

Real Stories of Small Business Success: Successful, Small Scale, Manufacturing from Five European Island Regions

A TRAINING MANUAL

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A: Introduction

It is common knowledge nowadays that *small and medium sized enterprises* (SMEs) are very important to economic growth. Their positive contribution is all the more evident in the context of massive lay-offs from large firms and especially appreciated in epochs of long term, structural unemployment.

A firm with fewer than 50 employees is defined as “small”, while one with more than 50 employees but fewer than 250 is defined as “medium”.

In most economies, smaller enterprises predominate. In the European Union, SMEs comprise approximately 99% of all firms and employ between them about 65 million people. Of the 26,000 registered enterprises in Malta in 2005, more than 24,000 are small businesses employing fewer than 10 people.

SMEs play an even more pronounced role in the case of very *small islands*, since the typical average enterprise size is even smaller than elsewhere.

SMEs are:

- Major contributors to job creation
- Major nurseries for the development of skills
- Major providers of services to larger firms
- Locations for more flexible job practices
- Locations for more innovative job practices
- Locations which offer more sustainable employment
- Activities which offer an easier route to business set-ups
- Units which offer faster responses to changes in consumer taste and demands

Manufacturing is also seen as an important contributor to economic growth and development. The factory has been a symbol of industrial progress for the last 200 years. Manufacturing creates many jobs, usually in large firms, develops technical skills, adds higher value to products and creates many supportive service industries.

However, many handicaps can affect the set-up and operation of SMEs which are based in small island territories And are involved in manufacturing. How challenging are these handicaps? Can they be overcome? How? Can some small firms from small islands serve as models of successful export-oriented development? And if so, which? What would be their characteristics?

These are some of the main difficulties faced by an SME developing a manufactured product from a small island:

- The domestic market is small and, in the case of an archipelago. Fragmented and dispersed. There are therefore only limited domestic customers and some may be hard, or more expensive, to get to.
- Because the domestic market is small, and some basic services need to be provided anyway, the *per capita* costs of providing communications, health, housing, road infrastructure, energy, education and other facilities may be higher.
- Because the domestic market is small, competitive pressures are limited and it may be easier to become a dominant provider of a particular product.
- Most raw material has to be imported from off-island, by ship or plane
- Any products meant for off-island customers must be exported, by ship or plane.
- Business linkages (for both inputs and outputs) to other domestic firms may be very poor.
- Skilled labour and expertise may be lacking. Any that may be available will be poached by better paying firms or would emigrate to better paying locations or countries.
- Local banks and investors may prefer to support larger and/or foreign clients.
- Technological innovations are usually developed off-island and eventually make their way to the island.

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.

One is hard pressed to imagine how manufacturing-based SMEs in small island territories can thrive. Instead, a common expectation is that of a sustained lack of local competitiveness in the face of imported goods. Protectionism and benevolent economic stewardship by the state or a regional authority may have encouraged local investment in producing for the small domestic market, such as in food, beverages and cottage industries, where this is allowed or tolerated. Such operations, however, are often stubbornly uncompetitive.

Moreover, even where small island territories have good quality and competitive products, there are difficulties in sourcing effective research and development capability, skilled human resources, suitable terms for financing and/or appropriate technology. The all-too-frequent outcome is a steady deterioration in the competitive position of local SMEs, a short-to-medium term loss of markets and an erosion of profit margins. Finally, a dependence on typically more expensive transport, insurance and tele-communications costs acts as an additional, in-built structural disadvantage to such firms engaged in manufacturing, especially in bulk (high-volume), heavy and/or perishable imported raw material or exported products.

What is the outcome of all this? It is imports rather than exports, and it is trade and consumption rather than industrial manufacturing production, which attracts the interest of the local commercial community on the island. It is also the public sector, rather than the private sector, which creates more stable and secure jobs. Politically, the importing business elite typically enjoys the upper hand and tends to elbow out locally produced goods in preference for imported (possibly cheaper and better) ones, from off-island. Local island consumers may also prefer to patronize 'high-status', foreign goods coming from the mainland, at times even when they are more expensive or of inferior quality than the local counterpart. One may argue that the Cohesion Funds & Structural Funds of the European Union have facilitated the transformation of many island peripheries into relatively more affluent sites with upgraded infrastructure; but an added consumption capacity of imports may have been achieved along with the *loss* of all local productive capacity, except perhaps construction.

Thus, it is no surprise that hardly any small island economy has a significant manufacturing sector. Furthermore, where this manufacturing sector exists, it is mainly export-led investment fuelled by foreign investment and technology and often benefiting from export subsidies and other positively discriminatory legislation. In most cases, small island territories have abandoned the industrialization phase, leapfrogging from agricultural self-employment to service economies, specializing in tourism, banking, bunkering, berthing, communication and administrative jobs in both the private and public sectors.

As if this tragic picture was not enough, a heightened pace of transition to a knowledge-based economy presents still more bad news for the manufacturing prospects for small islands.

Globalization and global competitive trends are leading to the greater concentration of resources associated with the modern economy (high-tech industries, flexible IT-skilled labour pools, research and development institutes, ICT-specializing universities) in large urban centres and metropolitan areas. This trend suggests that new technologies are *not* altering a pattern of concentration ushered in by industrialization; but are actually helping to fuel it. Geography (measured as proximity to large centres of population) increasingly matters in the knowledge economy; while contemporary success (measured in terms of economic viability) means being a successful *knowledge* economy.

Thus, to sum up so far, islands are often conceived as isolated and disconnected locations, badly equipped to be competitive because of their defensive self-absorption. Within the parameters of the global knowledge economy, there is even less scope for places or firms to try and survive as "islands of self-sufficiency". The implications of such an assessment are not good news.

What happens to a location which is unable to muster a significant knowledge critical mass?

- It will find itself exporting people, brains, investment and other forms of capital to attractive metropolitan zones or their immediate suburbs.
- Local employment opportunities will fall.
- Actual entrepreneurs will move away.
- Potential entrepreneurs will look away and lose interest.
- The young and educated people will relocate and migrate first, often never to return except to briefly visit relatives and friends.
- A decreasing island population reduces its political clout, rendering a lobbied political resolution to their adverse condition less likely.
- The availability of state-of-the-art, public infrastructure (as in roads, health care, education) declines.

This vicious dynamic may appear irreversible. Depopulation, for many islands, is already a real threat.

Small islands are structurally cheated of markets, economies of scale and institutional “thickness”. Burdened as they are with these structural handicaps, small island communities must now navigate in a world that not only penalises the small and peripheral, but is also favouring big cities. At face value, they are amongst the most poorly equipped to respond to the challenges of the knowledge age. Do, and can, small islands offer interesting lessons in economic development?

B. The NISSOS Project and its Partners

The NISSOS Project has been searching for such exceptionalities and looking at their transferability. A 3-year pilot project (2003-2006) kindly supported by the European Commission through its Leonardo da Vinci vocational training program, NISSOS has sought to develop a learning pack which is sensitive to, and based on, the best practices and experiences of successful, small scale manufacturing firms based on their own small island territories. This training manual is one of the project outcomes.

NISSOS is the Greek word for *island*. Studying islands has been referred to by Grant McCall (1994, 1996) as ‘Nissology’. NISSOS is also the acronym for *Network of Islands for Small Scale Organizational Success*. For more about the NISSOS project visit: <http://www.nissos.net>.

Deciding on the meaning of business success was not easy. High levels of annual turnover? High levels of profitability? High levels of employment? Very long periods of firm existence? None of these was chosen.

Eventually, success was defined in terms of five variables which 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 to be examined as

success stories from the five participating island regions would be relatively few and therefore no sampling would be necessary. Only those firms which fulfilled all five variables were adopted.

The five variables defining success chosen by the NISSOS Partners are:

- (1) **local ownership**, meaning majority or exclusive control of the firm is vested in individuals who are native islanders;
- (2) **small size**, meaning firm has up to 50 employees or outworkers;
- (3) **manufacturing**, meaning firm is producing a commodity that has weight, volume or form, which can be separated from its producer in the act of sale or purchase;
- (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 locals.

There are 11 project partners in NISSOS. Two come from each of the five participating regions, one oriented towards education, the other oriented towards small businesses. The University of Malta is an additional, third partner for Malta.

| The NISSOS Project Partners | | |
|-----------------------------|--|--|
| <i>Island Territory</i> | <i>Education Partner</i> | <i>Business Partner</i> |
| Åland | Åland Polytechnic | Åland Trade Association |
| Iceland | University of Iceland | Iceland Technological Institute |
| Malta | Foundation for Human Resources Development & University of Malta | Malta Enterprise |
| Saaremaa | Tallinn Technical University (Saaremaa Campus) | Estonia Chamber of Commerce & Industry |
| Scottish Isles | UHI Millennium Institute | Highland Council |

The 11 partners hail from 5 European island territories: the Åland Islands (Finland), Iceland, Malta, Saaremaa (Estonia) & the Scottish Isles (United Kingdom).



Åland has been an autonomous territory within the state of Finland since 1921. The 6,500 island, demilitarized archipelago supports a Swedish –speaking population. The islands are positioned in the Baltic sea, practically half-way between Eastern Sweden and South-Western Finland, about 65 miles east of Stockholm, the Swedish capital. Åland's economy is heavily dominated by shipping, trade and tourism. Shipping represents about 40% of the economy with several international carriers owned and operated off Åland. Most companies outside shipping are small companies with less than ten employees. Farming and fishing are important in combination with the food industry. A few, but high profile, technology companies contribute to a well-off economy. There are tax-free sales on Åland ferries travelling between destinations within the European Union; but this has also made Åland a different tax-zone, meaning that tariffs must be levied on goods brought to the islands. Capital city: Mariehamn.



Iceland is a large island located in the centre of the North Atlantic, almost half way between Britain and the east coast of the USA. Located at the point where two continental plates collide, the island is an active volcanic region with an abundance of geothermal power. The economy still depends heavily on the fishing industry, which provides 70% of export earnings and employs 12% of the work force. A former colony of Denmark, Iceland proclaimed its independence in 1944. The government remains opposed to EU membership, primarily because of Icelanders' concern about losing control over their fishing resources. Iceland's economy has been diversifying into manufacturing and service industries in the last decade, and new developments in software production, biotechnology, and financial services are taking place. The tourism sector is also expanding, particularly in the niche area of ecotourism. Capital city: Reykjavik.



Malta is a three-island archipelago located at the centre of the Mediterranean sea, between Italy and North Africa. For many years serving as a military base to foreign powers, the islands have in recent years transformed themselves into a freight transshipment point, a financial centre, and a tourist destination. Malta produces only about 20% of its food requirements, has limited fresh water supplies and has no domestic energy sources. The economy is dependent on foreign trade, manufacturing (especially electronics and textiles), and tourism. Malta secured independence from Britain in 1964, became a Republic in 1974, and a member of the European Union in 2004. Capital city: Valletta.



Saaremaa – which translates as ‘Island’s Land’ - is the largest island of an archipelago located off the mainland coast of Estonia. Saaremaa, literally ‘Island’s Land’, is the second largest island in the Baltic Sea. The island, as part of the Estonia, achieved independence in 1991, after spending many years as part of the Soviet Union. Saaremaa is covered by forests, wooded meadows and limestone areas covered with thin soil and stunted vegetation.

The major local minerals are dolomite, limestone, curative mud, and on a smaller scale mineral water, sand, gravel and ceramic clay. Saaremaa is a county, divided into 17 municipalities, each with its own local authority, the largest, Kuressaare (the capital city) having had municipal rights since 1563.



The **Scottish Isles**, of which at least 87 are populated, are governed by 6 different local authorities (called *councils*) within the 32 that cover the whole of Scotland. Three of these councils – Shetlands, Orkneys and Western Isles – are made up exclusively of islands. The other three – Highland, Argyll & Bute and North Ayrshire – contain both island and mainland territory. The population of the Scottish Isles is just 2% that of Scotland.

Textiles, beer and whisky are among Scotland's chief exports; though tourism and fisheries remain important to the Scottish Isles. North Sea oil and gas has gained prominence in Scotland's economy since the 1970s. A devolved Scottish Parliament has, since 1999, been given powers to govern the country on certain purely domestic matters and has limited tax varying capability.

These five European territories are circled on the map of Western Europe on the following page:

Europe



C. Showcasing Successful Manufacturing Firms

For the first phase of their research, the 11 NISSOS partners of this project have identified 144 manufacturing firms from their respective island regions that are *successful* – meaning: export oriented, locally owned, employ less than 50 employees, and have some form of adapted technology. (Of course, this data can change: new firms are set up, others are folded up, others merge, take over or are acquired by other firms.)

| Island Territory | Population | Land Area (Sq. Km.) | No. of Islands (populated) | Jurisdiction | No. of Successful Firms | Successful Firms per 10,000 population | Their mean workforce (as at 2003) |
|------------------|------------|---------------------|----------------------------|---------------------------------|-------------------------|--|-----------------------------------|
| Aland | 26,000 | 1,430 | 21 | autonomy | 25 | 9.6 | 15.9 |
| Iceland | 290,000 | 103,000 | 4 | sovereign | 42 | 1.5 | 26 |
| Malta | 400,000 | 316 | 3 | sovereign | 33 | 0.8 | 22.5 |
| Saaremaa | 36,000 | 2,900 | 7 | county | 19 | 5.3 | 23.3 |
| Scottish Isles | 100,000 | 10,110 | 87 | spread over 6 local authorities | 25 | 2.5 | 10.5 |

The ‘density’ of such successful firms varies between the territories, from a high of almost 10 firms per 10,000 resident population in the case of the Ålands, to less than 1 firm per 10,000 residents in the case of Malta. The lower the population, the higher the density of successful manufacturing firms. Iceland suggests the highest mean employment levels among such SMEs, with an average workforce of 26 employees (inclusive of subcontracted personnel). This could be indicative of more vigorous growth and expansion beyond the initial start-up staff complement. The Scottish Isles have the smallest mean employment level of just 10.5 employees per firm, suggesting low consolidation. The Saaremaa case is of firms having been established exclusively since 1990, many via conversions and privatisation; mean employment levels in such firms may have gone down in the last decade, even with business expansion, as a result of rationalisation and a quickening of technological input.

The data of these successful small firms from the five island territories can be displayed in terms of the economic manufacturing sub-sector to which their products belong:

| Island Territory | Natural | Natural | Chemical | IT / Hi-Tech |
|------------------|---------------------------|----------------------|-------------------------|-------------------------------|
| | Craft | Agro | Plastic | Engineering |
| | | | | |
| Alands | wood panels | processed meat | sausage skins | purifier units |
| N = 25 | furniture | fish processing | air cleaning systems | IT / software |
| | sheet-metal (9) | sour apples (7) | plastic printing (5) | welding |
| | | | | electrical systems (4) |
| | | | | |
| Iceland | | cod/shark liver oil | sulphur resistant pipes | Artificial Intelligence Games |
| N = 42 | | cattle food | plastic tubs | Virus Software |
| | | Candy | fishing nets | electrical equipment |
| | | poultry processing | fibreglass boats | fish industry equipment |
| | | fish processing (20) | fish scales (9) | digital EEGs (13) |
| | | | | |
| Malta | decorative glass | olive oil | plastic pipes / cables | IT packages |
| N = 33 | gold/silver filigree | wine / sausages | paints / detergents | software support |
| | furniture (6) | sun-dried tomatoes | labels / packaging | solar panels (6) |
| | | liqueurs (6) | injection moulding (15) | |
| | | | | |
| Saaremaa | wooden boats | fish processing | rubber products (2) | aluminum boats (2) |
| N = 19 | wooden houses | berry processing | | |
| | lime / agar | meat processing | | |
| | limestone craft (8) | fur products (7) | | |
| | | | | |
| Scottish Isles | stone | Preserves | toiletries / soaps (2) | electrical instruments |
| N = 25 | woolen knitwear / fabrics | Beer | | flexible circuits |
| | jewellery | Whisky | | observation devices |
| | pottery / drums | smoked salmon (7) | | transformers (4) |
| | furniture (12) | | | |

The above data permits some interesting observations:

There are no craft based products available from small successful firms in **Iceland**, possibly because the country has very high labour costs and cannot compete on such products with cheaper manufactures from other locations. However, the story is markedly different in relation to the fishery industry, which is the focus of a large diversity of successful manufactures (including food derivatives) in Iceland.

Saaremaa has very few manufactures involving local technical and technological skills, other than in rubber products and aluminum boats. In contrast to Iceland, **Estonia** remains primarily a low wage location with manufactures that compete mainly on a cost basis.

Malta's successful firms are to be found mainly in the plastics/chemical sub-sector. The food/agro sector appears to be largely under-developed as a niche export market in Malta, in spite of the international acclaim granted to Mediterranean cuisine.

Manufactures from the various islands of **Scotland** are concentrated amongst natural products and derivatives. Some of these products, like knitted woolens, smoked salmon and whisky, are very well known in export markets. Even here, there are just a few, cutting-edge, technology firms.

The **Åland** Islands have the most diversified portfolio of manufactures. Being Swedish speaking yet part of Finland enables Åland-based firms to exploit dynamic markets in both mainland Finland and Sweden. This, in spite of a very small population of just 25,000.

D. Research Methodology

For the next phase of research, the NISSOS Project Partners developed a questionnaire consisting of 65 questions during spring 2003. 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, if any; 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 was administered to two sets of five small firms each, all of which qualify as successful (as defined above). Two different firms were selected carefully from each of the five island territories. The first firm was selected by virtue of its association with craft based production, mainly resorting to locally available raw materials (wood, glass, fish or wool). The second firm was chosen because it had an IT-driven and knowledge intensive product. Data for all 10 firms was mainly derived by semi-structured interviews during site visits to the firms, discussions with the founder or chief executive officer, and often supported by exchanges with individual employees. A summary of the collated data per chosen firm is available on pages _____. The names of the 10 selected firms are displayed below:

| <i>Island Territory</i> | <i>Firm enjoying raw material input</i> | <i>Hi-Tech' Firm</i> |
|-------------------------|---|----------------------|
| Åland | Snickarboden | Consilia Solutions |
| Iceland | Lysi | Frisk Software |
| Malta | Mdina Glass | Shireburn Software |
| Saaremaa | Saare Paat | Baltic Workboats |
| Scottish Isles | Shetland Designer | Gaeltec |

What follow are the real stories of 5 real firms, all working with locally available material.

WHO

Snickarboden started in the most haphazard and casual manner. Krister Lindberg, an engineer, became unemployed in 1982 and was seriously considering starting his own business. He stumbled across a wooden flower-stand in a local shop. His professional training made him realise that he could easily make a similar product himself. After discussing the matter, the manager of the shop promised to buy flower-stands from Krister Lindberg if quality and price standards were met. After this stroke of good fortune, Krister started developing his own business out of his garage with a basic set of tools and an old van.



Krister Lindberg

The decision to set up the business was supported by his immediate family. His wife and two children are the co-owners of Snickarboden. Hard work and strong determination to succeed paid off; after one year, Krister Lindberg had already outgrown his private garage and had to move to larger rented premises. Due to the limited home market, he soon realised that there was a serious need to develop new products for overseas markets. After some market analysis, he decided to go into upmarket wooden Venetian blinds. Since the demand for luxury products was growing in the Nordic countries in the late 1980's, this proved to be the right move at the right time. As exports soared, especially to Sweden, the firm needed still more space. Krister Lindberg was soon able to buy a factory which has later been extensively expanded. His wife Maj manages the finances, handles orders and takes care of administrative duties. Stefan Lindberg continues to remain responsible for most of the actual operation, such as material resourcing and production.



Maj Lindberg

Initial investment in Snickarboden was financed with bank loans. Krister maintains very good relations with his bank, securing financing during expansions. Being responsible for both purchasing, manufacturing and sales, he keeps a close eye on costs and uses an external accountant for regular feedback on the firm's financial health. To motivate his agents and retailers, he visits them regularly to discuss market trends and changes.



"The firm's success is based on flexible production and short lead times" – Krister Lindberg, Managing Director

WHAT

The initial product, the flower-stand, remains a standard product in the low price-segment. The exclusive wooden Venetian blind was developed a few years later and has been the main product since. It is a high quality product made completely in house by individually trained staff, and using a customised, partly automated assembly process. In recent years the blinds, available in a large variety of woods and colours, have been further enhanced with motors and remote control for ultimate comfort and ease of operation. The whole production is based on customer orders and blinds are made to unique client specifications. Raw material is mainly imported from Asia, according to customer preferences. Some is sourced from local Åland pine or birch.

When Krister Lindberg released his upmarket blinds, interested customers were not unduly disturbed by their expensive price. The demand for luxury goods had a good impact on the sales of the quite pricey wooden blinds from Snickarboden.



WHERE

At first, the business relied on local customers only. However, since the local market of the Åland Islands is very small for a manufacturing company, Krister Lindberg was very much aware that he had to expand his business to survive and, to do so, he needed to find clients abroad. Following the first inquiry from Sweden, he decided to visit the client personally. This was the first stage in developing an export market.

Snickarboden blinds are sold in Sweden, Norway, the Netherlands and France. Since the first contact in exporting, the firm has constantly focused on clients in Northern Europe by using a numbers of retailers in each country to market its products. The retailers advertise and promote the products at exhibitions; Snickarboden in return contributes to marketing costs. This has been a good technique to support the expansion of sales without spending too much on marketing which would have been very tough for such a small firm. The main competition in the consumer field comes from Venetian blinds of inferior quality from the Far East, sold at much lower prices.



One important niche for blinds is office decoration, in which Snickarboden has been successful. Famous clients - such as Ericsson, H&M and Nokia - act as important references in marketing.



INTERNAL SUPPORTS

Since most of the raw material has to be imported, the firm has been forced to increase productivity by adopting a high level of automation in manufacturing without losing the flexibility of being a small company. The production technology has constantly been improved at Snickarboden. A great portion of the technology is developed locally, in cooperation with specialized firms in automation. The company also focuses on environmental issues.

Top quality is expected in the upper price segment. To achieve this, Stefan Lindberg uses personal quality management. All employees are trained in-house by Stefan personally and by the production foreman. The workers regularly discuss objectives and processes together with management. Targets are set and monitored constantly by every worker. Staff turnover is very low.



EXTERNAL SUPPORTS

Snickarboden has had an excellent relationship with its bankers; most of its financing requirements are today solved through bank loans. Only a small portion of funding has been made available through state or regional support programs. The firm has been supported by Objective 2 European Union Funds meant to facilitate business development, offered on a co-financing basis. The firm has also participated in quality improvement programs run by the Åland Trade Association, hoping to improve its operational control and efficiency. It has fostered important long-term strategic alliances with its suppliers and some of its clients. Some suppliers are crucial to the production process at Snickarboden since they supply most of the raw materials.

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Web-site:
www.snickarboden.com
Activity: Wooden Venetian
Blinds
Employees: 12
Established: 1982
Contact: Krister Lindberg
(Managing Director)

While unemployed, engineer Krister Lindberg stumbled upon a possible business idea. He applied for a small bank loan and started manufacturing flower-stands in his garage. He soon realised that he could also satisfy a demand for wooden blinds. Today, Snickarboden has several prestigious clients, employs 12 people, and has an annual gross turnover of some €1.2 million.



WHO

Lýsi Ltd. was set up in 1938 by the Olafsson brothers, Tryggvi and Thordur, along with several other Icelandic entrepreneurs, after a sales agreement was reached with the U.S.-based pharmaceutical giant Up-John Ltd, when this firm was looking for a suitable replacement to Norwegian cod liver oil which was not as vitamin-rich as the Icelandic equivalent. According to the agreement, Lýsi was expected every year to produce 1,000 tons of cod liver oil in bulk: this was a by-product of the Icelandic fishery industry and which contained high amounts of Vitamin D. In order to be able to produce this amount of cod liver oil, Up-John paid for the product in advance of delivery, enabling the Olafsson brothers to build a processing plant large enough to fulfil the contract. After 1950, when Up-John lost interest in Icelandic cod liver oil, the firm shifted to consumer products. Steadily, Lýsi has become the biggest producer of cod liver oil in the world, (Is this true?) fulfilling the demands of the large U.S. market. The granddaughter and graduate of one of the founding brothers, Katrin Olafsdottir, is now the firm's owner and Managing Director.

WHAT

Cod liver oil has a long history in Iceland. It has been used for centuries to protect clothing, as a source of light and also for consumption. However, it was not until the 20th century that it was discovered to be a powerful source of both Vitamin A and Vitamin D. Lýsi could exploit this tradition, while taking it further into an export direction.



Lýsi is the brand name used for marketing a range of health products with some very unique features. They include cod liver oil, halibut liver oil, shark liver oil and other fish oil suitable for human consumption. The shark, in particular, is one known species which does not develop cancer, making its liver oil especially appealing. All these products are rich in vitamins and omega-3 polyunsaturated fatty acids which are likely to reduce cholesterol levels in human blood and somewhat improve the condition of the heart. Years of experience in producing these products have led to an improvement in quality and usage: the firm enjoys an ISO-9002 international quality standard rating.

Moreover, a unique production process based on steam, first introduced by the Olafsson duo in the 1940s, guarantees the quality of the products. Continuous research

and development of new technology and production methods improve productivity, product quality and operational efficiency. Contemporary equipment has been designed to minimize oxidation of the oils and to remove any taste and smell residues in the final product by natural means.



WHERE

Lýsi has exported its products to over 100 countries worldwide, 30 to 40 of which are regular clients. These include the U.S.A., Canada, the U.K., France, Finland, Denmark, Poland, Japan and China. The exported products are the same as those sold on the home market, although the design of the packaging may be different, in accordance with consumer culture and nuances. It can be argued that Lýsi does not have any direct competitors in their export markets since they are the only firm in the world that manufacturers processed oil from the raw material. Other firms produce similar health products from processed material. Its location in Iceland allows the firm to associate itself with that country's widespread reputation for pureness and high health standards, while maintaining access to raw material. Liver oil capsules can also be bought from Lýsi in bulk, and marketed under different names. The firm has also developed high-trust relations with its key distributors.

INTERNAL SUPPORTS

Lýsi remained a family business until 1998 when Icelandic bank investors bought shares in the firm. In so doing, Lýsi became a stock company. Today, Olafsson's granddaughter both owns and manages the firm and its 45 employees. The firm's production team requires specially-skilled workers, such as bio-chemists, nutritionists, quality managers and marine specialists, who enjoy well-paid jobs. The firm collaborates with the University of Iceland and the Icelandic Fisheries Laboratories, all based in Reykjavik, and this provides useful contacts with a local pool of rare, specialist human capital. In addition, the company provides some in-house training supervised by company specialists. The employee turnover at Lýsi is around 7% annually.





EXTERNAL SUPPORTS

The Icelandic government has provided the firm with some institutional support, for example, by including them in state support programmes for small enterprises. However, it is difficult to evaluate precisely the extent to which Lýsi has benefited directly from these programmes. The Icelandic state has also been very supportive of their export drive, including its managers amongst business delegations led by Icelandic diplomats. Such activities 'open doors' for business, and may be much more cost-effective than pumping money. Cooperation with the University of Iceland and the Icelandic Fisheries Laboratories facilitates research and development. This has given Lýsi the opportunity to recruit highly skilled workers who are motivated in pursuing research and innovation. The firm has partaken of the reputation of Iceland as a nation that has a great deal of experience in the fishing industry and for the quality products that firms in this industry produce.

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E-mail: lysi@lysi.is

Web-site: www.lysi.is

Product: Marine Lipids for the Health Industry

Employees: 45

Established: 1938

Contact: Katrin Olafsdottir
(Managing Director)

Lýsi's origins and success can be traced to a crucial sales agreement involving a large and supportive U.S.-based multinational, along with a symbiotic relationship with Iceland's most successful export industry – the fishery. The firm's health products also benefit from a strong association with Icelanders' reputation as a healthy nation. Now in the hands of 3rd-generation family ownership, Lýsi benefits from institutional support and cooperation provided by the Icelandic Government, the University of Iceland and the Icelandic Fisheries Laboratories. The firm has successfully transformed itself from a bulk crude manufacturer to a 'Research & Development' driven health company.



WHO

Molina Glass was set up in Malta by two Englishmen, Michael Harris and Eric Dobson, in 1963. Harris left Malta in 1972, but Dobson continued running Molina Glass until the early 1980s, when it was taken over by Joseph Said, a Maltese glassworker who had trained at Molina Glass. (**Molina** is the name of Malta's former capital city, located just 2 kilometres away from the firm's base.)



Joseph Said

The firm was the first to commence the manufacturing of glass blown objects in Malta. Joseph Said, who is the current owner, was the first Maltese glassmaker and originally in charge of the design and production techniques at the firm. He became sole owner of the company in 1985, after which he invested in new equipment and researched new production methods. The company won the International Award for Tradition & Prestige in Brussels in 1987 and the Malta Achievement in Industry Award for Crafts in 1992.

WHAT

Molina Glass mainly produces mouth-blown decorative glassware, branching more recently also into stained glass, lamp works, uplighters and glass fusion techniques. The products have successfully been branded as a core Maltese souvenirs (along with filigree and lace products), and nowadays glassblowing has consolidated its position as an 'invented tradition' in Malta, developing a heritage product in such a short space of time. Products can also be designed and customised to client specifications. Molina Glass products compare very favourably with foreign competitors. Their main disadvantage is that they may lack the style and design of their Italian rivals, which lead the industry internationally. To counter this weakness, new Italian glassmaking techniques are incorporated so that the products are even more unique and stylish in terms of colour and design.



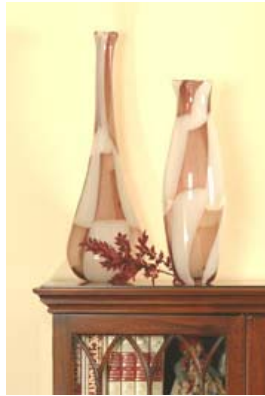
Until 1992, locally available crushed glass was the basic raw material. At that point, however, the decision was taken to shift to a higher quality glass imported from Italy and the Netherlands. This switch made the product more expensive (mainly because of higher freight and transportation costs associated with importation), but it also allowed the firm to achieve a higher level of excellence. Moreover, the cost of raw material is low when compared to the labour costs incurred in such a labour intensive activity.



These initiatives have pushed up the overall quality standards of the glassblowing industry in Malta. There are two other local competitors: their founders were initially employees at Mdina Glass who decided to branch out on their own.

WHERE

Mdina Glass has its factory at the Ta' Qali Crafts Village, the centralised location for craft-based production in Malta. The firm has been participating in various international Trade Fairs and tapping foreign markets. It was clear to the firm that exports were crucial for its survival since the local market was simply too small. Although Mdina Glass sells mainly to tourists visiting Malta, yet it has succeeded in exporting 35% of its products worldwide. Its main threat comes from unfair competition of imported glass products which are generally of inferior quality and which sell at cheaper prices. These are sold as authentic Maltese glass souvenirs in the crafts village and in retail outlets when they are actually fakes imported from overseas locations where wages are cheaper.



Apart from selling its products to tourists who visit Malta, Mdina Glass exports to Greece, USA, Russia, U.K., Cyprus and the Netherlands. Exports to other countries have been erratic and are generally 'one off' orders. On the basis of experience gained, the firm is now targeting 'niche' outlets such as special galleries. A retail outlet has also been opened in Valletta, the capital city, to tap into Malta's growing cruise-ship tourism market. Personal links with tour leaders and taxi drivers ensure that the Mdina Glass factory at Ta' Qali Crafts Village is on the tourist itinerary. Furthermore, some domestic sales have picked up because of a growing interest by a more affluent Maltese middle class in choice interior home and office decor.

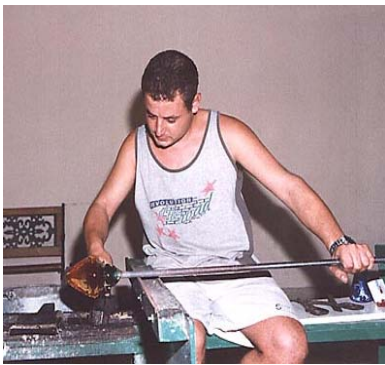


INTERNAL SUPPORTS

Throughout the years, Mdina Glass has expanded its knowledge, skills and business acumen. While basic process and product developments have taken place, products produced by the firm continue to reflect a strong sense of tradition, culture and typical Maltese characteristics that make the products truly local.



The firm remains a family-led business, with responsibility being gradually shared with the upcoming, second generation. In 1996, Joseph's eldest daughter Nevis joined the firm and now runs both local and export sales. A second daughter Pamela joined the team in 1999: she now runs the firm's retail section which lies adjacent to the manufacturing and production facility. This means that visitors to the Mdina Glass shop can observe the production process in the factory alongside. In 2000, Olivia, Joseph Said's third daughter and a graduate, joined the firm and assumed responsibility for manufacturing and production.



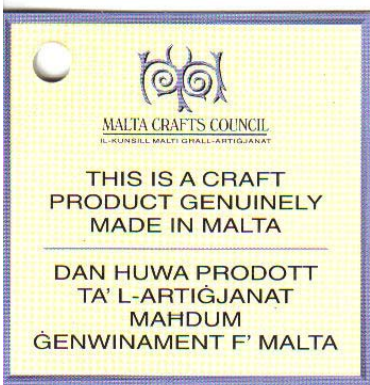
Most of the 35 employees are highly flexible, skilled and specialised glassmakers who over the years have learnt and perfected their glassmaking skills. They are trained by the owner and senior employees 'in-house': quite essential since there is no training infrastructure for glassblowing elsewhere in Malta. All workers also benefit from a production bonus scheme. With their unique talent come the uniqueness, colour and design of traditional handmade glass products, which are evidently essential ingredients for the survival of the decorative glass industry. In 2002, Mdina Glass started engaging a number of professional interior designers to further develop its products and diversify the business.

Meanwhile, Olivia regularly visits the Veneto region in Italy, a world centre for new glass compositions, colours, forming techniques and artistic skills. There, she attends specialised courses in new techniques and design, returning to Mdina Glass with fresh ideas.

EXTERNAL SUPPORTS

There are drives by state-funded agencies in Malta to facilitate the export orientation of small local firms. However, in the opinion of the firm's ownership, these initiatives are not enough.

The firm enjoys subsidised rent at the Ta' Qali Crafts Village, although it paid for all the costs of an extension to its current premises.



A Malta Crafts Council has been set up to urge local entrepreneurs in expanding businesses for both local and export markets. The Council intends renovating the Crafts

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Website: www.mdinaglass.net

Activity: Mouth-Blown
Stained Glass Quality
Products

Employees: 35

Established: 1963

Contact: Joseph Said
(Managing Director)

Village and introduce a certified genuine Malta Craft Label. This will allow customers to identify the genuine Malta product, in contrast to cheaper, lower quality imitations imported from elsewhere.

Mdina Glass has been successfully indigenised after being initiated by non-Maltese entrepreneurs. Over more than four decades, the firm has successfully marketed its original products to a growing and diversifying international (mainly tourist) market which now recognises the Mdina Glass manufactures as intimately connected with Malta. Their products represent a skill & craft 'tradition' which has been creatively invented and nurtured 'in house'. The firm is managing well the transition to second generation, women-led, family management.



WHO

Saare Paat is a small company building wooden boats, founded in 1993, in the course of the restructuring of a large collective fishing farm. In Estonia, many private businesses have started in a similar way: an opportunity arose during the dismantling of the sprawling public sector and of what had been state-imposed collective enterprises. In the case of Saare Paat, a traditional trade of boat building with a history of over 100 years on the island of Saaremaa was restored.



“As we wish to increase our production volume, finding new markets is our everyday task,” - Peeter Laum, Manager.

During the years of Soviet occupation, Estonia was isolated from the West and all overseas contacts were suspended. The shipping and sailing traditions were discontinued, although the collective fishing farm maintained a few small boat building facilities. In 1989, when the first co-operation contacts were renewed with Western businesspersons, an Estonian-Swedish joint venture called Saare Marine Industries was set up by the fishing farm Saare Kalur (*Island's Fishers*) in order to build traditional wooden boats. The islanders who had fled to Sweden during World War II now helped to establish contacts with Scandinavian entrepreneurs and to develop new technologies together. The joint venture did not do as well as was expected: so the production line was shifted to the manufacture of garden furniture. Meanwhile, 3 local persons established their own firm Saare Paat (*Island's Boat*) in 1993. They started by renting space from Saare Marine Industries.



By 1997, Saare Kalur had been reorganized into a holding company. It bought out the Swedish owners and became a shareholder of Saare Paat. Today, 81% of the shares of Saare Paat belong to this holding company and the remaining 19% to 2 private individuals: one being Peeter Laum, the production manager of Saare Paat. Saare Kalur is now a holding company with almost 400 shareholders. Its major activities comprise investment, business and real estate administration.

"We will not be taken seriously unless we bring out a new model to the market every year. We are like car manufacturers, constantly developing the already existing models and working out new products." – Peeter Laum, Manager.



WHAT

Since the very beginning, Saare Paat has produced wooden boats. This is labour intensive production and therefore allows competing successfully on cost advantages, because wages in Estonia, and especially in the countryside, are considerably lower than the country's Western neighbours, such as Sweden and Finland. Step by step, volumes have increased and new products based on other technologies, such as fibre-glass yachts and speedboats, have been added to the firm's products. Meanwhile, the volume of production of wooden boats has remained stable, this being about 25 boats a year.

The production of Saare Paat is of top quality. It cannot be otherwise. So far, the new fibre-glass yachts have been sold via a Finnish partner, a company that is well known internationally. This strategy however diminishes the visibility of Saare Paat as a brand. However, now that a Norwegian engineer has designed the *Stormer*, a new speedboat model for Saare Paat, it is expected that this product will become the firm's own major branded manufacture.

WHERE

Saare Paat's production has been targeted for export from the very start. Selling to the domestic market was unthinkable since there was simply no local market for such products at that time. It was a situation of 'export or perish'. Exports now represent some 90% of the firm's gross annual turnover. The marketing department is looking for new markets and new clients; the firm has exhibited and promoted its products in boat exhibitions and trade fairs. The firm's main export market is Finland, followed by Norway, Sweden, Germany, the Netherlands, Denmark and France.

INTERNAL SUPPORTS



The success of Saare Paat is largely based on the collaboration and synergy of a relatively young team having been co-workers since the collective farm period. With the inspiration and know-how given by the Swedish partners, they could launch the manufacture of boats and, year by year, succeeded in increasing the volume of export. As graduates of the Faculty of Economics of Tallinn University of Technology, the members of the team could resort to their solid academic education as well as to the management and leadership experience gained during their careers in the collective farm. Last but not least, practically all the managers have always been active yachtspersons. Business planning and other new skills were acquired in the course of their work.



Three private persons raised leverage capital. The premises for the factory were obtained during a reorganization of the ownership of the collective fishing farm into the ownership of the holding company. At first, Saare Paat rented the building from the joint venture company; now it owns its premises.

Wooden boat-building is thriving in Saaremaa. The local vocational school offers a training specialisation in carpentry and this serves as a good basis for the further specialisation needed in Saare Paat. The firm is thus obliged to provide its own in-house training for its special skilled workers, under the watchful eye of the Production Manager. Saare Paat also produces plastic yachts in co-operation with FinnGulf, a Finnish company. For this reason, 10% of the staff has had training in Finland. Cultural and linguistic closeness between these two territories enables such training in spite of the fact that Estonian workers mainly speak their mother tongue.



Although the firm's wages and salaries are close to the island's sectoral average, the turnover of staff from Saare Paat remains rather high. Management wishes to achieve a more effective organisation of work, which would make it possible to pay their workers better salaries, and this should, in turn, contribute to a higher rate of worker retention.



Workers build yachts together as a team. If the work is completed in time, all the workers are rewarded financially.

EXTERNAL SUPPORTS

So far, Estonia enjoys a competitive advantage based mainly on cheaper production inputs, such as labour and locally available raw material. Knowledge capital is mainly sourced from Western countries. It is difficult to predict how long it will take for Estonian firms to reach a higher, innovation-driven stage where competitiveness will be primarily determined on the basis of skill and technological sophistication. Meanwhile, Estonia has built up a harmonised tax regime with generous tax rates.

The State, mainly through Enterprise Estonia, has also introduced support schemes which enable entrepreneurs to access different funds. There are 13 different support programmes available, co-financed by European Union structural funds. Saare Paat has applied for EU grants in order to support its product development. The Estonian State also subsidises transport costs to/from Saaremaa, though costs remain higher than for the rest of the country. Meanwhile, the cooperation between firms and universities in support of research and development requires strengthening.

The success of Saare Paat is largely based on the collaboration and synergy of a relatively young team who have been together since the collective farm period. With the inspiration and know-how given by the Swedish partners, they could launch the manufacture of boats and, year after year, managed to increase export volumes. As Economics Graduates of Tallinn University of Technology, apart from being active yachters, members of the production team can resort to a solid academic education as well as to the management and leadership acumen gained during their previous careers. Business planning and other skills are acquired in the course of the work.



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Website: www.saaremaa.ee/boat

Fax: (+372) 45 24 461

Email: boat@tt.ee

Website: www.saaremaa.ee/boat

Activity: Wooden & Fibre-Glass Boat Manufacturers

Employees: 44

Established: 1993

Contact: Peeter Laum,
Production Manager

Saare Paat continues a long, boat building tradition at an ideal location. Saaremaa has the additional advantage of being a tight and safe island community: less crime, a better quality of life for its residents, and a stable commercial environment for its businesses.



WHO

Wilma Malcolmson is the owner and director of Shetland Designer. She is a skilled, opportunistic, economically shrewd and adaptable Shetlander. Like most young women, Wilma was taught *Fair Isle* hand knitting at an early age and has an intrinsic ability to blend colour and pattern using the traditional palette. Initially, she worked as an outworker for other local companies, becoming skilled in the use of domestic knitting machines.



Wilma saw the potential to increase production without sacrificing quality using the domestic punch card knitting machine, which had the capacity to produce the complex patterning of Fair Isle. She began to experiment with technique, incorporating technology to support what had hitherto been an exclusively hand-made, labour-intensive product. She also created her own knitting designs, gradually increasing sales while still working from home and being self employed.



In 1982, Shetland Designer was established using Wilma's own capital. Overheads were kept low by using outworkers with their own machines to produce the garments Wilma had designed. The use of outworkers is, after all, well established amongst the Shetland knitwear firms. Wilma used her local contacts and built on well established relationships to employ knitters who identified with and had pride in the product. Production was in relation to perceived demand so there was little outlay or financial risk in the limited stock held.

Since then, Wilma has established a stable product for which there continues to be consistent demand. However, she recognises the need for continuous innovation and the potential of Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) to diversify her range to include less labour-intensive, and therefore cheaper, garments. She develops prototypes and pays for the associated program to be made on the industrial Shima Seiki CAD/CAM system at the Shetland College Textile Facilitation Unit.

"Our garments are designed, styled and knitted to exceed the highest standards. We feel we have produced a highly individual, men's and women's range of knitwear for the modern lifestyle."- Wilma Malcolmson.

WHAT



Fair Isle Knitwear exemplifies a world and ethos which we look back on with nostalgia and want at some level to buy into; a talisman to ward off the evils and stresses of modern life. The patterns and colours used are based on unique traditional designs and associated with the kind of indigenous craft activity valued in an increasingly virtual world. It is produced by a Shetlander in a beautiful and remote archipelago and remains popular as a fashion classic.

The unique Shetland pattern is recognised throughout the world: it enjoys a niche identity and an enduring association with top quality. The textile industry in Britain has been decimated by competition from the East producing often inferior but cheaper goods. Survival of Shetland Designer has depended on the capacity to capture a consumer prepared to pay extra for the authentic, hand crafted, locally produced original garment. The *Shetland Lady* branding ensures its authenticity as a genuine product of the island and is subject to a rigorous quality control system operated through Shetland College. This guarantees high and consistent standards of manufacture and finish. The identity of the product makes it an evocative memento of the Shetland experience; it is a product that is easily shipped or, better still, carried off the island by visiting tourists.



The wool for the traditional jerseys comes from the Island's ancient breed of sheep, which has a range of fleece colours, from white through various shades of brown, to black. Dyed yarn is also used to produce a range of subtly coloured designs. Traditionally, there has always been a plentiful supply of local wool. In the past, the sheep were 'rooed' or plucked to remove the fibre which is soft and fine but strong and hard wearing. The local wool broker still supplies the traditional yarn.



Wilma has placed emphasis on designing a product which has its roots in the tradition but which has contemporary appeal. She recognises the importance of fashion and colour forecasting in market led design and consults design intelligence in order to maintain a fashionable image for her product.

WHERE



Although there are around 15 other firms producing knitwear on the Shetland Islands, Shetland Designer has maintained a steady turnover and retained its share of the market. The firm currently exports to 7 overseas countries with 17 regular clients. Retail outlets absorb the costs of export. Exports represent approximately one third of total annual turnover. The bulk of the remaining sales are to tourists visiting Shetlands. Wilma attributes her success in retaining customers to the consistently high quality of the product and the unswerving commitment to meeting the requirements of the client and doing so on time.



"Our garments are designed, styled and knitted to exceed the highest standards. We feel we have produced a highly individual, men's and women's range of knitwear for the modern lifestyle." - Wilma Malcolmson.

The value of face to face selling is an important aspect of the success of the business. Wilma has a workshop and retail outlet next to her house in Cunningsburgh, from which the knitwear collection is sold directly to the customer, giving a higher return on the product. Promoted by the local Tourist Office, the shop has become a regular 'stop-over' point for craft bus tours helping to boost sales in the summer months. With the increasing development of infrastructure to support tourism and the collective marketing and branding of the Shetland Islands, it is anticipated that visitor numbers will increase. Meanwhile, Wilma uses design intelligence to maintain a fashionable range of garments. Hers is a strategic approach to market identification.

INTERNAL SUPPORTS



Production of the traditional hand framed garments has relied on maintaining a skilled and loyal complement of around 30 subcontracted out-workers. Knitting has been a steady form of employment for Shetlanders for the past 200 years and it is this knowledge and expertise that Shetland Designer has utilised. The company runs on informal structures and although Wilma would recognise many of the features of 'best practice' such as team work, setting and monitoring targets, rewarding performance there are no formal structures in place and the company relies on Wilma's reputation as a fair employer to sustain her outworkers in a climate of shortage of skilled workers such as finishers and linkers.



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Email: info@shetlanddesigner
Web-site:
www.shetlanddesigner.co.uk
Activity: Fair Isle Knitwear
Employees: Nil (30 outworkers)
Established: 1982
Contact: Wilma Malcolmson
(Managing Director)

In an economy where knitting as employment is a reminder of the 'old days' of subsistence living and where far more lucrative work can be obtained in fish processing, the oil industry and secure, local authority jobs, the challenge for the future will be the recruitment and training of young people. So far, the bulk of Wilma's outworkers are now middle aged and the uptake among youths for jobs in the knitwear industry is low.

EXTERNAL SUPPORTS

Wilma started small and the business was built up very gradually. The initial set up of the business was totally self-financed and home based. With the expansion of the company, Wilma obtained business advice from Shetland Islands Council and sponsorship to attend a design seminar and subsequently marketing trips to Trade shows. The Development Department has also provided funding for promotional literature. The most significant local authority support was a contribution towards the capital costs for a workshop and retail outlet which gave the business a higher profile and allowed for expansion. Indirect support was also obtained by Shetland College through funding by the European Social Fund (ESF), which was used to invest in CAD/CAM sophisticated technology.

Wilma is a good example of financial incrementalism. She practised her sense of enterprise quite effectively within the constraints of her own budget before embarking on expansion and the risks to capital that such a move can entail. She used the expertise and experience available through the local authority to extend her business, design and marketing skills and to build up her client profile. Once the potential of the market had been assured, she sought external sources of capital available at advantageous rates.

Shetland Designer is a shrewd combination of traditional skill and modern, computer-assisted technology. While the products are inspired by old family patterns, they maintain a careful association with current fashion trends. Tourism is a crucial and inexpensive link to foreign clients.

1. Overview

While all successful in accordance with the terms of the investigation, the 5 firms under study use different natural resource inputs (wood, wool, glass and fish). They also exhibit different levels of competitiveness. Saare Paat is based in a country with a very recent history of economic liberalisation; its relatively lower wages allows that and other Estonian firms to compete on cost advantages, maintaining a high level of labour intensity in the production of hand-made wooden boats and other wooden products; the down-side is a relatively higher turnover of staff, presumably moving to better paying jobs in a buoyant labour market. Shetland Designer utilises a ‘putting out’ system to produce its FairIsle Garments. While it enjoys no price advantage and benefits from low worker turnover, it does not enhance or adapt imported technology and its operation remains strongly centralised around its founder and owner, in spite of being physically dispersed. This may explain its relatively lower annual turnover. Snickarboden, Lysi and Mdina Glass do not compete on price advantage, have imported and adapted technological inputs, enjoy low staff turnover, have benefited from links or experiences abroad and have instituted some kind of devolved management structure, even if with elements of ‘family labour’. Snickarboden and Lysi also benefit from the local availability of technological suppliers.

2. Business Set-Up

Apart from the Estonian case (which is a transformation from a former collective venture), the other 4 firms exhibit the typical launch of an SME as a one-person or family affair, based essentially on own financing and/or a bank loan (probably under personal guarantee). Even many years after their establishment, these firms continue to remain controlled or dominated by the owner or his/her close relatives. However, the existence of a ‘third party’ – such as a foreign friend, a business contact, a local supportive retailer or a potential client - is usually crucial and acts as a catalyst to the business set-up and is often a gatekeeper to the crucial off-island or foreign market niches.

3. The Obligation to Export

In all 5 cases, the obvious limitation of the local domestic market means that the decision to export off-island is a foregone conclusion. Unlike other larger markets, one cannot assume that an initial invention or major innovation will be followed by a period of relative stability marked by heavy local demand where “passive entrepreneurs” come in to free-ride on someone else’s intuition. The decision to set up the firm may have been taken along with, rather than separately from, the identification of an off-island or foreign market niche. In the case of Shetland Designer and Mdina Glass, the presence of tourist visitors to their island allows them to ‘export’ their products without incurring additional freight, insurance or distribution costs.

The ‘export-or-perish’ syndrome is a very powerful one on small island territories and may somehow compensate for the absence of ‘domestic firm rivalry’ that elsewhere pushes firms into higher quality products and processes, creating in turn competitive advantage. 4 out of the 5 firms being reviewed have just two, one or no significant domestic competitor.

4. State Support

Shetland Designer has acknowledged strong state support, via local enterprise councils, in various aspects of its operation: capital procurement and upgrade, promotional literature, trade trips as well as premises development. In the other four cases, support by the state or its agencies has been described as nil or marginal. In one particular case, 'red tape' was singled out as a negative feature of state involvement. (Such statements need not imply the total absence of state support; but also that whatever is provided by the state directly or otherwise is not valued highly by the recipient small firm.)

5. In-House Training

All 5 firms report that in-house training is a key feature for developing the skills of their employees. All five, except Lysi, have a strong 'craft' disposition to their operation; so, much depends on the training of employees or out-workers – along with the inculcation of the corporate ethos - to ensure a product that meets company standards and client expectations. This training is often performed directly by the owner, who thus also doubles up as instructor and the firm's cultural archivist.

6. Competing on Quality

Only Saare Paat offers products which are less expensive than those of its direct competitors. The other 4 firms must compete on quality to justify a higher-priced product. The quality exigencies of the product are often supported by a specific quality programme. Lysi conforms to ISO 9002 standards while Shetland Designer upholds the Shetland Lady Trademark, which is an attempt at the local branding of quality garments.

7. Combining Production & Consumption

Combining a retail outlet alongside the manufacturing facility proper is shrewd business sense for both Shetland Designer and Mdina Glass. In that way, tourists, other visitors and would-be clients can experience the development of the eventual product; production and consumption become deliberately blurred and overlapping activities and experiences. Manufacturing takes on the character of a 'looked at' process, an object of the tourist 'gaze' (Urry, 1990) and therefore more readily associated, appropriated and 'consumed' as a souvenir.

8. Associating with the Island

Deliberately or otherwise, 4 of the 5 firms under consideration appear to benefit handsomely from their association with their home island. Iceland's long and proud association with the sea, its

fisheries industry and its maritime culture promote the branding of Iceland as a reliable provider of fish or marine related products and derivatives, as are the products of Lysi. Moreover, the tourism industry in Iceland is also branding its product as a high-priced destination with very high standards of natural beauty, purity, cleanliness and general good health: all of which are useful sales pitches to Lysi's health products. (The Iceland Tourist Board's sales pitch for 2004 was: "Pure. Natural. Unspoiled. Iceland... the way life should be."). Similarly, Malta's tourism profile is heavily themed with notions of a hardworking and flexi-skilled Mediterranean race; the skill involved in developing the decorative ware of Mdina Glass is thus a way of congealing in time both contemporary labour as well as its historical past, as are other products such as gold and silver filigree or hand-crafted decorative lace, for which the Maltese are well known. Saaremaa (the island of the wood nymph) and its Saare Paat firm are also free-riding on the island and Estonia's long tradition as a haven for wood. Juniper trees, along with dolomite, windmills and a famous, local, home-brewed beer are considered the symbols of Saaremaa. It is no surprise that most of Saaremaa's export-oriented firms today are in the wooden boat building or home construction business; while many of Iceland's export-driven firms are engaged in the fisheries sector. But the close association between product and island is perhaps best advanced by Shetland and its Fairisle garments. Shetland is probably better known for its knitwear than for any other craft product. The textile product is deliberately branded as the quintessential Shetland Islands souvenir, not least thanks to the link between sheep, wool, nature and the garment product to the islands; while local Fairisle knitters engage in 'co-operative competition' thanks to their common interest in safeguarding the high international regard of their Shetland Lady label and trademark. The same strategy is being deployed with good effect in relation to Harris Tweed and by a number of Scottish Isles – such as Islay, Jura and Arran - in relation to whisky distilling.

9. An Attractive Quality of Island Life

Meanwhile, Snickarboden stands out in failing to declare any association between its wooden window blinds and the Åland Islands. However, its owner and founder had spent a stint abroad in Sweden, yet decided to return to Mariehamn in order to enjoy what he claims to be 'a better quality of life'. Although not articulated explicitly, elements of such an enviable 'quality of life' on a small island might well include a well-bonded, flexibly-specialist and loyal work-team, strong family structures and other social networks based on mutual knowledge and familiarity, and other significant and long standing 'social capital' supports which promote unitarism. The island effect is not only significant in extending and packaging the 'island lure' to potential clients, but also to potential entrepreneurs. In so doing, it does well to develop a 'brain rotation' strategy which depends on the attraction of foreign brains to the island; or of local brains leaving the island, developing skills, knowledge, contacts and acumen while away, and then luring them back with their added knowledge baggage. This may be one viable response to the challenges of the knowledge driven economy; although, admittedly, such a global outlook may not figure so prominently on the strategic agenda of small island entrepreneurs who are developing products sourced from local inputs. That a significant percentage of an island population may be away at its respective metropole at any point in time facilitates the 'glocalisation' of its citizenry and its ability to 'mix and match' local virtues with global opportunities.

10. Using the World Wide Web

In spite of the often assumed potential of the internet in transcending space and developing into an effective business tool, the five SMEs from small island territories in this study remain exceptionally unconvinced and sceptical of such prospects. To them, it seems that the best approach to source suppliers, identify clients and develop a market share remains the one they are most comfortable and familiar with: face-to-face encounters and personal knowledge. The development of a presence on the world wide web is important, and most export-oriented firms in the 5 territories now have their own web-site; yet, the internet's role in actually clinching business remains to be seen. Perhaps the internet is more useful as a marketing tool to those other companies which compete on price. Being involved in an up-market niche may explain why one can afford to be slow in grasping any of the benefits of internet marketing.

We now move on the real stories of five other firms, this time operating in more technologically competitive areas of manufacturing.



Consilia Solutions is an information technology firm based in Mariehamn, developing internet-based, content management systems and offering consultancy in programming.



"In this business, so much depends on the people you know and what sort of personal network you have" – Jan-Olof Engblom

WHO

Engineer Jan-Olof Engblom came from a family with an entrepreneurial flair. His father had owned a fishing boat for 30 years. Jan-Olof worked as a computer programmer with Swedish multinational firm Electrolux for some years. In 1991, he decided to set up his own consultancy firm in Stockholm. He identified his clients through the broad network of contacts he had developed while still at Electrolux. However, he became tired of the hectic tempo and long travelling times associated with city life. So he decided to move back to his native Åland in order to improve his quality of life. This included taking up golf as a hobby. Åland has little traffic, a clean environment and a more 'laid back' approach to life.

Jan-Olof set up Consilia Solutions in 1997 with his old friend Stefan Lindén. Stefan is also a computer engineer and a graduate from Sweden. He joined an Åland-based firm which set up the first locally operated internet portal. He eventually became the co-owner of a sailboat rental firm and of a book wholesale dealer. The start-up capital for Consilia came from private savings and a bank loan: the founders wanted full control over their own firm.

WHAT

Consilia offers services in consultation and the development of programs for editing web pages or content managing systems (CMS) for business firms and not-for-profit organisations.

The idea originated in Consilia's own difficulties in identifying a handy, user-friendly, high quality program for creating its web pages. It was Jan-Olof's and Stefan's contention that it should be very easy to make the contents of the home page accessible and to be able to regularly update the contents without any specialist knowledge. Consilia has created its own solution to this challenge, a web-based publisher called *Informer*.

Currently, the *Informer* program is used by firms both on Åland and in Sweden for managing the contents of the internet and intranets. The program is also customised for small firms. Principally, *Informer* does not require technical skills, so those responsible for updating and organizing the information content can easily update the home pages themselves. Managing the contents is carried out in a web reader, which means the task can be undertaken anywhere, as long as the internet is accessible.

"We have got most of the customers that we can expect to have on Åland and now we are starting to look at the export market again" - Jan-Olof Engblom, managing director.



Informer also includes additional features such as registering all visits to a home page and keeping track of the language option used by the visitor. For intranet purposes, *Informer* can also handle users' rights and monitor the amount of time each person has been logged in.

The location on Åland rather than, for example, Stockholm, has its advantages. Lower fixed costs, such as lower rental charges, enable the company to cut product prices and compete in a growing market.

As the firm's products are virtual, freight costs are also completely avoided. A firm purchasing Consilia's products gets the product directly installed into its own system by the Consilia staff. It is also possible to send the finished programme via internet.

WHERE

Consilia was initially oriented towards satisfying Swedish clients. By 2003, however, it has a growing clientele of firms and organisations on Åland, and exports only covered some 5% of the firm's gross turnover. Local clients include the Alandia Group (the largest insurance group on Åland); the Chips Group (a leading business in the Scandinavian snack food industry); Eckerö Linjen (a leading passenger transportation firm operating between Åland and Sweden); and the Åland Postal Service. Consilia has just one competitor firm on the local market. However, this local market is very easily saturated and links with overseas customers will have to be renewed. This may require the development of new products, such as a cheaper, simplified version of *Informer*.

Consilia has been exporting its products to clients in Sweden and Finland. It has two major overseas clients, both located in Sweden, and both of whom have been in regular contact with Jan-Olof, now Consilia's managing director and exports manager, since his business operations in Sweden prior to 1997.

INTERNAL SUPPORTS

Consilia Solutions is based on the professional cooperation of Jan-Olof Engblom and Stefan Lindén. The firm's internal organisation is non-hierarchical and informal. All five employees have professional degrees and enjoy salaries above the sectoral average. Staff enjoy special benefits: free gym visits, a broadband internet connection at home, mobile phones paid for by the firm.

There is a planning meeting every Monday morning, which facilitates employee involvement in the firm's decision-making process. Such policies contribute to the development of an efficient and highly motivated team of workers. High levels of job satisfaction also mean low staff turnover: only one employee has been 'lost' since 1997. The employees are, after all, the firm's most important resource. Consilia invests in the further training of its staff, and encourages their participation in specialised courses and conferences. The professional development of its staff is an investment to Consilia, not a cost, in spite of the difficulties that this may create with such a small staff complement.

EXTERNAL SUPPORTS

Soon after its launch, Consilia received a Finnish Government grant of €50,000 for product development: this led to the hiring of the first employee. Financial support is also available from state agencies for participation in different fairs overseas.

Otherwise, the Consilia partners have not sought financial support. The firm's success is traced mainly to Jan-Olof's numerous business contacts and the competence of the firm's employees. A network of connections has proved vital for Consilia. Jan-Olof has joined different local organisations and associations upon resettling on Åland so as to extend and cultivate his personal network.

When Jan-Olof and Stefan set up Consilia in 1997, they agreed on three targets, to be reached within 5 years of start-up: They would have five employees; they would be financially independent; and they would have an annual gross turnover of €500,000. The first two of these three goals have been realised.

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Mariehamn, Åland Islands
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Fax: (+358) 18-17776
E-mail: info@consilia.fi;
info@informer-site.com
Websites:
www.consilia.aland.fi
www.informer-site.com
Activity: internet-based,
content management
systems and IT-consultancy.
Employees: 5
Established: 1997
Contact: Jan-Olof
Engblom (Managing Director)

After years in hectic Stockholm, programming consultant Jan-Olof Engblom decided to move back to Åland Islands. He soon found a business partner and, opting for a state product development grant, their firm could employ a third person and start developing its own flexible internet content management programme. Consilia Solutions gradually replaced its Swedish customers with local ones. However, thriving on the local market is not possible: the firm is eyeing overseas markets again, and is hoping that a mass-market version of their core product will serve this purpose.



“There was no market at all in anti-virus software. Our product developed right alongside the market” -Friðrik Skúlason.

ÍSLENDINGA BÓK

WHO

Friðrik Skúlason is the founder and one of present owners of Frisk Software. Frisk means ‘health’ in Icelandic, as well as being made up of Friðrik’s first and second names. Friðrik is a graduate in computer science, a computer genius and quite eccentric in his life style. He was 26 years old and working with IBM in Iceland in 1989 when he began analysing common viruses that were starting to affect computers at that time. He wrote a programme that was able to detect and destroy various computer viruses. Skúlason placed this program on the internet from where it could be widely accessed and downloaded for free. The programme was a great success and Friðrik spotted a business opportunity: his new firm was established formally in 1993, when it became necessary to start hiring employees. The company was set up along with his wife and partner Bjorg, who has a degree in business studies and runs the administrative side of the business. Frisk Software has today gained international recognition as a reputable brand in anti-virus software.

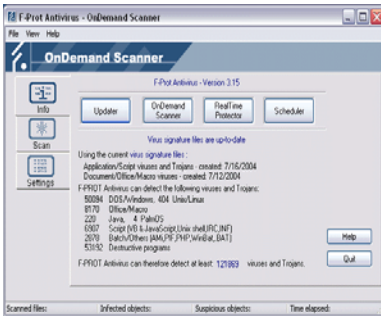
WHAT

Frisk produces spelling correction software and anti-spam filters. It has also spawned the technology behind *Islandingabok*, a web-based, password protected, genealogical database for Icelanders, useful in tracing genetic diseases and disorders. The company’s main product continues to be an anti-virus programme called F-Prot antivirus. It scans computers for viruses and has a high portability, which means that the programme can be used along with almost any computer operating system. The programme is also cheaper than most similar products when it is sold to such clients as large firms; although this price difference does not apply to small corporate clients and individuals. F-Prot does not require a large computer-memory base and operates at a high-speed. This combination of features enables Frisk to compete successfully with much larger companies like Intel or IBM.

WHERE

The Icelandic home-market is very small when it comes to such a specialised product like f-prot antivirus software. In light of this, Frisk's goal from the beginning was to export the product and strive to gain a high market-share abroad. What made this possible were several factors. First and foremost, the product had international appeal both in Europe and the USA, and was soon selling in 75 countries. Its purpose was to solve an increasing world-wide problem, that is to say the emergence of computer viruses. Because the program was intended for export via the internet from the start, a strategic decision was made to write the program first in English, and only later in Icelandic.

The owners realised early on the possibilities that the new economy entailed, even before the product became common knowledge and a marketing hype in Iceland and abroad. The launch of the programme on the Internet in 1989 is an example of their foresight. Initially the programme was distributed as *share-ware* on a mailing list called "virus-I". From this list customers could download the programme free of charge, use it for a trial period and then pay for it if they wished to continue using it. After some time this strategy started to pay off and Frisk software gained increasing market share, mainly in the USA. Internet driven export gave Frisk software a good starting point and increased the firm's chances to establish itself in foreign markets in competition with well-known 'giants' such as Intel, McAfee and Norton antivirus. Today, customers come across the product via the internet from such sites as www.download.com, pay for the product via the internet and then download it, enjoying free access thereafter. This includes upgrades which are introduced regularly due to the constant invasion of new computer viruses. The Internet is also used to transport the product to the so-called OEM's (Original Equipment Manufacturer) abroad. These are firms that buy a 'no-name' product, brand it and sell it to their customers as a box-product or, again via the internet. Frisk Software has several such OEM contracts.





Company Contact Details

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Webpage: <http://www.frisk.is>

Activity: Anti-virus software,
spelling correction software,
anti-spam filters &
genealogical database
software.

No. of employees: 45

Established: 1993.

Contact: Friðrik Skúlason,
Managing Director.

Using the internet as a marketing tool is both cheap and easy. This has stimulated exports from the start of operations. As a result, Frisk Software enjoys significant customer loyalty, has 'products' which can travel without any associated freight costs and has now gained considerable market share in such places as the USA, United Kingdom, Canada and Scandinavia.

INTERNAL SUPPORTS

Frisk has 45 full-time employees that are highly skilled and educated in subjects like computer science/technology, programming or business administration. The founders are still the main managers of the firm, assisted by several project managers that are responsible for certain tasks and projects. Due to the high-tech nature of its products, the firm depends on highly specialized knowledge, which is sometimes not available in Iceland. In such instances, Frisk has reacted in two main ways: by importing skills/knowledge from abroad (by recruiting a number of foreign workers); and by encouraging the training of local employees by other employees (peer training) in virus analysis. This has enabled Frisk to fulfil the demand for specialized knowledge. Turnover of staff is very low. One third of the workforce has had training or educational experience out of Iceland.

EXTERNAL SUPPORTS

The firm has neither received any financial support from the state nor any other kind of institutional support in the form of special regulations, tax reductions or export support. Thus, the owners financed their firm and found ways to minimize all costs. The absence of external support made the owners of Frisk Software realise that they had to rely on themselves and create a firm with considerable flexibility in size, function and finance. This there was every motivation to minimise costs and to look for innovative ways of cutting costs still further: as, for example, via the use of the internet to market, promote and sell products.

Frisk Software International is an export-driven company conceived by Friðrik Skúlason, which pioneered a product in response to an emerging, new market: that for anti-virus software. Exports were internet-driven from the start, avoiding all costs associated with the transportation of physical manufactures.

SHIREBURN

WHO

John de Giorgio set up Shireburn Software in 1983. He has a forceful and charismatic personality, is a work horse and a 'go getter'. Today, he leads the Shireburn Group of Companies which is involved in the implementation of collaborative solutions based on Lotus Notes and the web, transactional systems for financial and inventory management, as well as its own in-house training programmes, internet solutions and systems.



John commenced operations providing IT awareness training courses, consultancy and some software development. For the first five years he was a 'one-man band'. He was then invited to take up a scholarship on entrepreneurship in the USA. On his return to Malta in 1988, he recruited two developers and focused his efforts on software development. He developed various software packages and continued to expand his operations and increasing his staff. His team improved the software packages by continuous dialogue and personal contacts with their customers.

In 1998, John started undertaking consultancy and implementation work selling his financial software packages in the U. K. through his brother, a London-based, qualified accountant and auditor. Eventually, a U. K. office was opened, selling a variety of computer applications packages and related services. As the available communications and remote access systems improved, much of the work being carried out for clients in the U. K. could be undertaken from Malta at a much lower cost and the U. K. office was shut.



Having been the distributor for Lotus Software in Malta since 1990, Shireburn was heavily involved in the development of solutions for Lotus Notes. Working on various client projects and faced with the limitations of the Lotus Notes environment regarding reporting, an opportunity was identified to utilize integration between Lotus Notes and Microsoft Word and Excel as a means of addressing reporting within Lotus Notes.



After resolving client reporting needs using the Notes-Office reporting technique, the idea was formed to develop a specific product aimed at addressing this need. Ultimately, this decision resulted in the development of *Integra for Notes*, a reporting tool developed specifically for Lotus Notes users. This product was launched in November 2001.

Shireburn is now focused on marketing *Integra for Notes* globally. The product is a reporting tool for the Lotus Notes environment, developed and supported by Shireburn with clients that include large corporate firms from all business sectors, including finance, insurance, government and manufacturing. A heavy investment was made in promotion and marketing; today, the company is exporting this product to 18 countries.

WHAT

Integra for Notes was developed primarily for the export market. It was a superior reporting system to the other packages being offered abroad. It provides facilities to enhance the reporting, printing and analysis of data held within the Lotus Notes environment and is a high value addition to any Lotus Notes site. It generates reports of the Lotus Notes data printing needs via MS-Word and Excel and automates the importing of data into Lotus Notes and the export of these notes to Excel, Word or Text files. With these features, it is targeted to Lotus Notes users and is leading in its field, thanks to its diverse functionality and innovative possibilities.

Integra for Notes created a huge potential for this niche market and diversification of products to address the market worldwide. At the same time it offered an opportunity to tap a large market beyond Malta's limited market size.

The export market price for *Integra for Notes* is similar to that within the local market; and it can compete in the export market mainly thanks to the product's unique innovative features. The product does not have any local competitor in Malta; while, overseas, there are just two rival firms: one based in the U.S.A. and one in Croatia.





WHERE

The firm began to market the product by participating in seminars and exhibitions and appointing business partners who sell *Integra for Notes* on its behalf. It has currently 24 business partners [or agents] in each of the countries it is selling its products and services. The strength of the organisation's marketing abroad is primarily through the alliance with its business partners.

Export opportunities are continuously being explored the world over, but especially in the U.S.A. Export marketing is undertaken via advertising in leading specialised magazines, sponsoring and attending major conferences or fairs, and speaking about the product at users' group meetings. Initially, it was very difficult to sell this new product and a very high percentage of the profit margin had to be ploughed back into a major marketing campaign whose key purpose was to recruit business partners.. The first export sale was made in Las Vegas, USA at a Lotus Notes Conference. The client was so impressed with the product that he, in turn, became a business partner. Deutsche Bank, Hertz U.S., Henkel, Ingersoll Rand, Philips, Reuters, Siemens and various U.S. Air Force and U.S. Navy agencies are counted amongst Shireburn's clients.

INTERNAL SUPPORTS

The highly technical product requires highly-skilled and technically competent employees. The skills required are not readily available on the labour market and consequently the company provides in-house training, carried out by the heads of the development groups. In some instances, training is also undertaken abroad.

The Shireburn Group of Companies has 21 full-time employees. 5 members of staff are dedicated to *Integra for Notes*: 2 sales representatives (who are not Maltese) and 3 developers. Finance & Administration for *Integra for Notes* is centralised at the Shireburn Group level.

Some 20% of the Shireburn Group employees have had training stints and/or work-experience outside Malta; 15% have had overseas educational experience. All employees are well remunerated and their salaries are considered above average for the sector.



Shireburn thrives from its staff's commitment towards developing new enhancements and product releases. Other reasons for its success include its product support, in spite of any time-zone differences with clients, and the excellent product documentation which is available on the product's web site: www.integra4notes.com. Innovation and creativity are encouraged by John and he likes to surround himself with people who generate ideas.

The firm is technology-driven: flexibility and innovation are its major strengths. Its internal architecture is made of small development groups with clearly defined goals and a flat organizational hierarchy.

As an incentive to its employees, the company operates a profit-sharing scheme: a percentage of the company's pre-tax profit, if any, is shared equally amongst all the employees who are on the company's books as at December of each year, following a performance review.



EXTERNAL SUPPORTS

The firm has excellent relations with the bank whose overdraft facilities it occasionally taps. Otherwise, the firm makes use of accumulated internal funds to service and develop its operations.

Manufacturing exports from Malta are facilitated by the Business Promotion Act. Shireburn Software benefits from the tax incentives contemplated in this piece of legislation, and which will apply until 2008. Rather than paying tax at the normal rate of 35%, the firm qualifies for a reduced tax rate of 5% for the first seven years of operations, followed by a rate of 10% for the next six years and a rate of 15% for the following five years. It also benefits from an incentive scheme for the training of its personnel: 120% of actual expenditure for work-related training is deductible from the firm's taxable income. Shireburn also qualifies for export subsidy support under the same Act. Most such schemes are administered by Malta Enterprise.

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Fax: Fax: (+356) 2131 9528

Email: info@shireburn.com

Website:

www.shireburn.com/

www.integra4notes.com

Activity: Provision of IT
Services & Products for
Businesses.

Employees: 5

Established: 1983

Contact: John de Giorgio
(Managing Director)

Shireburn Software enjoys the administrative and financial support of a larger company, while it focuses on specialised and customised services and products for export. Useful contacts and experiences in the United Kingdom and the U.S.A. triggered the decision to set up the firm. Information Technology expertise enables the firm to deliver customer support across 21 time zones; market its software worldwide, sell through a channel of 24 business partners; while its owner continues to enjoy Malta's quality of life.

Baltic Workboats shipyard

Baltic Workboats Ltd is a shipyard building small aluminum sea going vessels. The company's former name was Saare Töölaevad. The firm was given its English name in October 2004, with a view to improve familiarity in foreign markets and with foreign clients.



"Starting a new business was like jumping into the water head-first" – Mark Muru.



WHO

Mark Muru was unemployed: he was looking for a new job after his former workplace closed down. He had worked for many years at the Saaremaa Boatyard of the Estonian National Maritime Board. These facilities were still in very good condition, and the infrastructure was also quite suitable for a fresh start with a new boatyard. Mark knew how to build boats, while his wife Merle is trained as an economist. And so he took the initiative to identify and contact parties who would be interested in the setting up of a new shipyard, of which he is now the production manager, while his wife manages the finances.

The initial business idea was to concentrate on ship repair. However, Mark had very good contacts with Marine Alutech OY, a Finnish Boatyard. These business links went back to the time of his previous employer. Marine Alutech had won a large delivery order from an Estonian company, Eesti Loots AS (Estonian Pilot Ltd) but lacked the manpower to complete the job in time by themselves. And so, Saare Töölaevad was invited to act as subcontractor. Since then, Baltic Workboats only builds new ships.

WHAT

The production of small, aluminium work ships - like customs and border guard vessels - is quite labour intensive. Raw material comes from wholesalers based in Tallinn (on the Estonian mainland) who in turn import it from such countries as Germany and Norway. There is no locally available raw material in this case. The only possible cost advantage comes from a relatively cheaper workforce. Nevertheless, Baltic Workboats competes in the international market with top quality products. Indeed, Estonian products have to be of better quality than that of established competitors.

The initial idea was to link the brand and the firm name with the island, since Saaremaa was quite well known in Europe and Scandinavia at the beginning of 20th century as a location with a strong shipbuilding tradition. By 2004, however, the company decided that it had to change its name because 'Saare Töölaevad' was really hard to remember as well as to pronounce.



“When customers know that our product is Estonian, they watch out more scrupulously for mistakes than they would for products coming from more established European countries.” – Mark Muru



“To live you have to work: so, one might as well perform pleasant work.” –Mark Muru

WHERE

Although Baltic Workboats has a near monopoly on its products in the local market, this is not a significant feature since the local market is very small. Its main customers come from the other Baltic states, Scandinavia and Germany. Baltic Workboats Ltd has also found a valuable partner in the German Shipyard of Abeking & Rasmussen GmbH, after participating in an international fair. The purpose of the cooperation is to design, develop, and build a fast, 19.5 metre patrol boat which meets stringent quality standards. This product has been successful; it has been sold to clients as far away as Indonesia and is used by the authorities there to chase and catch pirates. The Finnish firm Marine Alutech remains a valued partner; however, Baltic Workboats builds boats under their own name now and no longer as a subcontractor.

Distance from markets in this particular case does not cause any problems. The products are picked up on site by their new owners who are then fully responsible for their transportation.

INTERNAL SUPPORTS

The selection, recruitment, motivation and training of staff is quite effective. There is very little mobility among the employees and salary levels are decent. Employees are loyal and committed to their firm; any disagreements are discussed and resolved in the course of general meetings which are organized whenever necessary. All the employees are Estonians, except for one Finn and one Azeri worker. Some of the employees did spend some time exploring employment opportunities in the rest of Europe once Estonia joined the European Union in May 2004. However most decided that it was better to work in their home country.

Employees used to learn the necessary skills in Finland by means of on-the-job training at Marine Alutech. Now, there is an annual training course for welders at Baltic Workboats. Those employees who sit and pass the examination can upgrade themselves to a higher qualification level, while also benefiting from a promotion and a certificate of competence from the independent and internationally accredited expert company TÜV Nord Gruppe.



Generally, workers at Baltic Workboats require no foreign language competence. Still, employees must know enough English to be able to read and understand instructions, since user manuals in their line of work usually come in that language.

EXTERNAL SUPPORTS

The climate of political stability and the drive towards international competitiveness have left their mark on Baltic Workboats, just as with other export-oriented firms in Estonia. When it started operations, the firm's cost estimates were too much based on one person's opinion. Today, the firm is proud to enjoy the stamp of approval of the Russian Maritime Registration of Shipping.

There are some cooperative links between Baltic Workboats and a local industrial school which trains boat builders. Baltic Workboats takes some trainees from this school and offers them on-the-job training. On other occasions, experimental models are ordered from the VTT Technical Research Centre of Finland: this allows trainees and workers to practise with different designs.

Enterprise Estonia has a regional development centre in Saaremaa. It is the national institution tasked with the support of entrepreneurship, providing financing products, counselling, opportunities for co-operation and training amongst entrepreneurs, access to research and development institutions,. Baltic Workboats has not used its range of supports very eagerly, however: the firm claims that the paperwork required is excessive and simply consumes too much energy. It would involve recruiting an additional, full time employee, which is too much for a firm as small as Baltic Workboats.

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93822 Saaremaa, Estonia
Website: <http://www.swb.ee>
Tel: (+372) 45 21140
Fax: (+372) 45 21145
E-mail: swb@tt.ee
Activity: Aluminium Boat
Builders
Employees: 29
Year Established: 2000
Contact: Mark Muru,
Production Manager

It was unemployment which drove Mark Muru to develop Baltic Workboats, using infrastructure left over in Saaremaa from the Soviet era, and with the help of his wife Merle. Now, many new Swedish customers and partners know of and about Baltic Workboats and its fine yet competitively priced products. The firm is now well established in the regional market. It has valued partners from Germany and Finland, and has opted for an English name to improve visibility in an international market.



Back in 1971, a chance encounter led to the founding of Gaeltec Ltd. This firm is based at purpose-built premises on the outskirts of Dunvegan – a small village in the North-West of the Isle of Skye – the largest of Scotland's Inner Hebridean islands with a population of around 12,000, connected to the mainland by a toll bridge in 1995. Dunvegan is 23 miles (37 km) from the island's main town, Portree and 128 miles (206 km) from the nearest major mainland centre of population – Inverness.



Syd Johnson, M.D.

WHO

Donald MacLachlan was a successful London-based research scientist, involved in the production of specialised temperature and measurement equipment for biomedical, electronic and industrial applications. The pressures of work in London prompted Donald to escape the 'rat-race' and he relocated to the Isle of Skye, where he undertook various casual jobs in order to make ends meet. The decision to start his own business was taken following the identification of a product gap in the market after a chance conversation in a pub with a fellow research scientist from Edinburgh University who became his very first customer. Donald was able to utilise the skills gained in his previous employment as Chief Executive Research Scientist at the London-based company G.V. Planer Ltd., where he was involved in the production of specialised temperature and measurement equipment for biomedical, electronic and industrial applications.

Donald started to manufacture electronic pressure measuring equipment that was difficult to source in the UK and costly to import from the USA. Working alone from home allowed him to be self-sufficient and continue to enjoy his new rural lifestyle on the island. Donald's first client put him in touch with other buyers and gradually word spread and orders started to increase in what is a highly specialised and narrow market.

A good relationship with his previous employer in London enabled Donald to develop Gaeltec using technologies he had developed while still their employee. He paid GV Planer Ltd. royalties every year from 1971 until the late 1990s. Over time, Gaeltec has developed its own exclusive technologies.

Syd Johnson was Donald's first employee and has since gone on to become Gaeltec's Managing Director, responsible for exports within the firm. Syd moved to the Isle of Skye to take over his family's croft after graduating from university. He was then offered a job at Gaeltec in 1974 and has been with the firm ever since.



Certificate No. FM 37880
BS EN ISO 9001:1994
BS EN 46001:1997
CE 01986

"We have a very strong brand identity now – I believe it is quite common for those using our products to refer to them as 'Gaeltecs'!" - Syd Johnson, Managing Director.

WHAT

Gaeltec manufacture transducers (tiny electronic instruments for measuring pressure). Initially, these were used for technical applications such as measuring wind and water pressure in such diverse applications as formula one racing cars and ocean going vessels. Today, one of Gaeltec's core products is the Catheter Tip Pressure Transducer which is used in the medical industry to provide accurate pressure readings while fluid is being infused or drawn to and from the human body to aid the diagnosis of oesophageal, gastrological and urological ailments. The firm also manufactures digital recording hardware and accompanying software which are used with their transducers to provide PC-based recording and analysis systems. The firm also continues to undertake individual commissions for products for use in both engineering and medical applications.

All of Gaeltec's products are highly specialised and manufactured to strict and specific standards – the firm adheres to international quality management regulations such as ISO 9000. The firm enjoys a very good reputation among its clients as a quality supplier of both products and services. The firm's exceptional success as an exporter is also due to the fact that the electronic goods it produces are high value and low volume. These features enable Gaeltec to operate with very low freight costs (less than 2% of their products' total landed cost), keeping export costs down. Because of their lightweight nature, products can be insured and delivered anywhere in the world using conventional national mail/post networks.

Since the production runs are rather low – around 500 discrete products per year – the production system can afford to avoid automation, providing useful jobs in this remote region of the island.

WHERE

Distance from markets, resultant transport costs and a limited local market makes export manufacturing on the island very difficult. Consequently, very few manufacturing businesses are based on the Isle of Skye. However, Gaeltec's remote island location has been used as a successful marketing tool – with their memorable location and locally-inspired firm and brand name securing custom.



“Customers of Gaeltec find it quite remarkable that our firm is located on the Isle of Skye. The exceptionality of our location makes it difficult to forget us” – Syd Johnson, Managing Director.

There was no perceived drive to export during the business's formative years – more of a natural progression, with the firm's founder only intending to diversify the business to ensure that he could remain financially self-sufficient. However, Gaeltec's participation in medical supplies trade fairs led to a natural progression into international sales as word spread about the firm throughout the very specialised medical supplies industry. The firm now operates a similar product distribution system to other manufacturers in the same industry – using a network of international medical equipment distributors. International opportunities were not actively explored by Gaeltec Ltd. until more recently. The firm has now been exporting for almost twenty years and today the business has fifty-four regular overseas clients and exports to seventeen different countries. The firm has just one direct competitor in the UK and very few in the rest of the world.

Gaeltec employs 22 people, most of whom worked elsewhere before joining the firm and having gained educational and work experience off island. The firm's production requires specialist skills in electronics: skills which are not readily available in the local labour market. However, the firm has successfully recruited a number of islanders on its staff from relevant backgrounds, including science and software engineering graduates. All the staff reside in Skye (the employee having the furthest distance to travel to/from work lives in Portree – the island's main town). None of Gaeltec's employees are directly related to the founder or the current managing director. There are however two husband-wife teams working with the firm.

INTERNAL SUPPORTS

In 1974, a government grant of £20 a week enabled Donald, the firm's founder, to take on his first employee – Syd Johnson.



The business provides its own in-house training and also additional staff training where this is perceived to benefit the business. Two staff members have undertaken further training while employed by Gaeltec: one through distance learning and the other by attending a vocational course at a mainland college.



The firm's flexibility and ability to innovate provides a significant operational advantage. Gaeltec Ltd. will customise or design their products to suit their individual clients' needs whenever possible, which opens up a huge potential market for the firm.

The firm's staff turnover is extremely low: when staff members do leave the firm, it is usually either to retire or relocate off-island. Staff also enjoy ample time flexibility, clocking in and out of work in a discretionary manner, as long as they put in their 40 hours' worth per week.

EXTERNAL SUPPORTS

Over the years, Gaeltec has benefited from a number of external supports - although these are not strongly perceived as having contributed to the firm's export success.

Regional Support:



At a regional level, Highlands & Islands Enterprise (HIE) - formerly known as the Highlands & Islands Development Board - has contributed towards the capital costs of building new premises for the firm at Dunvegan in 1977, and the expansion of these premises in 1991. Gaeltec eventually bought the premises from HIE. HIE has also funded a number of trips to marketing exhibitions throughout the UK for Gaeltec personnel to promote the firm's products.

National Support:



In the past, the firm participated in a national government scheme which was run by the Export Credit Guarantees Department (ECGD), an export credit agency. This scheme ensured that the firm received payments for goods upfront and also provided Gaeltec with an insurance policy for any missed payments.

More recently, Gaeltec has been liaising with the Scottish Executive and their contacts in China to try and develop their export market there.



In 2001, Gaeltec was one of fifteen Scottish companies awarded a share of £2 million funding for research and development projects from a Scottish Executive administered SMART: SCOTLAND initiative which encourages small firms to develop highly innovative technology and commercially viable products and processes by providing direct financial assistance towards the costs of carrying out a technical and commercial feasibility study lasting between 6 and 18 months. SMART: SCOTLAND winners who successfully complete their projects and who require further assistance to develop a pre-production prototype can get further support through the SPUR programme.

European Support:



Gaeltec has participated in the European Commission's Information Society Technology (IST) Programme, part of the European Union's Fifth Framework Programme for Research, Technological Development and Demonstration Activities, launched in 2002. Under this programme, Gaeltec received a three year grant enabling the firm to collaborate with other European companies to develop a new treatment for cancer of the throat and the oesophagus. This is the first time the firm has been involved with work aimed at treating a medical condition, rather than just diagnosing it: this has the potential to open up a whole new export market for Gaeltec. There are now plans afoot for Gaeltec to participate in the European Commission's 6th Framework Programme (FP6).

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The identification of a highly specialised, high value product which is easily transported, the business's flexible approach to clients' needs and the development of a high profile brand over the last 30 years has enabled Gaeltec to evolve into a highly successful, specialised and internationally renowned manufacturing company; which however has remained small scale, worker friendly and located on a small island, far away from anywhere significant. Gaeltec enjoys a rare combination of a non-automated production system producing a very high value added product, thanks to considerable technological input in the design, portability and reliability of the product.

1. Overview

NOT A SINGLE ONE of the five ‘high-tech’ stories above deals with a firm which was set up exclusively on the basis of local, island knowledge. We read of a shifting and shuttling from island to mainland, from mainland to island, trying to achieve and hold on to the best of both worlds. Combining the markets, clients, knowledge and technological dynamism of the city; with the serenity and more leisurely pace of the island way of life. Effective communications are crucial to make this possible and practicable. Although the internet and the world wide web facilitate this, they do not replace conventional opportunities for face-to-face exchanges. Access to regional and international airports, apart from ferry services, are important for island communities to remain ‘plugged in’ with the rest of the world. Islands which are jurisdictions have an advantage here because they are more likely to have such infrastructure, even out of sheer national pride. The Isle of Skye, in contrast, where Gaeltec is located, is still to et its own airport.

2. 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 wth its centrally planned economy.

3. 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. 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.

4. 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.

5. Securing & Maintaining 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.

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.

6. 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". 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" - 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. This detail cannot be stressed enough: interviewed island-based entrepreneurs 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.

7. 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 genealogy database and web-site (with access limited to Icelandic nationals, and the site only available in the Icelandic language); but this has no direct relationship with its anti-virus export product and is mainly a form of sponsorship-in-kind to the very nationalist, Icelandic community.

8. Targeted 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 programmes to SMEs is also evidenced in other countries. 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 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.

9. 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. International awards and recognition by the UK-based Financial Times (in the case of Shireburn) are important signifiers of a successful and reliable product and associated, crucial ‘after sales’ customer service. A Russian and a European ship register have both certified Baltic Workboats’ craft as meeting international standards.

10. 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 benefited from apprenticeships with a Finnish company which had placed orders for the Estonian firm’s sea-craft. 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.

Conclusions:

1. the mix of the local and global in entrepreneurship.
2. the nature of the material or virtual products
3. the search for markets and niches beyond one’s home turf
4. human resource strategies (recruitment, motivation, professional development, low turnover)
5. the combination of strategy and serendipity
6. the gender dimension (profiling successful men and women)
7. the diverse nature and impact of external supports (national, regional)
8. adopting and adapting technology
9. linking up knowledge, policy & business ‘silos’