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Is Access an Issue Affecting Irish Competitiveness?

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LOGISTICS SOLUTIONS

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LOGISTIC CHALLENGES FOR IRISH EXPORTERS

AIR TRANSPORT ON THE ISLAND OF IRELAND

ACCESS IRELAND

Access Ireland

nitl

Supply Chain Management Centre of Excellence

D.I.T
Is Access an Issue affecting Irish Competitiveness?

by RANDAL FAULKNER and EDWARD SWEENEY, NITL

INTRODUCTION

Being an island, off an island, off the ‘mainland’ of the European market would appear to present Ireland with significant disadvantages in relation to competitiveness. Indeed, in 1996, as part of the process of developing a long term strategy for enterprise in Ireland, Forfas prepared a report called ‘World Class to Serve the World’ which identified the key issues affecting Ireland’s future role as part of a global economy. Access or, in other words, getting products in and out of Ireland was identified as a critical issue. Various recommendations, including the establishment of the National Institute for Transport and Logistics (NITL) as a centre of excellence for transport and logistics to support companies operating in Ireland, were put forward to address this issue.

This paper examines the changing role of transport in determining economic competitiveness and whether it is an issue for Ireland both now and in the future.

FACTORS OF PRODUCTION

The economic textbooks talk about the ‘factors of production’ which determine the location of industry and therefore the economic development of a country or region. These include such factors as closeness to sources of raw materials, closeness to market, availability of labour and availability of capital.

Sources of raw materials and location of markets are the factors directly related to access and for many years these were the factors that governed Ireland’s economic development. We did not have many natural sources of raw materials nor was Ireland a big enough market to support a significant industrial base. However, Ireland did have land as a significant natural resource and it was obvious that agriculture would be an important sector with closeness to the large UK market being a key rationale for its development. The production of linen was another important industry historically as Ireland’s climate and land was ideally suited to the growing of flax and with closeness to raw materials being a key factor of production, the processing of that flax and the manufacture of linen products developed in Ireland, with many towns (particularly in Northern Ireland) having large linen factories. It was this base that led to Ireland’s strength as a textile centre. In both of these cases it was ‘closeness’ or ‘access’ which was the determinant of the type of economic development Ireland enjoyed.

But the relative importance of the factors of production change over time. The 60’s and 70’s saw the relative importance of resources such as people and facilities taking a leading role in economic development. The IDA built ‘advance factories’ so that new businesses could quickly and easily start up. The well known advertisement then used by the IDA,
featured a photograph of Ireland’s young and well educated workforce to attract inward investment. Financial incentives to attract foreign companies were used and Ireland was promoted, particularly to US companies as a ‘Gateway to the European Market’, albeit at a distance.

The groundwork done then to attract industry certainly paid off in the 90’s when Ireland enjoyed growth rates ahead of any other EU member. To support the unprecedented growth of the Celtic Tiger era, Ireland did improve its access issues. Dublin has more direct international flights than most UK regional airports. Sea crossings between Ireland and the UK have a lower cost per kilometre than the crossings between UK and continental Europe.

One consequence of the Celtic Tiger is that now Ireland has to ‘play with the big boys’. Ireland is competing in a global industrial development game. Competitiveness means ‘global cost competitiveness’ as companies review their cost base and consider the total cost of their supply chains of which access or transport cost is just one element and not necessarily the most important cost element. The way in which transport or access is managed has changed and companies in Ireland need to be aware of this and adapt their management focus.

Below is a brief description of how the management of transport has changed over the years.

**INDUSTRIAL MOBILISATION**

In the early days of modern industrial development, when Henry Ford produced his Model T, customers could have any colour they liked as long as it was black. The primary driving force for economic development was production. People wanted the product, and the secret for success was being able to produce large quantities as cheaply as possible, and the easiest way to do this was to make them all the same. There was limited or no competition, so the sales function consisted of taking the orders from the queues of customers prepared to buy, and the transport function was solely concerned with getting the product from A to B as cheaply as possible - not as quickly as possible, because customers were prepared to wait.

**MASS PRODUCTION AND MASS MARKETING**

Soon, Henry Ford had competitors who wanted to take advantage of the market opportunity he had created. Cost effective mass production remained important with features such as design, colour and accessories being introduced to create product differentiation. Marketing took on an increasingly important role promoting the relative advantages of their product over competitors products and creating a perceived need for the special features. Additionally, customers were no longer prepared to wait, because, if Ford could not supply a car, General Motors could. Having product in stock and close to the market place was critical. The transport function also changed and was renamed ‘distribution’ having responsibility not just for transporting the product from A to B, but additionally having responsibility for managing warehouses/showrooms close to the market place and managing the stock in these warehouses/showrooms, in other words, managing a distribution network.

Interestingly it was at this time that Ireland did develop a significant car assembly business with Ford in Cork and BMC, through Brittain’s, in Dublin. The rationale being that it made sense to manufacture components in UK or Germany and ship them to Ireland for final assembly. Various government financial incentives made this attractive.

**FLEXIBLE MANUFACTURING/MARKETING**

Growing consumer choice and a finite market created market pressures for companies. The marketing people needed to introduce new products and new features to
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Maintain sales in an increasingly competitive and oversupplied market place. New car models were introduced every year and consumers were put under pressure to change cars in order to keep up to date with the latest model. Huge sums of money were spent on advertising. For production this was a nightmare. The way a production manager keeps production costs down is by making large quantities of the same product. Introducing product changes meant ‘changeovers’ and ‘downtime’ and therefore reduced production efficiency and increased cost. ‘Carrying the can’ for the conflicting objectives of marketing and production was the ‘distribution’ function. The distribution manager would be trying to meet orders for specific products from customers while at the same time trying to get that specific product made within the timescale demanded by the customer. Generally this was done at the expense of holding stock. Production would produce long runs of one model and then change to another model etc. Stocks would build up. However, this was also a time when the customer would order a car and specify the colour, upholstery finish, added features, but usually either waiting for an age for the specified product or having to accept something different from that ordered.

In far-thinking companies it became clear that someone was needed to reconcile the conflict between marketing’s need for flexibility and production’s inflexibility, and still meet customer requirements. In these companies the distribution function was renamed ‘logistics’ with responsibility for making the right trade-offs and encouraging flexible production to match the flexible marketing. Logistics management encouraged production to be intimately involved in product design in an attempt to get designers to use a standard basic design with standard components and then developing ‘late configuration’ of product i.e. designing a product which was largely standard and could therefore be produced in reasonable runs, and then introducing the specific changes as late as possible was one of the techniques used in the motor industry to reconcile the conflicting objectives of production and marketing. Other techniques included better forecasting so that production could be planned well in advance.

This change potentially works to Ireland’s advantage. Where closeness to raw materials and markets limited Ireland’s potential in the early days of industrial development due to our peripheral location, today with global sourcing of raw materials and global markets no one location has a particular advantage in terms of access. The locations that will succeed will be those with:

1. the capability to introduce new products i.e. research and development
2. strong sales and marketing skills
3. the capability to effectively manage these global supply chains

While the automotive sector has been used to illustrate the development of the transport management function over the years, the same companies in the clothing sector is a good example of how a traditional Irish business has managed to adapt to the changes.

As discussed earlier, linen was the base from which the textile business in Ireland developed, due to Ireland’s capacity to grow flax the raw material for linen. As linen declined and synthetic fibres were developed, Ireland, particularly Northern Ireland, managed to attract a significant number of manufacturing companies e.g. DuPont, Enkalon etc. to make material and companies like Fruit of the Loom to make garments. The raw materials were synthetic and the key factors of production were the available workforce and Government financial incentives. As the market for these materials declined and low cost manufacturing locations developed, so the factories closed or relocated. But Ireland’s textile business has reinvented itself. With good design skills, strong brands and effective sales and marketing based in Ireland, Ireland’s textile business has taken advantage of the low cost production centres to manufacture, but is managing the business from

GLOBAL MANUFACTURING/MARKETING AND MASS CUSTOMISATION

Today the situation has changed yet again. Now companies source raw materials in several countries, manufacture part of the product and/or subcontract some or all of the production to third parties somewhere else, and undertake final assembly in another country and then supply markets all over the world. Managing this increasingly complex process is the ‘logistics’ function, but now renamed supply chain management (SCM). It has become possible to coordinate everything because of the existence of sophisticated IT systems giving visibility to the flows of product and their associated costs throughout the supply chain.
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Ireland using its new found supply chain management skills coupled with sophisticated IT.

**IS ACCESS AN ISSUE FOR IRELAND?**

If our thesis is correct then it will be SCM capability rather than access which will determine the competitiveness of Irish companies in the future. Unfortunately there are still many Irish companies who are in the ‘transport management’ era, never mind having progressed to ‘distribution management’ or even ‘logistics management’. This is reflected in the third party transport sector as well. Changing the word on the side of a truck from ‘transport’ to ‘logistics’ does not mean a relevant response to the changing needs of the industrial base.

A number of key trends and developments in the logistics/SCM field illustrate how innovative thinking is required if the access issue is to be fully addressed. Firstly, fully vertically integrated supply chain structures (based on the logic of control through ownership) have been replaced with more virtual structures as a result of concentration on core competencies and outsourcing. Secondly, new supply chain models, such as fourth party logistics (4PL), have presented the opportunity for manufacturers and retailers to re-evaluate their relationships with transport and logistics service providers. Thirdly, competitive advantage in the increasingly global marketplace has moved away from the traditional dependence on cheap labour and access to cheap raw materials. It is now dependent on a range of factors including, but not limited to:

- design and new product introduction capability;
- marketing and brand management;
- knowledge and skill base;
- strategic vision;
- product and process technology; and
- information management.

A key ingredient in this mix is SCM. NITL’s ongoing research indicates that, whilst pockets of SCM excellence undoubtedly exist, there is significant potential for improvement.

**CONCLUDING COMMENTS**

While access in the traditional sense is not necessarily the most important issue for Ireland’s competitiveness now or in the future, recognition of the need to develop SCM capability is a challenge which needs priority attention by Government and by companies in all sectors. What is required is a broader definition of “access” – away from a purely product and material focus to an approach which embraces information, knowledge, skills and expertise.