

## Globalization ROI Components

Software Globalization may start as a development issue in support of a particular customer or market opportunity, but Globalization quickly evolves into a strategic business endeavor.

*"Any great company is going to do over half their sales outside North America."*

– Eric Schmidt, CEO Google

*"Yes, but everyone is late on international products, particularly for Japan and China."*

– Michael Moritz, Sequoia Capital, Google Director

Globalizing software can have significant implications for a company's growth and success over years; however it's important to consider the factors that will relate to each company's opportunities and situation.

Globalization consists of many practices involving issues from legal and taxation to product development and distribution. Use experts to get logistics clear in calculating ROI, as "surprises" can cause chaos in financial planning.

Software globalization involves a longer-term approach to revenue growth countered by controlling ongoing maintenance and marketing costs. Successful software globalization will also positively influence less quantifiable gains, such as boosting sales of related products and services, or increasing equity valuations, as a company becomes a worldwide concern. There are costs and benefits associated with corporate risk, in that product sales are spread over a broader range of potential customers and economic opportunities.

Companies may also consider a phased approach, testing particular software products (or components of products) in chosen markets before attempting gains on a global scale.

Some companies engage regional distributors to internationalize and localize their software. This approach results in "forking" software development, raising costs by making it necessary to support multiple versions of source code. This also severely impacts abilities to implement new versions and features across markets, and adversely affects quality worldwide.

There are a number of ways to calculate Return on Investment (ROI) for Globalization projects. It is important to include variables that relate to your own company's products, services, market position and relationships outside your "home" market. Though language is an obvious component, there is far more involved to making a product tailored for locale-specific opportunities.

### **Software Development**

You not only want your product to function in other languages, you want it to function gracefully.

From a technical consideration, two related processes lead software development tasks: internationalization and localization.

Internationalization involves enabling software to support worldwide customization of software for language and cultural formatting requirements. It allows the software to become locale-flexible, in support multiple language user interfaces, measurement requirements, date/time formats, data input and output, and the addition of locale operators. Proper internationalization simplifies maintenance of source code for customers across the world, as the software publisher

only need maintain a single code base. With internationalization, software vendors are able to leverage translation efforts from software version to version far more efficiently. Quality internationalization allows a product to behave as a customer in a target market locale expects it to behave.

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Internationalization costs reduce dramatically after initial efforts, while also reducing localization, support and maintenance costs across worldwide markets.

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### **Balancing cost and reducing expensive surprises**

Internationalization can be expected to involve greater initial cost, as software is refactored for internationalization requirements. Depending upon the technologies used in the original product development and software functions, this process should not be underestimated. It is rarely trivial. Lingoport's Globalyzer software, along with internationalization design and development services will smooth this path, and lessen the burden on company resources. If the software publisher then adheres to internationalization design requirements, employs Globalyzer to check and coordinate ongoing internationalized development and provides training support its engineering staff; the cost of internationalization upon future software versions should not require significant additions to development costs.

Localization involves the translation and stylistic efforts to make an application locale-specific. With proper internationalization, additional language and market support can be implemented quickly as market opportunities present themselves. Localization costs and time to market become markedly reduced, both in initial and maintenance version efforts. Localization should become a decreasing expense year to year, as translations can be leveraged from version to version, except when new localization efforts are needed for new markets.

By designing, planning and cleanly executing well orchestrated internationalization and localization efforts companies can eliminate expensive surprises that cost development efforts, wasted localization dollars, poor quality performance, time to market and un-budgeted funds.

### ***ROI Formulas***

The first step in calculating Globalization ROI should be to create a measurement baseline. What will be the affect of using the initial language and locale-formatted version of software worldwide? Will users accept, for example, U.S. English and currency/date/time/numerical/ etc. formats? What would be expected revenues? Will it be negatively received in new markets? How would competitors that may be localized impinge on your marketability?

Short Term Non-Globalized Product ROI =  
Projected 12-month revenue - costs - expected loss (risk factors, e.g. bad debt)

### **Globalization Strategic Requirements**

How will making software globalized for world customer requirements effect sales projections in the first year and beyond? How will that affect the building of sales results worldwide? One can usually expect greater acceptance and sales growth with globalized products, but the degree will depend on specific market requirements including target buyer and user expectations.

Analysts estimate that buyers are three to four times more likely to buy if addressed in their own language. Additionally, globalized software may lower customer support costs in many markets, while increasing the quality of a customer's experience.

## Long term Globalized ROI view

A more complete approach views globalization factors over several years and beyond:

Globalized ROI = annual revenue + growth over (x) years + effect on equity - cost to develop - cost to maintain - expected loss - opportunity cost of capital investments

*Additionally, it may be reasonable to consider an initial internationalization product development effort as a capital expense, which can be amortized over several years.*

To be most effectively managed, the long-term view involves a continuous cycle of education, planning, implementation, organization and measurement as markets are maintained, and new markets are entered.

## Getting Internationalization Done

Embarking on a software internationalization effort is often a daunting task. The development team is faced with combing through hundreds of thousands or even millions of lines of code looking for issues that limit language and locale formatting support. The issues are complex, based on requirements, programming language limitations, third party products such as databases and reporting engines along with interfaces to other applications. Then those issues have to be turned into action items, re-engineered and tested. Lingoport provides products and services to help your company meet those objectives. We can work tightly with your development team so that internationalization becomes a normal component of your development practices while supplementing your skills and workforce.

### Globalyzer

- Internationalize faster with higher quality *and* lower costs
- Get to new markets
- Lower worldwide development, maintenance and support costs

Lingoport's software, Globalyzer, analyzes source code quickly for internationalization issues and helps developers step through fixing errors. Its customized rule sets can be quickly tailored to your development teams and leveraged for your entire development staff. This way, internationalization capabilities and "know-how" are systematically supported. Additionally, Globalyzer's optional command-line can be incorporated into your automated processes, such as the nightly build, monitoring ongoing development and helping you avoid creating new internationalization problems over your product's development lifecycle. Globalyzer provides a clear and deployable solution for assessing, working through and maintaining your products' internationalization needs.

Lingoport's services include internationalization architectural development, coding standards documentation, project planning, training, internationalization engineering and testing. Our services help you get the job done quickly and completely. We emphasize practical solutions that maintain your code integrity and quality standards.

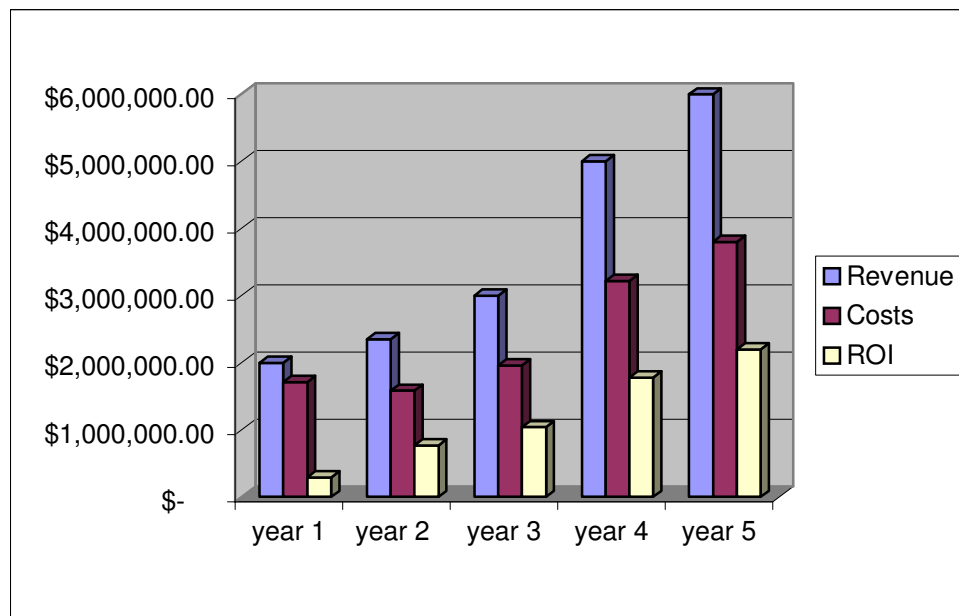
Both Globalyzer and our internationalization services have respective ROI's relative to their tasks. Globalyzer's contribution to internationalization efforts is usually fairly obvious once a developer or team has begun using it, as internationalization engineering is often both surprisingly complex in scope and tedious to perform. Services help you perform engineering tasks better and faster, as chances are your development team has new features to deliver and issues to work through outside of internationalization that are important to your current customer base.

## Example Globalization ROI table

All numbers are a simple hypothetical example using US Dollars

Lingoport can assess your software and provide internationalization design, project planning and implementation expertise, helping your company achieve development and financial goals. Our automated solutions expedite internationalization efforts for the lifecycle of your software development.

	<u>year 1</u>	<u>year 2</u>	<u>year 3</u>	<u>year 4</u>	<u>year 5</u>
<b>Revenue</b>	\$ 2,000,000	\$ 2,350,000	\$ 3,000,000	\$ 5,000,000	\$ 6,000,000
<b>Internationalization</b>	\$ 250,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000
<b>Localization</b>	\$ 150,000	\$ 100,000	\$ 100,000	\$ 150,000	\$ 100,000
<b>Cost of Sales</b>	\$ 800,000	\$ 940,000	\$ 1,200,000	\$ 2,000,000	\$ 2,400,000
<b>Legal</b>	\$ 150,000	\$ 100,000	\$ 100,000	\$ 150,000	\$ 200,000
<b>Support &amp; Maintenance</b>	\$ 100,000	\$ 117,500	\$ 150,000	\$ 250,000	\$ 300,000
<b>Other Overhead</b>	\$ 200,000	\$ 235,000	\$ 300,000	\$ 500,000	\$ 600,000
<b>Bad debt</b>	\$ 60,000	\$ 70,500	\$ 90,000	\$ 150,000	\$ 180,000
<b>ROI</b>	\$ 290,000	\$ 767,000	\$ 1,040,000	\$ 1,780,000	\$ 2,200,000
<b>ROI %</b>	17%	48%	53%	55%	58%



### Assumptions

- Release to additional markets in years 3,4, and 5
- Ongoing internationalization costs in licensing of Global Investigator to maintain internationalized development
- Localization leverages from year to year, including interface and documentation, new releases and market additions
- Cost of Sales at 40% of revenue
- Legal includes learning tax implications for new markets, maintenance and rollout of new market opportunities
- Support and maintenance costs of 5%
- Other overhead costs of 10% of revenue
- Bad debt at 3% of revenue

## *About Lingoport*

Lingoport provides internationalization software and consulting services, helping global technology companies meet their world market objectives quickly, while saving engineering, translation and software maintenance costs. Lingoport partners with select leaders in localization and international business consulting to provide complete globalization solutions.

Learn more about Lingoport at <http://www.lingoport.com>

Get a free demo Globalyzer account at <http://www.globalyzer.com>

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Recommended Reading: *Business Without Borders*, by Donald DePalma, Wiley Publishing, chapter 10  
<http://www.businesswithoutborders.info>