[*Translating and the Computer 25*, November 2003 [London: Aslib, 2003]

Making a Business Case for Localisation

Reinhard Schäler
Localisation Research Centre (LRC)
Department of Computer Science and Information Systems, University of Limerick, Ireland
www.localisation.ie
TILP - The Institute of Localisation Professionals
www.tilponline.org

Reinhard. Schaler@ul.ie

1 Abstract

What convinces a business manager to localise his company's products and content offering? The answer may seem obvious; it would seem to be a straightforward task, simply follow the example of large application and content developers, such as IBM/Lotus, Microsoft and Oracle who make more than 60% of their revenue from the sales of their localised products.

At a second glance, however, the answer requires some deeper analysis and more thought. Few companies have the experience, the global branding, the financial might and the access to sophisticated distribution networks as these multinational giants have. And, perhaps surprisingly, even Microsoft does not localise all its products into all languages.

Unfortunately, it has so far been difficult to gain access to studies providing the hard figures and the framework necessary to back up the case for localisation.

This presentation will develop a business framework that will allow you to assess how your organisation's products and content could be localised and the financial implications this would most likely have on your organisation's revenue stream. It will also provide you with an estimate of how much it could cost if your organisation decided not to localise.

The article will draw on data presented in relevant studies by industry consultants as well as research carried out at the Localisation Research Centre (LRC) at the University of Limerick.

2 Background

2.1 The Localisation Research Centre (LRC)

The LRC was established at University College Dublin (UCD) in 1995 with financial support from the Irish Government. In 1999, it moved from UCD to the University of Limerick (UL). The LRC is a research centre of UL and fully owned by the university. The LRC's mission is to provide the localisation community with a focus point and a research and educational centre.

The LRC

- participates in international research projects, among them
    - ELECT - The European Localisation Exchange Centre

- Transrouter - Automated project analysis tool
- WebIT - IT Terminology Online

- organizes an annual conference
- holds an annual International Localisation Summer School
- runs regular professional development courses
- assists in the running of UL's Graduate Diploma/MSc in Software Localisation
- publishes Localisation Focus, the International Journal for Localisation
- runs annual awards for the best localisation thesis (sponsored by Symantec), the best localisation scholar (sponsored by IBM) and the best global web site (sponsored by Euro RSCG).

2.2 The Institute of Localisation Professionals (TILP)

TILP was established in July 2002 as a not-for-profit organization by internationally respected members of the localisation community. It is the primary goal of TILP to develop professional practices in localisation globally.

TILP aims to

- provide professional certification;
- be the representative body of the localisation professionals;
- be the reference point at global level for the localisation industry and those requiring information about it;
- promote the industry through a variety of publications and activities;
- provide the infrastructure for a range of activities supporting the development of the industry;
- maintain direct and regular contact with localisation companies, government departments and agencies, researchers and students, and the media and international consultancy firms.

3 Localisation

There are as many definitions of localisation as there are localisation service providers and that is, according to the Globalisation and Localisation Association (GALA), five thousand: the *three big ones* (Bowne Global Solutions, SDL International and Lionbridge), probably less than a dozen medium-sized enterprises and almost five thousand small, owner-managed single language vendors.

For the purpose of this article, we will define localisation as *the provision of services and technologies for the management of multilinguality across the digital global information flow.* This definition goes far beyond and is, at the same time, considerably more succinct than the more “traditional” definitions, referring to localisation as the *linguistic and cultural adaptation of products to the requirements of a foreign market.*

We believe that our definition encapsules a number of characteristics of localisation otherwise not covered. These are:

- It covers services (translation, engineering, management etc.) **and** technologies (computer assisted translation, process automation, localisation automation);

- It is always and exclusively applied to **digital** matter which implies, amongst other points, that it is relatively speaking low-cost, multimodal and instantaneous;
- It is aimed at global information, which is accessible **anytime, anywhere** and by **anybody.**
- The subject matter of localisation is digital content - whether this is primarily an application (with embedded content) or primarily content (with an embedded application). The distinction between "application" and "content" disappears in the digital world and becomes digital content, digital information.

It is worth noting here, that localisation does not always and necessarily imply the localisation of a complete service or product. To the contrary, products are often localised only partially and to a point where the effort involved in localisation can be well balanced off against the potential income from a particular market.

3.1 The three principles of localisation

In our opinion, localisation efforts are driven mainly by three principles. They are:

1. Increase return on investment (ROI)
   An already developed product is superficially adapted to the requirements of foreign markets with a minimum of additional investment and is then sold in these new markets for the same price as the original product.
   This principle implies that it does not always and necessarily make sense to localise a product. If the target market will most likely not yield the returns necessary to justify the localisation effort (and this has to be interpreted in the widest sense)[1] than localisation makes no sense.Use globally acceptable content (LCD/I18N)
   Developers are instructed to develop products and services using content covering the lowest common denominator (LCD): the out-of-the-box product should not offend anyone and work for all *locales* without the need for further adaptation. In other words, services and products should be *enabled* and *internationalised (I18N).* Colours, symbols, sound and signs should be recognisable and understood by as many potential users as possible, independently of their linguistic or cultural background. The less adaptation has to be done, the higher the potential earnings from the sales of the localised product will be. The aim is to reduce the localisation effort to translation. However, aiming for the lowest common denominator is good for short-term revenues, but the information and entertainment value of the product and/or service suffer and, subsequently, its long-term market value.
3. Re-use (leverage) as much as possible
   Translation has to be automated as much as possible. Changes to the original product have to be limited to an absolute minimum, because each modification of the original will have to be implemented in each of the localised versions (x20, 30 or 40). Translations of previously translated, unchanged sources can automatically be inserted into the corresponding target languages of the updated version. This

[1] When calculating the return on investment (ROI) in localisation, it is not sufficient to subtract the relatively well-defined costs of localisation proper from the projected return, it is also necessary to take into account other costs such as those for market entry or product support as we will discuss in more detail later on.

can be up to 80% of the total word count and offers potential savings of millions of dollars/euro.

3.2 The emergence of an industry

The localisation industry as we know it today emerged in the mid 1980s. Ireland quickly became one of the world centres of localisation, because of the advantage of having English as the dominant language, a highly educated but poorly paid labour force and exceptional government grants and tax incentives for an industry sector working under the label *international product development.*

The localisation industry in Ireland was so successful in the nineties that the country became the world's number one exporter of software, outperforming even the United States of America – because seven out the world's ten largest independent software developers had located their headquarters for Europe, the Middle East and Africa (EMEA) in Ireland, amongst them Microsoft, IBM, Oracle, Novell, Symantec, Apple/Claris and Corel.

Between them, they covered a large proportion of the world-wide market for translation and software or web localisation which has been projected to grow from US$11 billion in 1999 to US$20 billion in 2004[2].

An interesting but often overlooked fact is that approximately 95% of all localised products still originate in the USA where the overwhelming majority of digital publishers now make more money from the sales of their localised products than they make from the sales of the original product.

Microsoft, for example, has made more than 60% of revenues from its international business for years, with the revenue from localised products exceeding US$5 billion. In Ireland alone, Microsoft carries out more than 1,000 localisation projects (product/language) per year bringing in revenues of US$1.9 billion from its international sales in 2001.[3]

4 Why localise?

A short survey amongst digital content publishers carried out by the LRC seemed to indicate that the business case for localisation is quite straightforward. So straightforward, in fact, that many otherwise sensible business people have not more to say than *well, it makes sense* or *everybody else is doing it.*

Even authors of serious business books on globalisation show pictures of web sites and assert understatedly *If this page were all the information this company offered to world markets, it would not be the third-largest auto manufacturer in the world.*

---

[2] Source: Allied Business Intelligence
[3] Steve Balmer (2002)

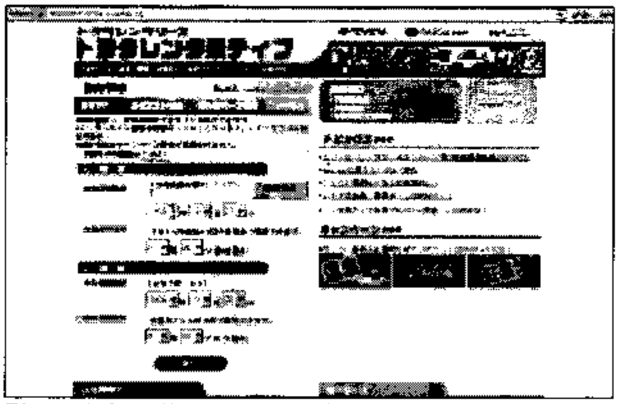

Figure 1: http://rent.toyota.co.jp

Other figures often quoted in support of a localisation business case are those in relation to the evolution of the online linguistic populations and global internet statistics by language[4].

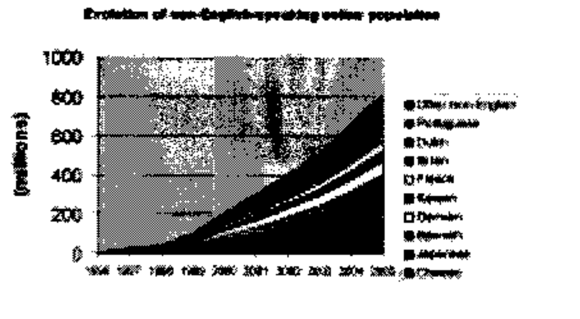

Figure 2: Online population

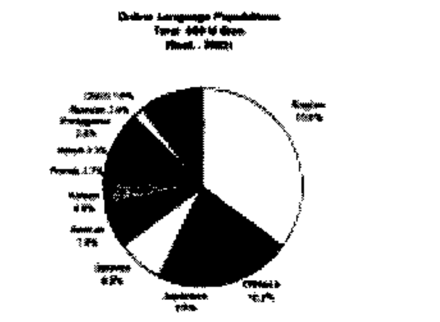

Figure 3: Online language population

According to IBM, more than two-thirds of today's internet users are outside the United States, and the IDC forecasts that fewer than 25% of web users will live in the United States by the year 2005 with more than 70% speaking a primary language other than English.[5]

Indeed, there seem to be plenty of examples to show that localisation is the route to take if a digital publisher is planning to increase its revenue. As already mentioned, the big three (Microsoft, IBM and Oracle) make more than 60% of their revenue from international sales. It works for them, so it must work for everybody else.

What is often forgotten, however, is that these multinational giants have almost two decades of localisation experience behind them. During this time, they have not only figured out how to most efficiently and effectively bring their products to the international markets, they have also made crucial mistakes and learned very expensive lessons – lessons, small and medium enterprises and even mid-sized divisions of large multinationals could not afford to make in today's economy.

Just adding a line item to your budget to cover your localisation costs – which can easily be calculated by multiplying the number of words in your source product with a

[4] Both statistics are provided by www.global-reach.biz/globstats
[5] www-3.ibm.com/software/globalisation/story.jsp

rate per word and adding a percentage value for project management – no longer works and, perhaps more importantly, will no longer convince senior management to allocate the necessary budget provisions to your division.

In addition, when making the case for localisation within an organisation, it is crucial to keep in mind that different groups within this organisation will have different interests and reasons to localise.

4.1 Localisation and company politics

Senior management is concerned with the overall successful implementation of a globalisation strategy to position the company in the global market. From their perspective, localisation is the means to realise this goal. They know, it has a price.

Sales and marketing, charged with bringing the company's products and services to new markets and increasing sales revenues, are interested in opening up as many new markets as possible. They are the ones that raise localisation requests and they are, to a certain extend, involved in identifying and developing local content. They do not, however, have an immediate concern with the cost of localisation.

Operations, in turn, are charged with the cost-effective running of the localisation projects. They are the ones pushing for effective localisation and leveraging . They operate under continuous cost pressures and are, in the corporate context, always the "poor relations". They will try to keep the amount of material to be localised down to a minimum.

The interest of shareholders is, of course, broadly in line with that of senior management and sales & marketing. Share prices will increase as the company gains global market shares.

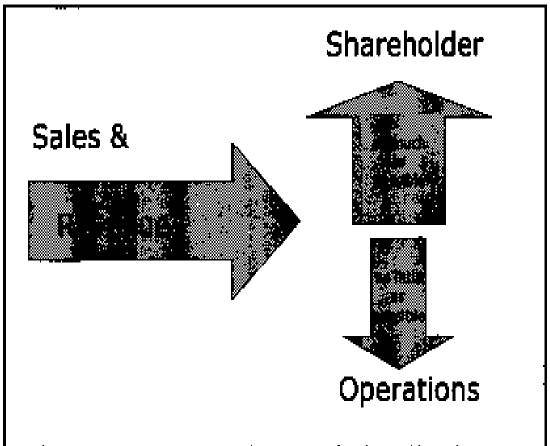

Figure 4: Corporate interest in localisation

5 Making the business case

This section attempts to rationalise the almost instinctive inclination towards localisation. It will cover the following elements within an overall business case scenario[7]:

[6] See *The three principles of localisation* outlined earlier.
[7] The original model of the business case scenario outlined here is based on one that was presented by Ben Sargent of Lionbridge at a seminar organised by *Client Side News (CSN)*, 25 June 2003, in Denver. Colorado.

- Why? - Strategic market entry (ME) decisions
- The matrix - data to back up your strategy (DR)
- How? - The choice for the appropriate resource model (RM)
- The holy grail - calculation of *Return on investment (ROI)*
- International product strategies - extend, adapt, invent (EAI)
- Who? - The outsourcing model (OM)
- What? -Identifying the most appropriate solution (SD)

Figure 5: The overall business case scenario

5.1 Why? - Strategic market entry decisions

There are many reasons why a business may decide to expand into new markets, ranging from tactical ones promising immediate results and mainly driven by expected short-term revenue growth, to more long-term strategical reasons representing an investment in future market opportunities by establishing market entry advantages over competitors by the early establishment of a brand.

There are a number of key performance indicators (KPIs), which are often used to describe the motivation behind the localisation effort and to outline the categories used to measure its success.

Increase sales in specific markets
The immediate aim here is to increase sales and get into new markets which could be either new geographical (new countries) or sectorial (government, corporate, consumer) areas, i.e. a company could decide to start selling their services or products in other countries or in sectors previously not explored.

Gain strategic advantage over competitors
While the medium to long-term aim is, as in the above case, to increase revenue, the immediate goal is to gain a strategic market entry advantage over competitors even if this could mean a short-term loss. The investment is expected to pay off at some time in the future.

Branding
The early establishment of a recognizable brand in a new market is also a more long-term investment which will not show positive returns immediately. Companies may decide to bring their brands to other markets even if the product itself is not fully available in these markets in order to secure their position.

Win the war
There are cases where organisations decide to adapt services and products to new *locales* because there is a perceived political and economic need for it. An example is the phenomenal investment in language and localisation technologies at the time of the cold war, the Vietnam War and the first and second Gulf Wars.

No matter what the underlying motivation for market entry may be, localisation owners need to demonstrate what the benefit and the potential return on investment (ROI) for specific localisation projects are, especially in times of great economic pressures. They can only do this working with key performance indicators (KPI), such as those discussed above.

A point not discussed here but definitely worth exploring is the potential cost **of not** localising a service or product for specific markets for an organisation.

5.2 The matrix - data to back up your strategy

Market entry decisions need to be backed up by solid data clearly sizing the potential markets and estimating the potential revenue to be generated from them. In the case of digital content, some of the typical data used to justify localisation projects for specific markets has already been discussed, e.g. a breakdown of the online population by language or the evolution of the number of online users by language over time. Other data often used to back up market entry requirements charts earnings per capita of the target population, their use of and access to technology and their education.

One way of evaluating the readiness of an organisation to enter new markets is by looking at the portability of its services or products, its potential to successfully penetrate the target markets and its current compliance with local conventions.

Portability
Does the organisation's product meet international requirements and general international market expectations? Can it be used in other countries and by users other than those for which it was originally intended? Does the organisation have access to an appropriate distribution network for the target markets and is it in a position to adequately promote its services or products in these markets?

Penetration
What size are the new markets under evaluation? How big is the intended target audience? Which language do they speak, which currency do they use? Do the target users have the means and the inclination to buy the services or products potentially on offer?

Conventions
Does the services and products comply with the legal regulations governing the target markets? Are they in tune with local cultural conventions and religious convictions?

The following table summarises the recommended action for organisations with products and services according to their readiness to enter new markets. It also provides examples of products for each of the possible categories under consideration.[8]

Port-able	Pene-tratlon	Conve ntions	Action	Example
√	√	√	All axes are aligned for your global success.	Sell travel and leisure products to Canadians or books to the English
√	X	√	The product and politics line up, but the population just is not ready yet to buy	Technology penetration is too low for the demographic that might buy your product.
X	√	√	The product is not right for sale outside your traditional trading are, although it would be legal to sell and the population does have the means to buy it.	Sell genetically modified brie to the French.
√	√	X	Product and demographics are right, but legal or logistical issues hinder success.	Sell missile parts to countries categorised by the U.S. government as rogue states.

Figure 6: Market entry decision matrix

5.3 How? - The choice for the appropriate resource model

Once the market entry decision, backed up by data, has been made an appropriate resource model has to be selected.

The basic choices for publishers are:

- Distributor
- Insource model
- Outsource model
- Hybrid solution

Organisations exploring the possibility of entering new markets are often surprised to find out that their products have already been adapted to the needs of local markets by their **distributors.** While the solutions offered by distributors often do not reach the

[8] Based on DePalma (2002), p. 105.

level of quality organisations are aiming for and are often low-tech *ad-hoc* solutions, they are always based on an in-depth knowledge of the market and have been implemented in a direct response to market needs and requirements.

To gain more control regarding how their services and products are offered in linguistic and cultural environments and the way in which they are positioned in new market places, organisations often choose to take the localisation process back inhouse. The added advantage of the **insource** model is the opportunity to learn about and understand in depth all issues arising during the localisation process and, thus, facilitate the development of a high level of inhouse expertise, knowledge and control. Disadvantages of this model are the increased headcount and internal overheads bringing with them a lack of flexibility, especially in times of economic turmoil.

Outsourcing is probably best suited for mature organisations who have an in-depth understanding of the internationalisation and localisation issues in relation to their services and products. They can confidently select suitable partners to take over what in many development organisations is not considered to be core competency. Alternatively, this route is also suitable for smaller organisations that simply do not have the inhouse capacity for service or product localisation. Options include single language vendors (SLVs) and multi language vendors (MLVs).

Hybrid models are the choice of organisations with the resources and the experience necessary to pick the best solutions for specific projects without loosing inhouse competency.

5.4 The holy grail - calculating *Return on investment (ROI)*

At the centre of all considerations in relation to bringing services and products to the global market is the question of return on investment, or *ROI.*

On the surface, calculating ROI seems an easy task:

{Cost of localisation} - {Revenues from localised service/product} = ROI

However, this equation is only correct if its elements are clearly defined. While it is relatively straight forward to define and measure the direct revenues from the sale of localised services and products, it is at least difficult, if not close to impossible, to accurately measure the benefits of localisation driven not by short-term revenue gains but by longer-term strategies such as those discussed earlier (gain strategic advantage over competitors, branding).

Equally, the calculation of the full cost of localisation is extremely complex because it does not just include the charge for translation, engineering and project management billed by localisation service providers (inhouse or third party) to their clients, but also has to address other costs such as those of market entry and customer support.

There are currently no industry standards available allowing organisations to easily identify the tasks and activities that should be included in the calculation of these costs, let alone concrete figures providing broad guidance to newcomers.

To address this shortcoming and initiated by requests from industry, the Localization Institute (www.localizationinstitute.com) facilitated the establishment of *The Localisation Metrics Initiative (LMI)* in the spring of 2003. Its aim is to define and collect client localisation metrics, i.e. measurable and comparable data on localisation projects. Companies participating in LMI include Cisco, eBay, Documentum, Macromedia, Palm, Powerquest, PTC, Siebel, Sun, and Veritas.

So far, the group has defined the following metrics:

- Globalization headcount
- Localization headcount
- Outsourced vs. in-house globalization expenses
- Globalization costs
- Localization costs
- Localization costs against Localization Product Revenue
- Outsourced localization cost per word
- In-house localization cost per word
- Internationalization resources
- Internal and external linguist cost
- Target languages by product type
- International company websites
- International websites and product localization
- ROI
- Localization product ROI

The group believes that agreeing specific definitions is a crucial first step, which will allow participating companies not only to track change within their own organisation, but will also make it possible in the future to compare company specific values with industry averages. The collection and analysis of data is planned for 2004, as is a similar effort to define and collect localization productivity metrics.

5.5 International product strategies - Extend, adapt, invent

The decision to go global will have to be mapped to strategies offering different options according to market needs and requirements on the one hand and the ability and strategic intentions of an organisation on the other.

Enabling
The service/product can be used by speakers of the language(s) in the target market, even if the user interface and accompanying documentation are not translated. The product supports all relevant scripts and writing systems and what has been described earlier as the *lowest common denominator (LCD).*

Internationalisation
The service/product has been developed in such a way that it can be easily localised, content and functionality are kept separately, elements and components to be localised are easily accessible.

Localisation
This involves the translation and subsequent testing of one or a number of language versions of a service/product. Products and services can be localised:

- Fully
- Partially
- By tiers (e.g. tier one: the top three markets; tier two: next 4-6 markets, etc. with varying depth of localisation)

Popular acronyms for tiers include:

- FIGS: French, Italian, German and Spanish
- CJK: Chinese, Japanese, Korean
- BRIC: Brazilian, Russian, India (Hindi), Chinese

While *enabling* and *internationalization* will have to be addressed at the design and development stage (to avoid extremely costly subsequent re-engineering and re-development), the decision on whether a product should be *localised* and, if so, to which extend can be taken at a later stage.

When services and products to be brought to new markets are analysed by localisers, they generally group components and features under the following three categories:

Extend
The same approach as that taken for the home market is valid for the new target market.

Adapt
This service/product requires some modifications to comply with the new market requirements.

Invent
An entirely new approach is necessary, new market-specific material has to be sourced.

The factors to be taken into account and the questions to ask during this analysis are:

- Does the service/product properly address the needs of the potential users? Are they the same or different than in the home market?
- Are the conditions for the use of the service/product the same or are they different than in the home market?
- Do potential users have the means to purchase and use the service/product?

- Can the strategy used to communicate with potential users just be extended into the new market, does it have to be adapted or does a completely new marketing strategy have to be designed?

The following table summarizes the options and shows some examples for products for which particular strategies are best suited[9]:

Strategy	*Product Function or need satisfied*	*Conditions of product use*	*Ability to buy product*	*Recommended communications strategy*	*Rank order from least to most expensive*	*Product examples*
1	Same	Same	Yes	Extension	1	Soft drinks
2	Different	Same	Yes	Extension	2	Bicycles, motor scooters
3	Same	Different	Yes	Adaptation	3	Gasoline, detergents
4	Different	Different	Yes	Adaptation	4	Clothing, greeting cards
5	Same	-	No	Develop new communication	5	Hand-powered washing machines

Figure 7: International product strategies: extend - adapt - invent

5.6 Who? - The outsourcing model

Companies ready to outsource their localisation to third parties have the following options at their disposal.

- Single language vendor(s) (SLV)
- Multi language vendor (MLV)
- Business Process Outsourcing (BPO) Integrated Services Model

All three models offer a set of advantages and disadvantages and are more or less suitable for specific localisation project requirements.

The biggest advantage of choosing individual SLVs for the client is that he can choose the most suitable partner for each market. Clients have a high degree of control over projects through their direct contact with SLVs. The price they have to pay for this distinct advantage is a high overhead in terms of project management and process control.

MLVs, on the other hand, are in a position to keep the overheads on the client side to a minimum, taking over not only the localisation tasks but also much of the coordination and management. However, clients have to hand over much of the control to their vendor and can expect different localised versions of the same source

[9] Jeannet/Hennessey (1998), p. 377

to be of different quality without having much control over the choice of local localisation partners.

Recently, some of the large localisation service providers have started to offer complete BPO, supported by new technologies including proprietary web services solutions.[10]

5.7 What? - Identifying the most appropriate solution

Identifying the most appropriate solution (also called *Solution Design, SD),* is one of the most critical tasks in the localisation process.

It covers:

Business process design
- Process validation and re-engineering of internal or external globalisation and localisation processes

Technology enablement
- Customisation, design, re-engineering, internationalisation
- Content management system (CMS) globalisation
- Tools integration

Localisation project planning
- Project management, collaboration and communications planning
- Discovery and management of appropriate linguistic resources
- Setting-up of the technical environment for build and debug iterations, testing and QA

5.8 Summary

Making a persuasive business case for localisation requires a combined effort by both clients and vendors. While clients are probably best positioned to prepare the market entry requirements, to source the data backing up the entry strategy and to choose the resource model best matching their particular requirements, the localisation experience of vendors can be crucial when identifying international product strategies (extend, adapt, invent), when considering different outsourcing options and designing the optimal solution for a localisation project.

Defining ROI is probably the most crucial and can potentially be the most convincing element in a business case, which is why its preparation requires the combined knowledge and expertise of both vendor and client.

---

[10] Strategies for outsourcing in localisation are discussed in detail by John Papaioannou in his award-winning thesis *The Localisation Outsourcing Decision,* available at http://www.localisation.ie.

However, the industry has yet some way to go before standard metrics to measure the real cost and the real benefits of localisation have been developed and agreed and before verifiable and easily comparable data becomes available allowing clients and vendors to compare their performance against an industry average.

6 Measures of success and failure

Localisation is successful when a service or a product has been linguistically and culturally adapted to the point that users do not notice that they are using something that was originally developed in a different context (e.g. a country or a *locale)* for a different target group.

The following section will discuss a number of successful approaches to localisation and attempt to outline the potential cost of failed localisation projects.

6.1 Successful approaches to localisation

The following brief case studies aim to illustrate successful approaches to localisation and an opportunity for a new approach, *Localisation without frontiers.*

6.1.1 A case study: Operating systems for the masses

Microsoft has adopted a highly innovative strategy to provide language versions of its Windows operating system for countries with an expected low ROI and for emerging markets: the *Language Interface Packs (LIPs).*

The following is an overview of the international support currently available in Windows XP, including LIPs. There are:

- 25 fully localised versions of the operating system
- 33+ Multilingual User Interfaces (MUIs) - language specific resource files which can be added to the English version of Windows
- 9 Language Interface Packs (LIPs) - they create a language skin to localise the 20% of the UI that is used 80% of the time
    - Costs less than $100k (not 100s of k)
    - Takes 5-6 weeks (not 5-6 months)
    - Less disk space: 3.5-4 Mb (not 40-80 Mb

6.1.2 Localisation without frontiers

So far, localisation projects are without exception based on real or expected ROI, what business people call “a solid business case”. What is problematic with this approach is that it contributes to the growth of the digital divide between the people and countries taking part in the digital world and those who are excluded from it.

If access to the web is a distinct advantage in business and education, then those who have no access to it (the vast majority of the world’s population today) are distinctly disadvantaged.

Some industry experts have even warned that those languages and those cultures not present in the digital world will eventually disappear.

Basic barriers for the participation in the digital world remain and basic issues are currently unresolved for developing countries in Africa and Asia. According to

Unicode, the character encoding standards association, at the current rate it will take 700 years to encode the world's remaining scripts in Unicode, a standard that is widely seen as the one allowing for the encoding of virtually every script. Yet, the estimated cost for this effort is only in the region of USS2-3 million.[11]

Eric Chinje, Veronique Danforth and Ida Mori of the World Bank stated recently that the African subcontinent offers many opportunities for the development of the digital world but that innovative approaches are needed to overcome existing barriers preventing access for Africa countries to it.[12]

There seems to be a general agreement that current localisation efforts endanger languages and cultures; that a new approach, *Localisation without frontiers*, is needed to help with the removal of basic barriers preventing entry of African countries to the digital world and to break the *negative value chain* currently being applied to low ROI markets.

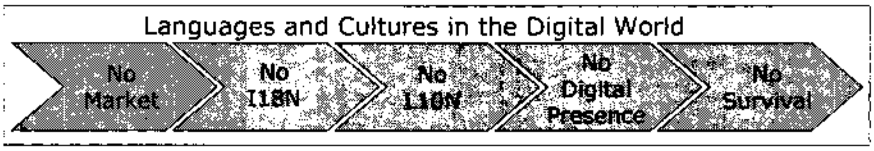

Figure 8: The negative value chain for low ROI markets

6.1.3 The IBM experience: moving up the value chain from service provision to Research & Development

The following graph illustrates the development of the localisation business divisions of one of the world's largest digital content publishers, IBM (now integrating LOTUS).

It shows how[7] different regions moved up the value chain between the early 1980s and the early 21st century. While Europe is still central to IBMs localisation effort, there is a clear move towards Asia for its localisation business. While this creates a threat to established localisation divisions it also creates the opportunity for Europe-based divisions to take on new tasks and develop their R&D capabilities.

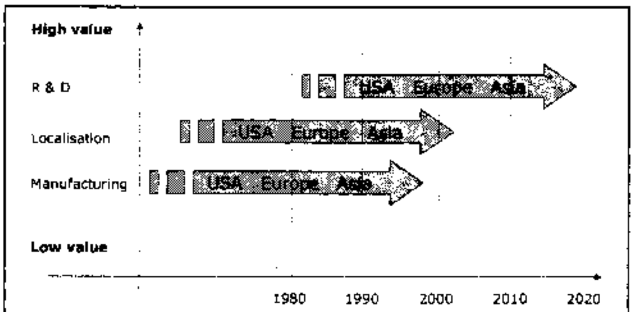

Figure 9: From localisation to R&D

[11] Deborah Anderson (Researcher, Dept. Ling.. UC Berkeley, US): The digital divide and the script encoding initiative (Unicode 24, Atlanta, 3-5 September 2003) and private communications.
[12] Eric Chinje. Veronique Danforth and Ida Mori (World Bank): Excuse me, again: Where? (Localization World, Seattle, 14-16 October 2003) www.worldbank.org/afr

6.2 The cost of failed localisation

The following table shows an approximation of the costs clients can incur if localisation goes wrong.[13] The factors taken into account range from lost product sale due to a delay in localisation to the cost of additional technical support necessary to cover for bad localisation.

$10k - $100,000s	-Total Market Value of one month's product sales, lost due to delay in localisation
$1k - $10,000s	-Inability to leverage translation memories (TMs) between multiple vendors or internal teams -Loss of TMs due to turnover of in-country staff or channel partner
$5k - $15,000	-Per 10-day trip to sort out a problems in a region
$10k - $100,000s	-To repurchase your own product rights when distributor quits/is fired
$5k - $15,000 per month	-For additional technical support costs because of inferior localisation
$100k - $Millions	-Fully loaded costs of insource localisation teams in each region

While the figures in the table above are, of course and necessarily, vague and hypothetical, they do give some indication of the proportionate losses that could be incurred.

7 Conclusion

Making a business case for localisation involves a number of steps from defining the market entry requirements, compiling the data to back up the requirements, to calculating the ROI. It involves development of an international business strategy (extend, adapt, invent), the selection of an appropriate outsource model and the design of a suitable solution addressing process, technology and management.

Because of its complexity, a business case for localisation should be the result of the combined efforts of a digital content publisher and a localisation service provider.

We highlighted the fact that, although ROI is a central aspect that should be calculated by clients and vendors, the calculation of ROI is only one link in the chain making up an overall business case for localisation.

While the industry has still some way to go before industry-standard metrics and average figures are agreed to measure and compare the efforts of localisers, many important factors to be taken into account when considering localisation are now well known and have been illustrated in this article.

[13] Ben Sargent (2003)

The individual steps described in this article with the available options highlighted at each step should provide a reasonable framework for the compilation of a successful business case for the localisation of a digital service or product.

The overall trend in localisation is growth.

As the emergence of new markets makes localisation into more languages *(locales)* profitable, new technologies such as translation memory technologies and process automation have brought down the cost of localisation considerably and made possible the localisation of material which only a few years ago would never have been even considered for localisation.

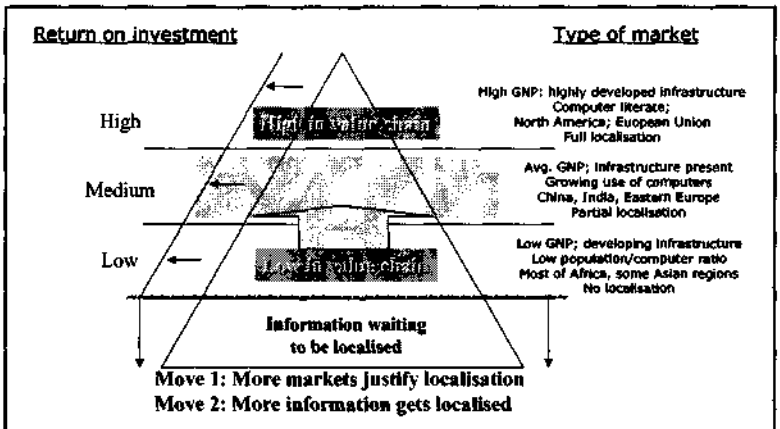

Figure 10: ROI and market evaluation

In discussions and consultations with industry experts, we have identified four vectors of scalability, which we believe will drive the growth of the localisation industry in the future:

- Culture
- Geography and languages
- Content
- Medium of delivery

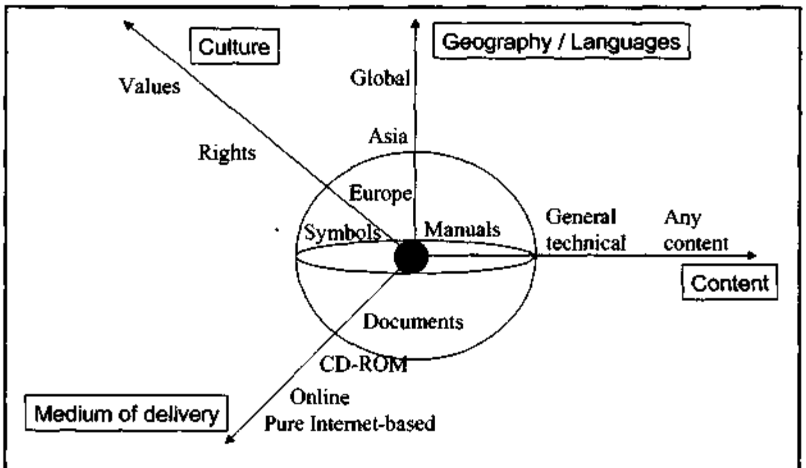

Figure 11: Vectors of scalability and growth

While these vectors and the opportunities for growth in the localisation industry have not been explored fully in this paper, they complement the main theme of this article and will be considered in a future study.

8 References

Deborah Anderson (Researcher, Dept. Ling., UC Berkeley, US), *The digital divide and the script encoding initiative*, Unicode 24, Atlanta (3-5 September 2003) and private communications, www.unicode.org.

Steve Ballmer, *Microsoft reports substantial growth*, in Irish Times, 21 October 2002

Don A. DePalma, *Business without Borders, A strategic guide to global marketing,* New York, 2002.

GALA - the Globalization and Localization Association, http://www.gala-global.org/ (consulted 21 October 2002)

Global Reach, *The evolution of non-English-speaking online population* and *Online language population (Sept 2003),* www.global-reach.biz/globstats (consulted 31 October 2003).

IBM, *Globalizing your e-Business,* www-3.ibm.com/software/globalisation/story.jsp (consulted 31 October 2003).

IDC, Worldwide globalization and localization services market forecast and analysis, 2000-2005

Jean-Pierre Jeannet and H. David Hennessey, Global Marketing Strategies, Boston and New York, 1998.

John Papaioannou, *The Localisation Outsourcing Decision*, http://www.localisation.ie (consulted 31 October 2003).

Ben Sargent, *The outsource model – How to use your vendor to develop the localisation business case,* Client Side News (CSN) Seminar, Denver, Colorado (25 June 2003).

Eric Chinje, Veronique Danforth and Ida Mori (World Bank), *Excuse me, again: Where?,* Localization World, Seattle (14-16 October 2003) www.worldbank.org/afr