trilingual, with English recognised as a key international language. Baltic Workboats’ employees have benefitted from apprenticeships with a Finnish company which had placed orders for the Estonian
firm’s seacraft. Above average salaries and lean hierarchies keep staff turnover at extremely low levels, reward staff investment in higher education and recognize the scarcity of skilled, specialised yet flexible labour in small, island-based, labour markets.

Conclusion

The life-histories of islanders, in those rare instances where they are meticulously documented, reveal a complex juggling of the pros and cons of home and away. Thus, both Isaac Caines, from the Caribbean island of St Kitts (profiled in Richardson, 1983: 54-5) and Kawagl, from the Melanesian South Pacific (profiled in Brookfield, 1972: 167-8), are rare examples of ‘entrepreneurs as people’ (Mitchell et al., 2002). Both personalities demonstrate an uncanny skill in the economies and temporalities of scope, which include entrepreneurship, flexible specialisation and stints abroad.

Thus, unlike much received wisdom about island life, the notion of an isolated, inward-looking and self-engrossed entity does not necessarily capture the way in which islands are experienced and practised by islanders and those who identify with islands (Manners, 1965: 181; Fog Olwig, 2004). More realistically, an island, and a small island especially, is a place that is oriented towards the outside world to which it relates as its hinterland (Baldacchino, 2005c). Island societies are involved in both sheltering and generating themselves from processes of globalization in which contextually given boundaries are transgressed and displaced (Singh & Grünbühel, 2003: 191). Rather than obstacles conducive to defeatism, the smallness of the local market and the existence of an all-surrounding sea provide clear and added impulses towards an export
orientation from small island entrepreneurs that seek to thrive on the basis of high product quality, proposing not so much to exploit comparative or competitive advantage but to construct an advantage based on products that are either intangible or relatively light and therefore still price-competitive from island locations (Cooke & Leydesdorff, 2006, forthcoming). In so doing, the small island must strategically connect with the global economy, identifying and cultivating markets, networks and clients, somehow following and keeping a tab on innovationary trends, often doing so by maintaining a vibrant traffic of people and ideas with the rest of the world. “The influence of outsider-generated knowledge resources” (Chrisman, 1999) is crucial in this instance. However, it needs to progress beyond its conventional interpretation as meaning external consultants or skilled expertise in short local supply: in small islands, these knowledge resources may include the very entrepreneur. Luring back the islander who had gone away or attracting an immigrant innovator is key to adequate glocality.

It is hoped that the inductive fieldwork based on comparative island research which has produced this paper becomes a more common undertaking amongst researchers, educators and practitioners interested in promoting island enterprise. It should also mitigate the excessive pessimism that often ‘defines away’ the development prospects of small islands.

References


Table 3: Summative Data for 5 Successful ‘High-Tech’ Firms gleaned from Questionnaire

<table>
<thead>
<tr>
<th></th>
<th>Aland</th>
<th>Iceland</th>
<th>Malta</th>
<th>Saaremaa</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm</strong></td>
<td>Consilia Solutions</td>
<td>Frisk Software</td>
<td>Shireburn Software</td>
<td>Baltic Workboats</td>
<td>Gaeltec</td>
</tr>
<tr>
<td><strong>Product -Q1</strong></td>
<td>Web-Content Mng't System</td>
<td>Anti-Virus Software</td>
<td>Software for Lotus Notes®</td>
<td>Aluminium seacraft</td>
<td>Electronic instruments</td>
</tr>
<tr>
<td><strong>Employees -Q2</strong></td>
<td>5</td>
<td>45</td>
<td>5 (out of 20 in mother firm)</td>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td><strong>Turnover-Q4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Idea Originator</strong></td>
<td>Founder (runs other firms)</td>
<td>Founder</td>
<td>Manager + Consortium</td>
<td>Founder</td>
<td></td>
</tr>
<tr>
<td><strong>Annual Turnover</strong></td>
<td>300,000</td>
<td>500,000</td>
<td>nil (in intern'l)</td>
<td>1,800,000</td>
<td>900,000</td>
</tr>
<tr>
<td><strong>Local competitors</strong></td>
<td>1 (various intern'l)</td>
<td>1 (20 intern'l)</td>
<td>nil (3 intern'l)</td>
<td>1 (in Finland)</td>
<td>nil (2 intern'l)</td>
</tr>
<tr>
<td><strong>Why set up-Q12</strong></td>
<td>business opportunity</td>
<td>business opportunity</td>
<td>higher value / diversity</td>
<td>take over idle plant</td>
<td>business opportunity</td>
</tr>
<tr>
<td><strong>Why export-Q16</strong></td>
<td>continue what was started in Sweden</td>
<td>small home market</td>
<td>away from 'hours for $'</td>
<td>initially subcontracted</td>
<td>chance encounter</td>
</tr>
<tr>
<td><strong>English version first</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Founder(s)</strong></td>
<td>Jan-Olof Engblom &amp; Stefan Linden (+ Franco Galea)</td>
<td>Fridrik Skulason &amp; wife Bjorg</td>
<td>John De Giorgio</td>
<td>Mark Muru + Investors</td>
<td>Donald MacLachlan</td>
</tr>
<tr>
<td><strong>Founder Background</strong></td>
<td>Programmer with Electrolux</td>
<td>Subcontractor with IBM</td>
<td>family business / IT trainer</td>
<td>Head, Former Boatyard</td>
<td>Scientist in London</td>
</tr>
<tr>
<td><strong>Boss Bias</strong>-Q34/36</td>
<td>owner=founder =partner</td>
<td>owner+wife= partners</td>
<td>owner=founder=CEO</td>
<td>no</td>
<td>yes- but handed over</td>
</tr>
<tr>
<td><strong>Management?</strong>-Q37/38</td>
<td>graduates (not related)</td>
<td>graduates (not related)</td>
<td>graduates (not related)</td>
<td>not related</td>
<td>Syd Johnson (+4)</td>
</tr>
<tr>
<td><strong>Training-Q43</strong></td>
<td>in-house</td>
<td>in-house</td>
<td>in-house/abroad</td>
<td>in-house/abroad</td>
<td>in-house</td>
</tr>
<tr>
<td><strong>Worker Turnover</strong></td>
<td>low (5%)</td>
<td>low (5%)</td>
<td>low (7%)</td>
<td>low (7%)</td>
<td>low</td>
</tr>
<tr>
<td><strong>Skill availability</strong>-Q40/41/42</td>
<td>professional degrees</td>
<td>yes- educational system</td>
<td>yes-educational system</td>
<td>valued skills/ prior firm</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Salaries &amp; Wages</strong>-Q48</td>
<td>above average + perks</td>
<td>average</td>
<td>above average</td>
<td>above average</td>
<td>average</td>
</tr>
<tr>
<td><strong>Best Practice (HR)</strong>-Q33</td>
<td>team spirit</td>
<td>profit-sharing/team- work</td>
<td>bonus on completion</td>
<td>team spirit</td>
<td></td>
</tr>
<tr>
<td><strong>Rely on Internet</strong>-Q11</td>
<td>no</td>
<td>yes - main selling tool</td>
<td>yes-downloadable software</td>
<td>no web site</td>
<td>less than 10% of sales</td>
</tr>
<tr>
<td><strong>Cheaper than Competition?</strong></td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td><strong>Cost Advantage</strong>-Q28</td>
<td>lower fixed costs / rents</td>
<td>no</td>
<td>lower cost base</td>
<td>yes (20% cheaper).</td>
<td>no</td>
</tr>
<tr>
<td><strong>Technology</strong>-Q20/21</td>
<td>adapted/invented</td>
<td>invented</td>
<td>adapted/invented</td>
<td>adapted/improved</td>
<td>adapted/patented</td>
</tr>
<tr>
<td><strong>Local Suppliers of Tech'y?</strong></td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>**Best Practice (Prod'n) -Q32</td>
<td>nil</td>
<td>portability</td>
<td>Int'l awards/reviews</td>
<td>Ship Registry approval</td>
<td>flexibility</td>
</tr>
<tr>
<td><strong>Initial Finance</strong>-Q13</td>
<td>own savings / bank</td>
<td>private savings</td>
<td>own savings</td>
<td>investors/bank</td>
<td>private savings/ former employer</td>
</tr>
<tr>
<td><strong>Sources of Finance</strong>-Q59</td>
<td>own savings / bank</td>
<td>private savings</td>
<td>mother firm</td>
<td>Investors</td>
<td></td>
</tr>
<tr>
<td><strong>Institutional Support</strong></td>
<td>nil</td>
<td>nil</td>
<td>nil (industry bias)</td>
<td>Brother in UK</td>
<td>Marine Alutech (Finland)</td>
</tr>
<tr>
<td>Details</td>
<td>State support-Q60/61</td>
<td>trade fair participation</td>
<td>too much paperwork</td>
<td>export incentive/lower tax/</td>
<td>no</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------</td>
<td>--------------------------</td>
<td>--------------------</td>
<td>-----------------------------</td>
<td>----</td>
</tr>
<tr>
<td>State support-Q60/61</td>
<td>trade fair participation</td>
<td>too much paperwork</td>
<td>export incentive/lower tax/</td>
<td>no</td>
<td>building costs/trips abroad</td>
</tr>
<tr>
<td>Obstacles to Export-65</td>
<td>no time for marketing</td>
<td>nil</td>
<td>meeting people in person</td>
<td>nil</td>
<td>too much paperwork</td>
</tr>
<tr>
<td>Networking?-Q64</td>
<td>crucial - but needs</td>
<td>download.com</td>
<td>via 'captured' Lotus clients</td>
<td>good contacts</td>
<td>to identify first clients</td>
</tr>
<tr>
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<td>download.com</td>
<td>via 'captured' Lotus clients</td>
<td>good contacts</td>
<td>to identify first clients</td>
</tr>
<tr>
<td>Link with Island-Q49</td>
<td>tired of hectic tempo</td>
<td>link with genealogy site</td>
<td>less credibility</td>
<td>no</td>
<td>pressure of work</td>
</tr>
<tr>
<td>Other Island Effects</td>
<td>&amp; city commuting</td>
<td>exotic</td>
<td>low cost base</td>
<td>no</td>
<td>rat-race in London</td>
</tr>
<tr>
<td>Product Branding?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>not yet</td>
<td></td>
</tr>
<tr>
<td>Island Branding?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Details</td>
<td>Trilingualism</td>
<td>Bilingualism (English).</td>
<td>bilingual, adaptable w/force</td>
<td>Former Finn=</td>
<td></td>
</tr>
<tr>
<td>boss spent time + own</td>
<td>brand loyalty</td>
<td>good base for sailing!</td>
<td>engineering designer</td>
<td>lightweight product</td>
<td></td>
</tr>
<tr>
<td>company in Sweden</td>
<td>new product at right time</td>
<td>brand loyalty</td>
<td>lured to Saaremaa</td>
<td>uses conventional mail</td>
<td></td>
</tr>
<tr>
<td>no freight costs</td>
<td>no freight costs</td>
<td>UK work permit refused</td>
<td>transport costs</td>
<td>bore by client</td>
<td></td>
</tr>
</tbody>
</table>
Successful Small-Scale Manufacturing from Small Islands – The NISSOS Project

FIELDWORK TEMPLATE

The revised, proposed fieldwork template is outlined below. It consists of 65 questions, organised into a series of sections and sub-sections, as follows:

A. Enterprise Data

B. Stakeholder Analysis

C. Enterprise Competencies

Production Considerations
Marketing Orientation
Operational Effectiveness
Enterprise ‘Internal’ Architecture

D. The Enterprise’s Resources

People
Reputation

E. Enterprise ‘fit’ with its Environment

F. Other Reasons

Enterprise Data

1. Product Description:
2. Number of Employees (full-time & other):
3. Turnover in € (Annual data over the 5-year-period: 1997-2002):
4. Exports as a percentage of turnover (same 5 year-period):
5. Number of years exporting:
6. Number of ‘direct’ local competitors:
7. Number & Names of countries presently exporting to:
8. Number of ‘regular’ overseas clients:
9. Position & name of person responsible within enterprise for exports:
10. Freight costs as a percentage of landed (c.i.f.) price in main export market:
11. Percentage of exports derived through internet, if any:

Stakeholder Analysis

12. How did the project idea originate?
13. How was the initial finance for the project raised?
14. Did the firm find the necessary institutional support?
15. What are the perceived reasons for the firm’s success in exporting?

- internal
  - the owner/managing director
  - other management employees
  - other

- external
  - state/government authorities/officials
  - local authorities/officials
  - clients
  - bank
  - other

16. Who and what triggered the drive to export?

- Saturation of home market
- Retaliation to entry of foreign competitors in home market
- Diversification of business (e.g. currency) risks
- Encouragement by public sector support agency
- Other

Enterprise Competencies

i. Production Considerations

17. Are the firm’s products priced cheaper on the export market?
18. Does the product have any unique features or specialised use?
19. If the firm has a cost advantage is it due to:
   - Cheaper Costs: raw materials; labour; water; electricity; other
   - Uniqueness of production process
   - Flexibility - small runs
   - Location- closeness to market
   - Other

20. Is the production technology imported?
21. Has the firm improved this technology?
22. Are there any local suppliers of specialised machinery used in the production process?

ii. Marketing Orientation

23. How were the first contacts with the export market established?
24. Where export opportunities to other markets explored?
25. Is the exported product any different from that sold in the home market?
26. Who are the firm’s main competitors in the respective export markets?
27. Are any of these competitors from the same country as the firm?
28. Are the products of competitors cheaper or more expensive? (Possibly indicate difference as a percentage of firm’s price.)
29. How does the firm’s exported product reach the final buyer?
30. Does firm enjoy competitive advantage from its distribution system abroad?
31. How are sales in the export market promoted and supported? (via advertising, below-the-line promotions, discounts, etc.)

**iii. Operational Effectiveness**
32. Does the firm follow any ‘best’ practice that gives it a cost or an operational advantage, such as:
   - Financial Management
   - Use of Information Technology
   - Innovation
   - Flexibility
   - Other

**iv. Enterprise ‘Internal’ Architecture**
33. Does firm follow any ‘best’ practice in: structure, internal communication, drive to support worker commitment that lead to a competitive advantage, including:
   - Stimulating team spirit
   - Transmits enterprise values
   - Communicates objectives
   - Sets and monitors targets
   - Rewards performance

**The Enterprise’s Resources**

**i. People**
34. Was the enterprise established by its present owner?
35. What was the background of the original owner?
36. Is the enterprise still managed by its owner?
37. Are there other managers running the enterprise?
38. Are they related to the owner? (yes/no/both):
39. If they are relatives of the owner, have they had a formal training in the activity they are responsible for?
40. Does the company’s production require any specially-skilled workers?
41. If yes, are these skills readily available on the labour market?
42. If yes, where is the supply of such skilled workers coming from?
43. If no, does the enterprise provide its own training?
44. Who is responsible for training such workers in-house?
45. **What % of your staff has been replaced over the past twelve months?**
46. **What % of your staff has had training and/or work experience off the island?**
47. **What % of your staff has had educational experience off the island (do NOT include distance learning)?**
48. **How do the firm’s wages and salaries compare with the sectoral average on the island?**

**Reputation**
49. Does the enterprise benefit from the reputation of its region/island/country in its line of business?
50. If yes, can this benefit be defined?
51. Does the enterprise enjoy a reputation among its clients as a quality supplier of products/services?
52. Is such reputation shared by other stakeholders such as, suppliers, banks, local authorities?
53. Does the enterprise brand its products?
54. Is this brand different from the enterprise’s name?
55. What percentage of the client base would select a product on the reputation of the enterprise rather than the strength of its brand?
56. How does the enterprise actively promote its brand?
57. What percentage of turnover goes to fund advertising and other brand building measures?

Enterprise ‘fit’ with its Environment

58. Define the enterprise’s relationship with the bank:
59. Define the enterprise’s sources of finance:
60. Has the enterprise benefited from state support programmes for small enterprises? (heavily/significantly/marginally). Specify:
61. Where state programmes or agencies supportive of the export drive? (heavily/significantly/marginally). Specify:
62. Did Government offer specific incentives to encourage exports? Specify:
63. Does the enterprise have any strategic alliance with supplier/key client?
64. Does the enterprise in any way network with similar enterprises in its field?
65. What where the main limiting factors/obstacles that the enterprise had to overcome in its drive to export?

Other Reasons for ‘success’?

- Be sure to identify, in as much detail as necessary, the following 3 features:
  - The evolution of entrepreneurship: WHY and HOW was the firm actually started? What led to the entrepreneur to take up the challenge of production?
  - The adaptation of technology: WHY and HOW did the production process and design get adapted (and not just adopted)?
  - The leap into export: WHY and HOW did the firm take the critical step of trying to go for [off-island] exports?