



INTERDEPARTMENTAL PROGRAMME OF POSTGRADUATE STUDIES IN
INFORMATION SYSTEMS

Master Thesis

**BEST PRACTICES FOR THE SUCCESSFUL
INTERNATIONALIZATION OF ONLINE SHOPS**

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Abstract

The aim of this thesis is to explore the importance of internationalization of online shops and to investigate business opportunities arising from this. Furthermore, to develop and introduce tools and practices in strategy, technology and internet marketing that are needed to assure increased chances of success.

Each country has specific features associated with the business environment, the penetration of e-commerce and the internet in general as well as specific cultural and social characteristics. These peculiarities require specific internationalization strategies for entering the local market and dictate parallel adjustments in IT infrastructure as well as a suitable e-marketing plan that needs to be followed.

The thesis attempts to create a set of best practices in these areas that are applicable to the majority of e-commerce businesses, regardless of their activity sector, their physical location and size.

Keywords: *e-commerce, internationalization, business strategy, e-business, internet marketing, web metrics, social metrics, mobile marketing, mobile commerce, affiliate marketing, order fulfillment, Rocket Internet, ECP Matrix, SEO, SEM, PPC*

Contents

Acknowledgements.....	2
Abstract.....	3
Contents	4
Table of Figures and Images.....	7
Index of Tables	9
1. Introduction.....	10
1.1 Motivation and Scope	10
1.2 Previous Research.....	10
1.3 Methodology	11
1.4 Limitations	12
2. Global e-commerce Opportunities.....	13
2.1 Market Size and Growth Trends	13
2.2 Defining Internationalization and Localization	15
2.3 Internationalization Benefits for Online Stores	15
2.4 Internationalization Challenges for Online Stores.....	16
3. Internationalization Strategy and Planning.....	17
3.1 Target Country Selection	17
3.1.1 Information about the Country - PESTEL Analysis	17
3.1.2 Information about the Market and the Level of competition – 5 Forces Porter Analysis.....	18
3.1.3 Competitor Analysis and the ECP Matrix	19
3.1.4 Web/Social Metrics Evaluation and Sales Data.....	22
3.2 Foreign Market Entry Modes (FMEM)	24
3.2.1 Categorization of Foreign Market Entry Modes.....	24

3.2.2 Selection of FME Mode.....	25
3.3 Level of Internationalization and Localization.....	26
4. IT Infrastructure for International E-commerce Deployment.....	27
4.1 Impact of Cultural Differences	27
4.1.1 Defining Culture and Values	27
4.1.2 Cultural Parameters in e-commerce.....	27
4.2 E-commerce Platform Requirements for Internationalization.....	27
4.2.1 Multi-Language Support.....	27
4.2.2 Multi-Currency Support.....	28
4.2.3 Payment Methods.....	29
4.2.4 Shipping and Logistics.....	30
4.2.5 Taxes	32
4.2.6 Web Analytics and A/B Testing	32
4.2.7 Multiple Storefronts	33
4.2.8 CDN (Content Delivery Network) Support	34
4.2.9 An overview of E-Commerce Platforms.....	35
4.3 Internationalizing Software (i18n).....	36
4.4 Website Localization (l12n).....	36
4.4.1 Content.....	36
4.4.2 Culturability	38
4.5 Customer Relationship Management (CRM) systems.....	38
4.5.1 Collecting Data	39
4.5.2 Using data for effective internationalization.....	39
4.5.3 Customer Support	40
4.6 Payment Methods.....	40
4.7 Logistics and Order Fulfillment.....	41
4.7.1 Order Fulfillment	42

4.7.2 Last Mile Delivery Problem.....	43
5. International online marketing.....	44
5.1 Search Engine Optimization	44
5.1.1 Keyword Research	47
5.1.2 On Page Optimization.....	50
5.1.3 Off Page Optimization	51
5.1.4 Mobile Compatibility.....	52
5.1.5 TLD and Hosting Server Location.....	53
5.2 Social Media Marketing.....	53
5.2.1 Social Media & Social Networks.....	53
5.2.2 Major Social Networks and Media	54
5.2.3 Social Networks and E-commerce.....	54
5.3 Pay per Click (PPC) and Display/Banner Advertising	55
5.3.1 International PPC Vendors	56
5.3.2 PPC Basics	57
5.3.3 Location and Device Targeting.....	58
5.4 Mobile Marketing	59
5.4.1 Why Mobile Marketing?.....	60
5.4.2 Mobile Marketing Strategies.....	61
5.5 Affiliate Marketing	62
5.5.1 Why Affiliate Marketing?.....	63
5.5.2 International Affiliate networks	63
5.5.3 Choosing Affiliate Network and Provision Model	64
5.5.4 Creatives and Promotional Material	65
5.5.5 De-Duping, Example code in PHP	65
5.5.6 Merchant - Affiliate Communication.....	66
5.6 Web and Social Metrics - Evaluating Online Marketing Efforts.....	67

6. Case Study : Rocket Internet.....	68
6.1 Company Profile	68
6.2 Internationalization Strategies	69
6.2.1 Criteria for choosing countries to Enter.....	69
6.2.2 Internationalization Approach and Setup.....	69
6.3 Rocket Internet Technology.....	73
6.4 Rocket Internet Online Marketing	74
Conclusions and Suggestions for Further Research.....	76
References.....	77

Table of Figures and Images

Figure 1: Internet Users in the World	13
Figure 2: World Internet Penetration	13
Figure 3: Ecommerce Sales Share Worldwide	14
Figure 4: Digital Buyer Penetration Worldwide.....	14
Figure 5: 5 Forces Porter Analysis (Source:www.mindworks.com)	18
Figure 6: Google Analytics Geo Report	23
Figure 7: Trackur.com social media monitoring by country and social network (Source: www.trackur.com).....	24
Figure 8: The Hierarchical Model of Market Entry Modes.....	25
Figure 9: CMS-TMS translation Workflow (Source: http://www.lingotek.com/magento)	28
Figure 10: Multistore feature in CS-Cart (Source: http:// blog.cs-cart.com).....	34
Figure 11: Content Delivery Network (CDN) (Source : https://gtmetrix.com/why-use-a-cdn.html).....	35
Figure 12: e-commerce solutions, installation and maintenance costs (Source: https://www.nbs-system.com/wp-content/uploads/benchmark_short_english.pdf)	35
Figure 13: The Customer Behavior Model (CBM) (Sadath 2013).....	39

Figure 14: Payment Methods Share by Country (Source: https://www.adyen.com/dam/documentation/whitepapers/Adyen-Edgar-Dunn-Company-Report-Optimizing-Payments.pdf)	41
Figure 15: Order Fullfilment Process (Source:Webgistix.com)	42
Figure 16: Ad Formats by Revenue, IAB Internet Advertising Revenue Report HY 2014.....	44
Figure 17: Google.co.uk organic and paid placements for "mobile phone"	45
Figure 18: Google.co.in organic and paid placements for "mobile phone"	46
Figure 19: Search Trends 2015 of Mobile Phones in Germany.....	48
Figure 20: Search Trends 2015 of Mobile Phones in Brazil.....	48
Figure 21: Keyword Planner suggestions Mobile Phones in the Philippines	49
Figure 22: Ahref.com backlink analysis of Lazada.com.ph	52
Figure 23: Largest Social Networks around the world (Source: http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/)	54
Figure 24: Baidu PPC Ads when searching for "Hawaii Travel" (Source: www.baiduadvertising.com).....	56
Figure 25: Text Ads Setup at Yahoo!Bing PPC network (Source: www.microsoft.com)	58
Figure 26: Google Trends, search term "S6" in Japanese cities	58
Figure 27: E-commerce by device in Japan, January 2015 (Source: www.wearesocial.com).....	59
Figure 28: IAB internet advertising revenue report, advertising format share (Source: www.iab.com).....	60
Figure 29: Share of web traffic by device (source:Wearesocial.sg)	61
Figure 30: Angry Birds In-Game Mobile Ads (Source: www.phandroid.com)	61
Figure 31: Rocket Internet Logo (Source: www.rocket-internet.com/media).....	68
Figure 32: Africa Internet Group, Rocket Internet (Source: www.rocket-internet.com , Rocket Results FY 2014)	70
Figure 33:Asia Pacific Internet Group, Rocket Internet (Source: www.rocket-internet.com , Rocket Results FY 2014).....	70
Figure 34:Middle East Internet Group, Rocket Internet (Source: Www.rocket-internet.com , Rocket Results FY 2014).....	70

Figure 35:Latin America Internet Group, Rocket Internet (Source: Wwww.rocket-internet.com, Rocket Results FY 2014)	71
Figure 36: Lazada Facts SEA (Source: www.lazada.com/about-us)	71
Figure 37: Lazada Market Entry Challenges and Solutions (Source: www.rocket-internet.com, Rocket Results FY 2014)	72
Figure 38: Lazada Current State Overview (Source: www.rocket-internet.com, Rocket Results FY 2014)	73
Figure 39: Westwing Zero Inventory Model	74
Figure 40: Rocket Internet CRM Data (Source: Adwords (w/o Westwing & Home 24), Google Keyword Tool, FB, Google Analytics	74
Figure 41: Rocket Internet SEM Reporting	75
Figure 42: Rocket Internet Framework Agreement with Technology and Marketing Providers	75

Index of Tables

Table 1: Table of Previous Publications related to the Internationalization of Online Stores	11
Table 2: The ECP Matrix	21
Table 3: Real Time Currency Exchange Rate Providers	29
Table 4: Cultural Dimension's Impact on Website Content (Tegarden, Dennis and Wixon 2013)	37
Table 5: Color - Cultur Chart (Barber-Badre 1998)	38
Table 6: Search Engine Market Share	46
Table 7: Affiliate Networks around the globe	64
Table 8:Lazada.com Challenges, Rocket Internet (Source: www.rocket-internet.com, Rocket Results FY 2014)	72

1. Introduction

Internationalization in business strategy is a term which is widely used in contract with enterprises that wish to increase their reach and invest somehow into other markets in different countries. However, internationalization in computing (i18n) is used to describe the ability of software to adapt to regional differences such as language, cultural differences etc without the need of engineering or core programming changes.

Online stores are parts of enterprises that follow their own way of internationalizing businesswise and from a technical and marketing perspective, which calls for special strategies and planning.

1.1 Motivation and Scope

The economic crisis in Greece has exposed the lack of extroversion of the Greek economy. Even e-commerce, which by nature is the most simple and less risky entry mode in internationalization, has little been exploited.

Recently, GRECA (Greek E-commerce Association) announced that the major problem for cross-border e-commerce of Greek companies, beyond the issue of logistics, is the lack of know-how around the expansion strategy that needs to be followed.

This thesis mainly aims to contribute to the Greek e-commerce community, to develop and introduce tools and best practices for the successful internationalization of online stores, which are useful for both academic purposes and professionals. As the results of this thesis might be helpful to other countries, non Greek individuals and enterprises as well, this study has been written in English.

1.2 Previous Research

Unfortunately there is not much scientific and empirical literature covering all aspects of the internationalization of online shops, but only references in publications of business strategy, general e-commerce, information systems and internet marketing.

A list of the related publications to the thesis, along with their research focus can be found below:

Author, Title and Date of Publication	Research Focus
Singh, Nitish (2012). <i>Localization Strategies for Global E-business</i> . 1 st Edition., Cambridge University Press.	E-commerce Opportunities & Challenges, Business expansion, Globalization Strategies, Localization
Newman, M. and Lake, C. (2010). <i>The Internationalization of E-commerce</i> , October, Econsultancy.com Ltd	E-commerce Opportunities & Challenges, Business expansion, Globalization Strategies, Legal Challenges, Search Engine Optimization
Aulonites G, Lympelopoulos K., Tzanavaras B (2010) , <i>Modern Marketing Strategies for International Markets</i> , Greek Language, 1 st Edition, Rosili Publishing	Globalization Definition, Internationalization, Market Research and Target Country Selection, Market entry Modes, International Marketing
Laudon, K. and Traver, C. (2014). <i>E-Commerce 2014, Business, Technology, Society</i> . 10 th Edition., Pearson	E-commerce, Technology, Marketing, Mobile, Social Media
Vlachopoulou M, Sergios D. (2014) , <i>E-Business and Marketing</i> , (Greek Language) 1 st Edition, Rosili Publishing	E-business planning, E-business models, E-commerce, Social Media, Online Advertising, Web & Social metrics

Table 1: Table of Previous Publications related to the Internationalization of Online Stores

1.3 Methodology

The methodology followed for the preparation of this thesis is based on three pillars:

1. Literature review of international scientific and empirical publications related to e-commerce, business strategy and online marketing, especially those with internationalization dimension.
2. Development of Strategic planning tools (eg The ECP Matrix, Chapter 3), programming code in PHP (eg Localization by Geo Location Chapter 4, Affiliate De-duping Script, Chapter 5) and practical examples (eg how to analyze competitors' SEO, Chapter 5) created specifically for the thesis

3. Presentation and analysis of a case study of Rocket Internet SE which managed to develop an online presence in 110 countries following effective internationalization strategies, technological development and marketing planning

1.4 Limitations

While this thesis attempts to cover as many as possible dimensions of the internationalization of online stores, due to the broad spectrum of e-commerce and the significant differences in culture and values among the world's countries, not all possible strategies for each country could be addressed.

Moreover, not many real case studies were available as many online stores' strategies of internalization are held confidential and are not available in detail to the public.

2. Global e-commerce Opportunities

2.1 Market Size and Growth Trends

According to Internet World Stats there are more than 3 billion users worldwide, which stands for a worldwide internet penetration of 42.4%.

Figure 1: Internet Users in the World

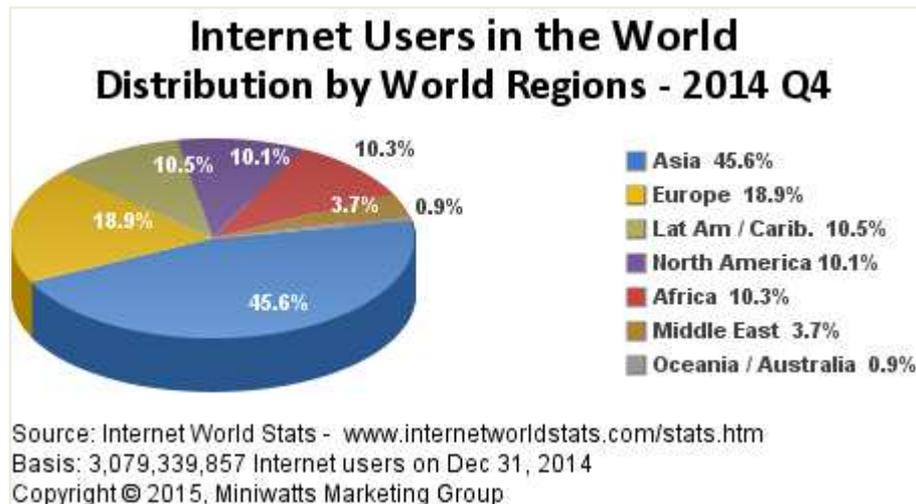
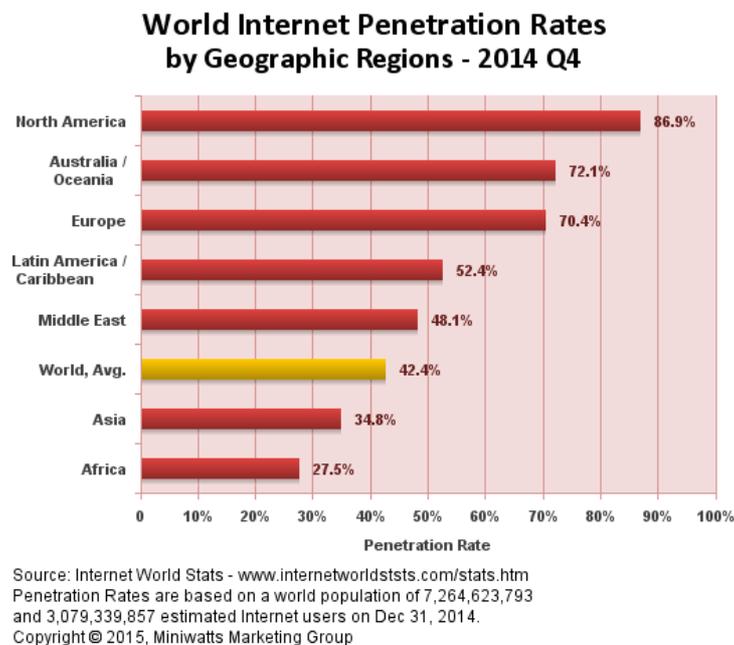


Figure 2: World Internet Penetration



Figures below illustrate the ecommerce sales share across the world and the ecommerce penetration in each area with a forecast until 2018:

Figure 3: Ecommerce Sales Share Worldwide

B2C Ecommerce Sales Share Worldwide, by Region, 2013-2018						
<i>% of total</i>						
	2013	2014	2015	2016	2017	2018
North America	34.9%	32.9%	31.7%	31.1%	30.7%	30.6%
Asia-Pacific	28.3%	31.2%	33.4%	35.1%	36.4%	37.4%
Western Europe	26.4%	25.4%	24.6%	23.9%	23.3%	22.7%
Latin America	4.2%	4.3%	4.2%	4.1%	3.9%	3.7%
Central & Eastern Europe	4.1%	4.0%	3.8%	3.5%	3.3%	3.2%
Middle East & Africa	2.2%	2.3%	2.3%	2.4%	2.4%	2.5%

Note: includes products and services ordered and leisure and unmanaged business travel sales booked using the internet via any device, regardless of the method of payment or fulfillment; numbers may not add up to 100% due to rounding
Source: eMarketer, July 2014

175334 www.eMarketer.com

Figure 4: Digital Buyer Penetration Worldwide

Digital Buyer Penetration Worldwide, by Region, 2013-2018						
<i>% of internet users</i>						
	2013	2014	2015	2016	2017	2018
North America	72.0%	73.6%	74.9%	76.3%	77.7%	78.8%
Western Europe	64.0%	65.2%	66.3%	76.3%	68.2%	69.0%
Asia-Pacific	42.1%	44.1%	46.8%	48.9%	50.4%	50.9%
Central & Eastern Europe	41.6%	43.4%	44.3%	44.4%	44.6%	44.6%
Middle East & Africa	31.3%	33.1%	34.0%	35.0%	36.0%	37.0%
Latin America	28.2%	29.9%	30.9%	31.8%	32.7%	33.7%
Worldwide	41.3%	42.7%	44.3%	45.4%	46.4%	47.3%

Note: ages 14+; internet users who have made at least one purchase via any digital channel during the calendar year, including online, mobile and tablet purchases
Source: eMarketer, July 2014

176049 www.eMarketer.com

Each area of the world, for different reasons, represents an opportunity for online retailers.

- Europe, Australia & North America have a high internet penetration as well as a high digital buyer penetration.
- Asia due to its large population has a high number of internet users and still room for improvement regarding its digital buyer penetration. It is predicted

that Asia & the Pacific are will have in 2015 the largest share of B2B sales worldwide

- Latin America, Middle East and Africa are developing economies which leave room for growth

2.2 Defining Internationalization and Localization

Internationalization is a term which is used in economics and business, as well as in software development (i18n) to which we will refer to in chapter 4.

From a business point of view Internationalization is basically the process of “increasing involvement in international operations, which requires adapting the firm's strategy, resources, structure and organization to international environments” (Johanson and Vahlne 1977) .

Localization of online stores is basically the process of adapting their business model and their software (Localizing Software i18n, see Chapter 4) to a specific market.

In a fast moving online world and in an obviously even faster growing worldwide e-commerce landscape, internationalization becomes more and more important to online shops.

2.3 Internationalization Benefits for Online Stores

According o G. Avlonitis et al , reasons that lead to the internationalization of a company are divided into two main categories (Avlonitis, Lymperopoulos and Tzanavaras 2010):

- Reaction Incentives as a result of changing competitive conditions in the domestic market as competition increases, small market, demand from abroad, legislation changes etc.
- Prevention Incentives due to change of strategy aimed at greater profits and growth, avoiding much dependence on the domestic market, opportunities abroad etc.

Internationalization benefits for online shops are similar to those of ‘traditional’ offline businesses and include:

- Extending Reach
- Maximize Revenues
- Ensuring Brands Consistency
- Reducing Costs
- Driving Cross Channel Sales

Benefits are multiplied for the online store being the ‘first mover’ into a market/country. The ‘first mover advantage’ exists for traditional business as well as for e-businesses where first movers have a competitive advantage and can create entry barriers for the competitors (Papadakis 2002). Lazada’s Case Study (Chapter 6) is a good example of an online store that, after moving first into South East Asian markets, created entry barriers to potential competitors.

2.4 Internationalization Challenges for Online Stores

Similar to offline businesses, online businesses face dangers when internationalizing such as financial and political instability in the target countries (Papadakis 2002), fluctuating exchange rates, localization costs etc

E-consultancy Ltd, a UK based digital publishing and training company, published a report by M.Newman and C.Lake which mentions as main challenges online store localization(Newman and Lake 2010) :

- Content creation and management
- Product range planning and product proposition
- Customer service
- Order Fulfillment
- Payment Methods

3. Internationalization Strategy and Planning

The internationalization planning of a company or an online shop is a strategic procedure, which involves decision making on:

- Which countries to consider entering
- How to enter a chosen country
- The level of internationalization and localization

3.1 Target Country Selection

Prior to entering a country an online store should be aware of dangers as well as possible costs involved and estimated profit potential from doing so. It is useful to collect information about the country, market conditions and level of competitions, data about the main competitors, and potential demand of the store's product range in the local market.

3.1.1 Information about the Country - PESTEL Analysis

A PESTEL analysis is a strategic management tool which helps scanning a company's current or future environment and in which way the company is influenced by Political, Economic, Sociological, Technological, Legal and Environmental factors (Manktelow 2015).

Political Factors

Political factors that could affect online shops are political stability, tax policy, trade regulations etc

Economic Factors

Economic factors crucial to online shops are the inflation rate, buying power of citizens, recession or boom, economic growth, exchange rates etc

Social Factors

Social factors focus on age distribution, cultural aspects, education, literacy, values etc

Technological Factors

Technological factors have obviously high impact on an online shop's internationalization and include internet and e-commerce penetration, social media, mobile phone affinity, speed of technological change etc

Legal Factors

Legal factors such as advertising regulations, consumer laws, domain name regulations, trademark protection etc are among the most important factors for online shops

Environmental Factors

Environmental factors affect mostly the nature of the product that are sold in an online shop and include mostly energy consumption limitations of products

3.1.2 Information about the Market and the Level of competition – 5

Forces Porter Analysis

Porter 5 Forces analysis is a strategic business tool which analyses the level of competition in a given market (Porter 2008).



Figure 5: 5 Forces Porter Analysis (Source:www.mindworks.com)

This strategic framework examines 5 main components (forces) of a market, which in the case of online stores are defined and explained as follows:

Threat of new entrants

How easy is it for new online stores with similar products to enter the market

Threat of substitute products or services

Is there a market for the products that the online shop sells. Are there similar products that are cheaper or more popular

Bargaining power of customers (buyers)

What is the expected market size (number of buyers) and what is the estimated average order amount. How price sensitive are the customers.

Bargaining power of suppliers

This affects online stores when using local product suppliers or local service suppliers such as courier, warehousing and advertising services etc Number of suppliers, level of services and cost of changing need to be considered.

Intensity of competitive rivalry

How many competitors are in the country, what are their USP (Unique Selling Proposition) un what is the level of customer loyalty

3.1.3 Competitor Analysis and the ECP Matrix

A *competitor* is defined as a firm that operates within the same industry, offers similar products and targets similar customers.(Chen 1996) Competitors for an internationalizing online shop are online shops that operate within the target area and offer a similar product range.

A competition analysis serves the purpose of gathering information of competitors in order to formulate a firm's competitive strategy and predict the competitors actions and responses (Czepiel and Karin 2009) .

In order to analyze and profile competitors this thesis introduces the *E-Commerce Competitor Profiling (ECP) Matrix*. The ECP Matrix gathers important

competitor information in a visually appealing way. An example ECP matrix regarding the UK Fashion Market (with fictional data) can be found below:

E-COMMERCE COMPETITOR PROFILING MATRIX

UK FASHION SECTOR

FACTORS	ASOS.COM	BOOHOO.CO.UK	FASHIONWORLD.CO.UK	NEXT.CO.UK
General Profile				
Location	LONDON	LONDON	GLASKOW	ESSEX
Company Type	LIMITED	LIMITED	LIMITED	LIMITED
Established	1999	2008	2013	2010
Annual Turnover	89.750.000	24.760.900	8.000.000	12.100.000
Av.Groth Rate (5 Years)	11%	8%	-12%	2%
Distrib.Model	PURE PLAYER	PURE PLAYER	PURE PLAYER	RETAIL/ONLINE
Stockist/Just InTime/Dropship per	Yes/Yes/No	Yes/Yes/No	Some/Yes/No	Yes/Yes/No
E-shop				
Multilanguage	EN, DE, FR, ES	EN, DE, FR	EN	EN
Multicurrency	\$,£, €	\$,£, €	£, €	£
Localized/Standardized	S	L	S	S
Support	Email/Phone/Live Chat	Email/Phone/Live Chat	Email/Phone/Live Chat	Email/Phone/Live Chat
Product Catalogue				
Fashion	Female/Male/Children	Female	Female/Male	Female/Male/Children
Shoes	Female/Male/Children	Female	Female/Male	Female/Male/Children
Accessories	Bags/Jewelry/Watches	Bags	Bags/Jewelry	Bags/Jewelry/Watches
Other	Gifts	NO	Gifts	TOYS
Brands/Private Label	Yes/Yes	Yes/Yes	Yes/No	Yes/No
Product Presentation	Image/Video/Catwalk	Image/Video	Image	Image
Sales/Clearance	Yes/Yes	Yes/Yes	Yes/No	Yes/No
No of Labels	129	87	100	65
No of Products	4500	2100	1100	900
Delivery				

Shipment Preparation (Days)	1	1	3	2
Areas	World	World	World	UK EUROPE
Cost	Free Worldwide	Free Worldwide	Free Worldwide Above 40€	UK 5€, EUROPE 10€
Carrier	DHL	DHL	DHL/UPS	DHL
Returns	Free UK, 30 Days	Free UK, 15 Days	Free UK, 180 Days	Free UK, 30 Days
Advertising / CRM				
CPC	Google, Facebook	Google, Facebook	Google, Facebook	Google, Facebook
Display	Google, Facebook	Google, Facebook	Google, Facebook	Google, Facebook
Remarketing	Google, Facebook	Google, Facebook	Google	Google
Video	Google, Facebook	Youtube	Youtube, Facebook	No
Social Posting Intervals	5 FB, 1 Twitter, 4 Instag.	6 FB, 1 Twitter, 4 Instag.	2 FB, 1 Twitter, 4 Instag.	1FB, 2 Instag.
Affiliate Marketing	Zanox, Affilinet	Webgains	No	Webgains
Blog	Yes	Yes	Yes	Yes
Newsletter	Individ.Gender 2/Week	Individ.Gender 2/Week	Mixed 1/Week	No
Reviews				
Good	Delivery Times, Product Quality, Shipping Costs	Product Quality, Email Support	Delivery Times, Product Quality, Shipping Costs	Product Quality, Email Support
Bad	Telephone Support	Delivery Times, Shipping	Email Support	Product Selection

Table 2: The ECP Matrix

The ECP Matrix checks main competitors against important e-commerce factors (first column) and differs from similar tools such as the O'Conner's competitors profiling method (O'Conner 2010) as it focuses mainly on online business and can be used by many online stores as is.

However, it is obvious that some factors may vary from country to country and depend heavily on the products the shop is selling.

All data needed to fill out the ECP Matrix can be collected from:

- Mystery Shopping
- Online Reviews

- Company Websites
- Magazine, Newspaper Articles about the online shop
- Competitor Analysis websites such as compete.com, semrush.com etc

3.1.4 Web/Social Metrics Evaluation and Sales Data

Most e-shops gather the interest of visitors outside the area they deliver to or from countries they serve using a standardized or globalized (eg English language targeting) approach. The number of visits, sales, enquiries or social media interactions from users of foreign markets can be a strong indicator that there is a market that might need a localized approach.

Enquiries usually are stored in the CRM of the e-shop, while conversion data as well as visitor amount, online behavior and referring source (social, ads, etc) are available within a web analytics software such as Google Analytics.

An example of a Google Analytics Geo Report including e-commerce revenue and conversion rate can be found below (Figure 6):

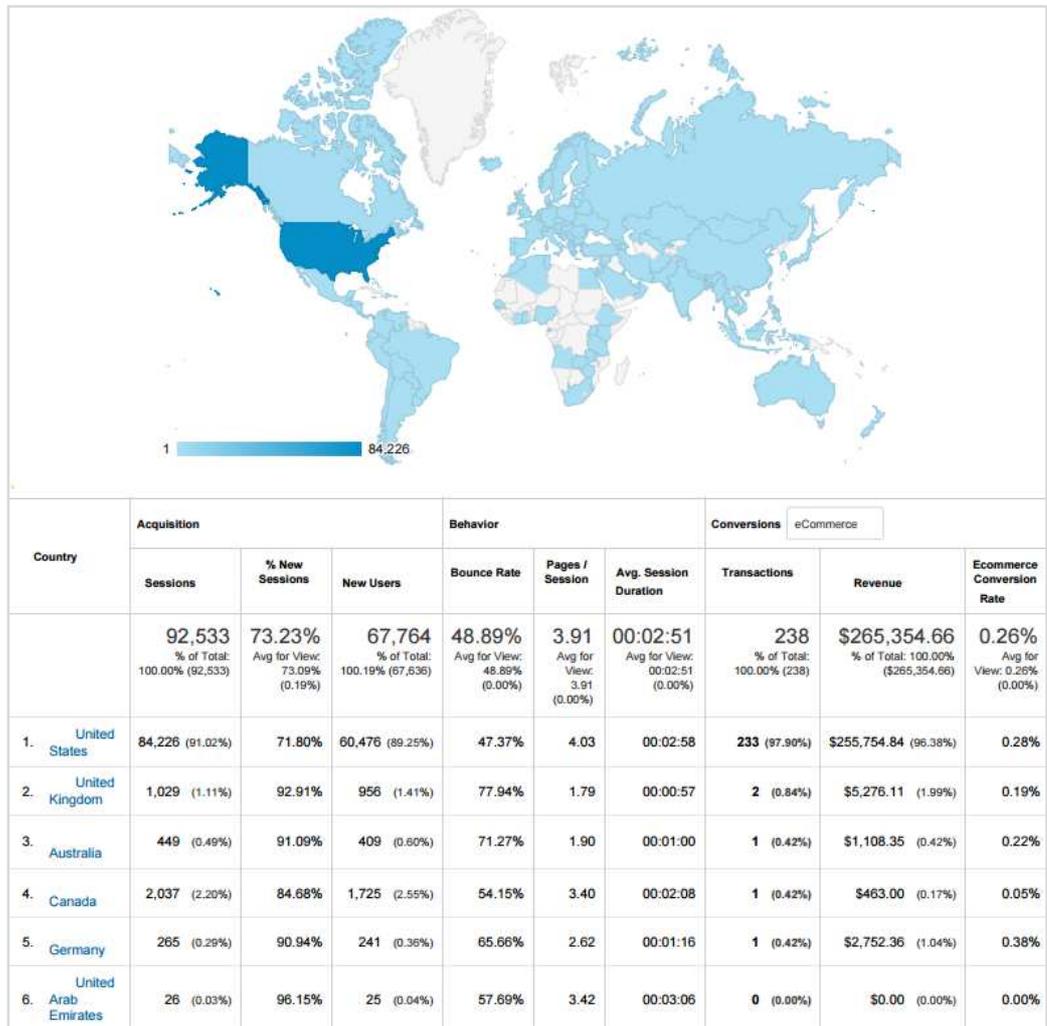


Figure 6: Google Analytics Geo Report

The report above, which refers to a week’s data of an online store located in New York USA, provides an overview of the most important web and sales metrics.

Another important information is the social brand reputation of an online shop in a target country. This can be tracked using social media online monitoring tools

such as trackur.com

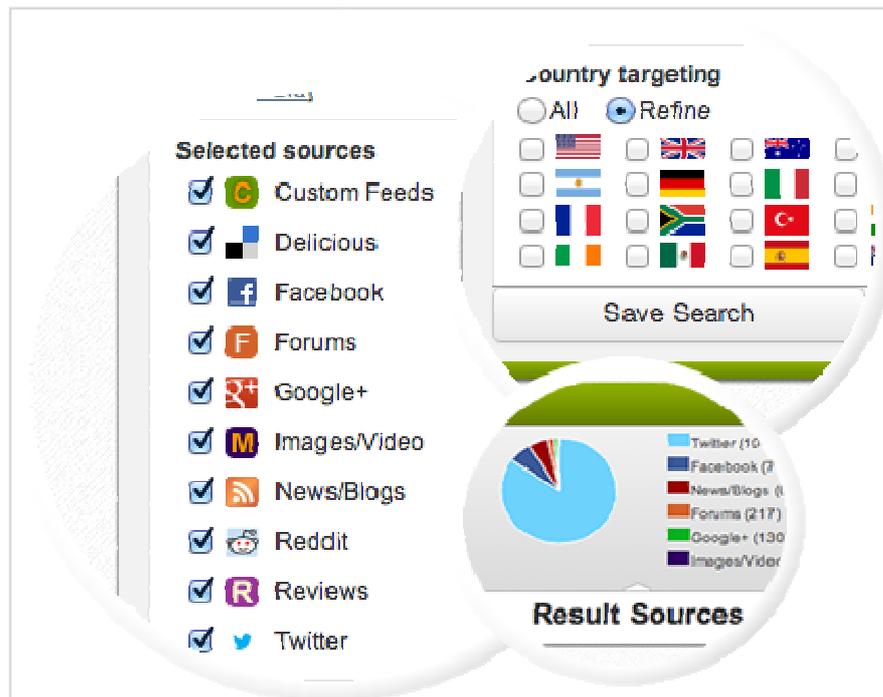


Figure 7: Trackur.com social media monitoring by country and social network (Source: www.trackur.com)

3.2 Foreign Market Entry Modes (FMEM)

A ‘mode of entry’ is basically the way a company has chosen to operate in a foreign country and is a critical strategic decision. (Kumar and Subramaniam 1997)

3.2.1 Categorization of Foreign Market Entry Modes

The typical internationalization process identifies two main entry modes (Peng 2008):

- Equity Based
- Non Equity Based

“The Hierarchical Model of Market Entry Modes” (Pan and Tse 2000) divides the above entry modes into a more appealing conceptualization as shown below (Figure 8):

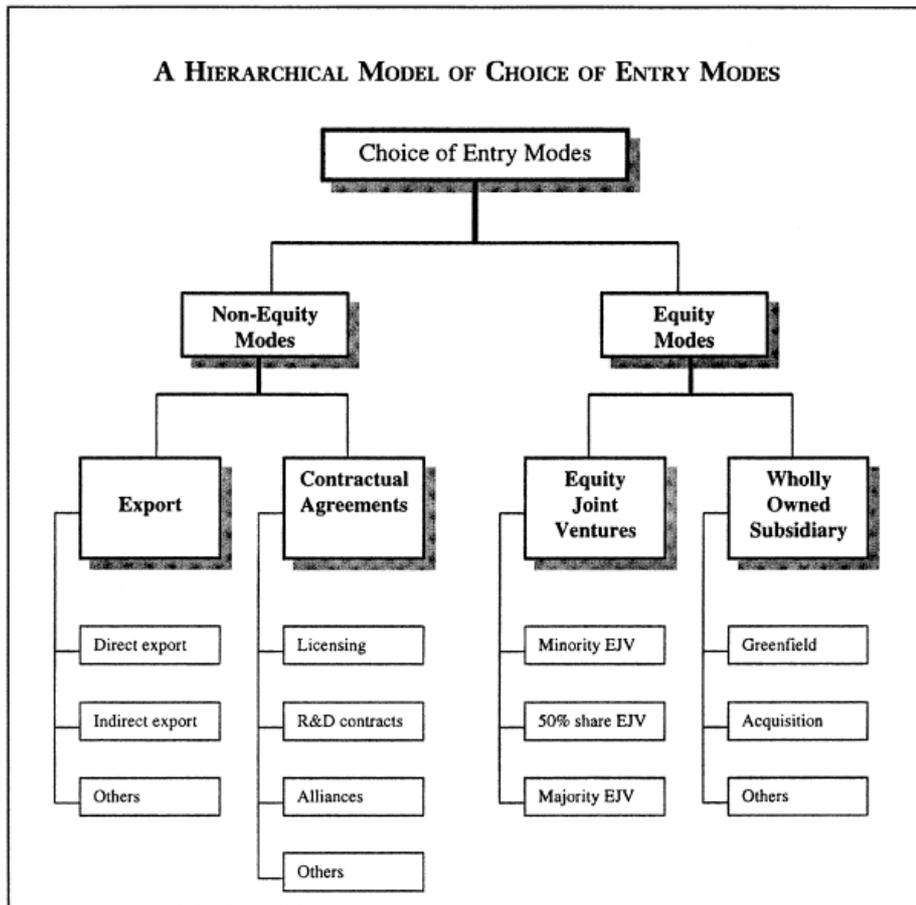


Figure 8: The Hierarchical Model of Market Entry Modes

3.2.2 Selection of FME Mode

Online stores with no physical presence or warehouses in foreign countries use the “Non-Equity Mode , Export” or a “Digital Entry Mode”. A recent study among Greek Family Businesses showed that digital entry mode allowed the investigated firms to achieve a speedy entry to foreign countries and compete in geographically distant markets (Plakoyiannaki et al. 2014).

While speed and limited risk when using the “Non-Equity Mode , Export” is important for online shops, it is not possible to apply it in many target countries. If, for instance, when conducting as PESTLE or PORTER analysis the target country has been identified to have a poor infrastructure in terms of transportation networks or has a high degree of bureaucracy, then a physical presence with a warehouse and a “last mile delivery setup” or even an office might be needed.

3.3 Level of Internationalization and Localization

After conducting the before mentioned analysis, localization costs can be estimated and a decision can be made about whether or not to enter a country, the entry mode and the desired level of localization. Any target country can be approached differently. Evernote, the popular note app, which is expanding into sales of physical products, explained (Edgar Dunn and Company 2014):

"We adopted a "four shades of grey" approach (not a "black or white" approach) for our online retail business involving physical deliveries".

They have 4 different “country tiers”, with a different approach for each tier:

Tier 1 - "all local" countries: for the largest markets such as China, Japan, and the US, this merchant has set up a local "look and feel" website, with prices in local currency and, most importantly, local fulfillment that includes a local warehouse with a local delivery service to ensure fast delivery and no import duties.

Tier 2 - "partly local" countries: for other large markets such as Canada, Germany, and the UK, this merchant has a similar set-up as for tier 1 countries, except that local fulfillment is only available on the most popular items.

Tier 3 - "local shop window" countries: for shoppers in countries such as Australia, Mexico, Singapore, Taiwan and South Korea, this merchant provides a local "look and feel" website, but no local fulfillment (i.e. they ship from a central location).

Tier 4 - "nothing local" countries: for all other countries (e.g. Abu Dhabi, smaller Latin American countries, etc.), shoppers need to visit and purchase from the standard .com website.

4. IT Infrastructure for International E-commerce Deployment

4.1 Impact of Cultural Differences

4.1.1 Defining Culture and Values

When interacting with in e-commerce with people of foreign countries, such as selling, providing support, doing business, employing etc it is important to understand their culture and values. Hofstede defines culture as “the collective programming of the mind which distinguishes the members of one human group from another” while value is defined as “ a broad tendency to prefer certain states of affairs over others” (Hofstede 1980).

4.1.2 Cultural Parameters in e-commerce

An online store should take into account cultural differences as they have impact on important factors such as payment, logistic systems and language (Bin, Chen and Sun 2003). However, cultural parameters are also values, colors, symbols, icons etc that need to be considered when developing web communication for different countries (Singh 2012) and in online marketing (Chapter 5)

4.2 E-commerce Platform Requirements for Internationalization

4.2.1 Multi-Language Support

Multi-language support allows for language targeting which is the lowest level of internationalization. To support multiple languages the e-shop’s content management system (CMS) should allow website content and product data to be entered in multiple languages. Multiple languages apply to the software’s backend too, as data entry might be conducted by editors from different countries.

Translating content from an initial language to another is accomplished either in-house or outsourced. To optimize outsourced translation workflow an automated way is to use a Translation Management System (TMS) in combination with the CMS of the online store. Figure bellow illustrates the interaction of a TMS and e-shop’s CMS:

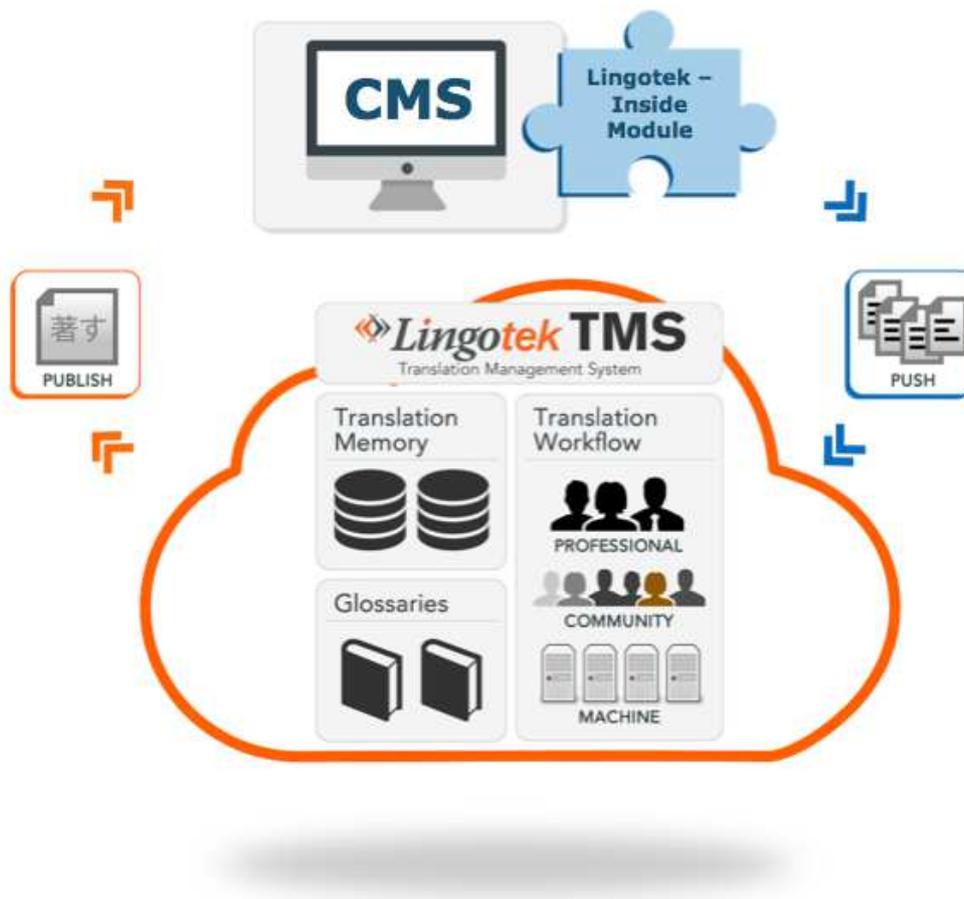


Figure 9: CMS-TMS translation Workflow (Source: <http://www.lingotek.com/magento>)

The TMS module collects content from the CMS in the initial language, translates it and sends it back to CMS in the target language. Popular TMS service providers are Lingotek (lingotek.com) and Across (across.net)

4.2.2 Multi-Currency Support

Many e-commerce platforms support nowadays multiple currencies. The most convenient way to update fluctuating exchange rates is the utilization of an exchange rates API service which allows for updating the online store automatically. The table bellow shows exchange rates API providers and the format used to parse the request and retrieve the exchange rate:

Provider	Technology	Reference
European Central Bank	XML to XML, Request URL: http://www.ecb.europa.eu/stats/eurofxref/eurofxref-daily.xml	http://www.ecb.int/stats/exchange/eurofxref/html/index.en.html#dev
Currency Layer	REST to JSON, Request URL: http://apilayer.net/api/live	https://currencylayer.com/
Yahoo Finance Api	REST to CSV, Request URL: http://finance.yahoo.com/d/quotes.csv	http://finance.yahoo.com

Table 3: Real Time Currency Exchange Rate Providers

If the e-commerce platform does not support automated exchange rate modification, a server cron job need to execute a request in preset time intervals and update the platforms database with the parsed API response.

4.2.3 Payment Methods

Obviously, the ability to offer multiple payment options to a potential customer is of benefit for an online store. While the importance of offering the most popular payment methods in a localization target country is discussed later in Section 4.6 the ability of the e-commerce platform to adapt to the various technologies used by the payment providers needs to be addressed at this point.

Some of the most utilized payment methods around the world include:

- **Cash On Delivery**

The customer pays upon receiving his order

- **Credit Card by Redirection**

The customer gets redirected to the merchant's bank and enters his credit card information. After the cart is charged the customer is redirected back to the online shop's payment success page. The merchant's bank is responsible for all security measures involved.

- **Credit Card at the online shop**

The e-commerce platform collects payment data, transfers it to the payment processor (usually a bank) and runs background charging and validating. The merchant is responsible for security and fraud protection and usually is required by the bank to comply with Payment Card Industry (PCI) Data Security Standards. Those technical standards are needed to be followed by the e-commerce platform and the online store's hosting server (Security Standards Council 2015)

- **Online Wallets**

The customer gets redirected to the merchant's bank and enters his username and password. The payment gets processed by deducting the needed amount from his online wallet, or charging a connected bank account, credit card etc. After payment the customer is redirected back to the online shop's payment success page

Popular online wallets include Paypal, Skrill, Yahoo!Wallet, Google Checkout Yandex.Money, Amazon Payments etc. The advantage of online wallet that the user does not need to enter any credit card information when purchasing online as his payment info and identity is confirmed by logging into the above services.

- **Direct Debit or SEPA Direct Debit in Europe**

The customer authorizes the merchant during checkout to withdraw money from his bank account by adding his name, account and sort number.

4.2.4 Shipping and Logistics

The shipping functionality of an e-commerce platform should not be limited to proposing to the customer available shipping methods and costs. As will be discussed in detail later in Section 4.7, order fulfillment methods may vary by business model and country. Shipping method and cost depends on the product's location, the recipient's location, the products dimensions and weight and desired delivery speed. Besides defining method and cost the e-commerce platform should be able to get real

time quotes by carriers, inform suppliers and order fulfillment companies about the order, update it's inventory etc

Following procedures apply:

The products are at the merchant's warehouse or premises

- Available shipping methods and prices are defined during checkout by taking into account order recipient's location and product weight and size.
- Prices are calculated by using pricing tables or real time rate calculation using and API provided by shipping carriers.
- Upon checkout the shipping carrier gets automatically informed to visit the merchant's premises for pickup at a specific time
- The merchant packages the products for pickup and updates his inventory

The products are dropshipped by the supplier

- Available shipping methods and prices are defined during checkout by taking into account order recipient's location and product weight and size.
- Prices are calculated by using pricing tables or real time rate calculation provided by the dropshipper.
- Upon checkout the supplier gets automatically informed (Email or API) to ship the order to the customer, usually using neutral packaging

The products are at an Order Fulfillment Warehouse

- Available shipping methods and prices are defined during checkout by taking into account order recipient's location and product weight and size.
- Prices are calculated by using pricing tables or real time rate calculation provided by the Fulfillment Company.
- Upon checkout the order fulfillment company gets automatically informed (Email or API) to ship the order to the customer, using the Merchants Packaging
- After the order leaves the warehouse inventory is updated, the online store inventory is updated and fulfillment pricing adjusted

4.2.5 Taxes

The e-commerce platform needs to be able to apply or deduct tax depending on the order recipient's location. E.g. if a European online shop sells products outside Europe, VAT tax needs to be deducted from the total order. On the other side, if an online shop located in New York delivers to a customer in New Jersey, additional sales tax needs to be applied during checkout.

4.2.6 Web Analytics and A/B Testing

It is important to online stores to measure performance and improve conversions using web analytics software such as Google Analytics, Coremetrics or Webtrends. Additionally, conversion optimization is a daily task using A/B or Multivariate Experiments using tools such as Optimizely or Convert. When conducting experiments site elements are modified (eg product image size, checkout page wording etc) and multiple variations of them are shown to visitors. The variation that over time improves conversions is adapted (Eisenberg, Quarto-vonTivadar and Davis 2008).

If an online store is simply globalized (eg uses English language), but has an international customer base, conversion optimization using experiments might have poor results. A better approach would be to segment the customer base by location and conduct the experiment on a specific customer segment. This can be achieved using geo-targeting to identify customer location and decide whether or not to display the experiment tag.

For the purpose of this thesis a few lines of PHP code have been developed to illustrate an easy geo-targeting approach for e-shops that are not localized or utilize only language targeting. In this example assume that we have an online shop in Portuguese language which sells to customers in Portugal and Brazil and wishes to display content accordingly. The example script connects to the freegeoip.net API which uses the visitors ip to find the responding country:

```

<?php

function getlocation($ip) {
    @ $request = "http://freegeoip.net/json/".$ip;
    @ $response = json_decode(file_get_contents($request), true);
    return $response;
}

// REQUEST LOCATION BY IP

$geo = getlocation ($_SERVER['REMOTE_ADDR']);

// GET COUNTRY CODE

$country= $geo['country_code'];

If ($country=="PT"){

// SHOW CONTENT FOR PORTUGUESE VISITORS

} elseif ($country=="BR") {

// SHOW CONTENT FOR BRAZILIAN VISITORS

}

?>

```

4.2.7 Multiple Storefronts

An advanced localization method is to use different storefronts for each/country to be served. Most modern e-commerce platforms offer this options when buying additional licenses for each domain. The main advantage is that all shops are managed from within the same backend. Figure bellow shows the product data page at the backend of the cs-cart e-commerce software:

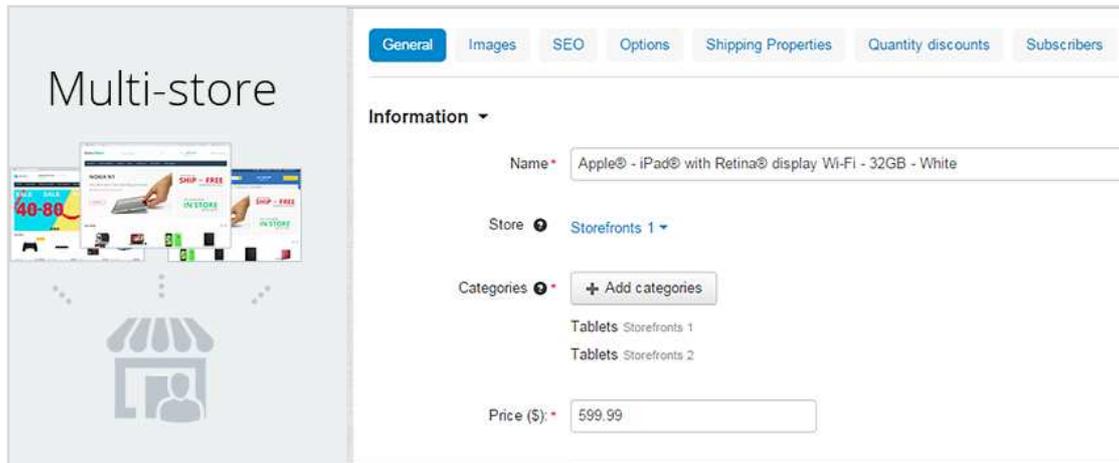


Figure 10: Multistore feature in CS-Cart (Source: <http://blog.cs-cart.com>)

The admin can add a product to multiple categories of different storefronts (aka localized online store domains) and later, even change price & description per storefront.

Payment and Shipping Methods and any other content can be set per storefront, making the different domains acting like different websites, but having the same admin panel.

4.2.8 CDN (Content Delivery Network) Support

Content delivery networks (CDN) are dedicated collections of servers located strategically across the wide-area Internet (Sariou et al. 2002). Those server cache static content of a website such as images, videos, CSS and Javascript files.

When a user requests a website, the server which is closest to the user delivers the static content reducing website loading time.

If an online store serves users on multiple locations around the world the CDN improves loading times and improves user experience. As loading times are an important factor for online stores as online customers expect fast loading web pages (Constantinides 2004) and page load time has become a SEO ranking factor (Chapter 5), a CDN is considered highly important when internationalizing.

Some of the most known CDNs are Akamai, Cloudflare, MaxCDN, Amazon CloudFront etc

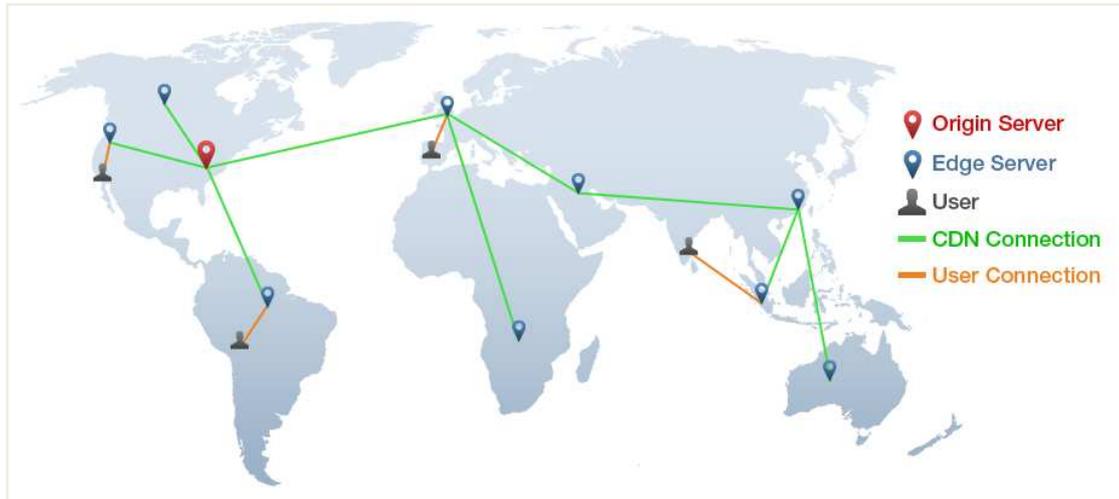


Figure 11: Content Delivery Network (CDN) (Source : <https://gtmetrix.com/why-use-a-cdn.html>)

4.2.9 An overview of E-Commerce Platforms

NBS Systems, an e-commerce consulting firm in the UK, publishes an annually review of e-commerce solutions in JAVA and PHP, installation and maintenance fees (Humeau 2013). The more expensive a solution is, the higher turnover needs to be achieved by the online store to cover costs:

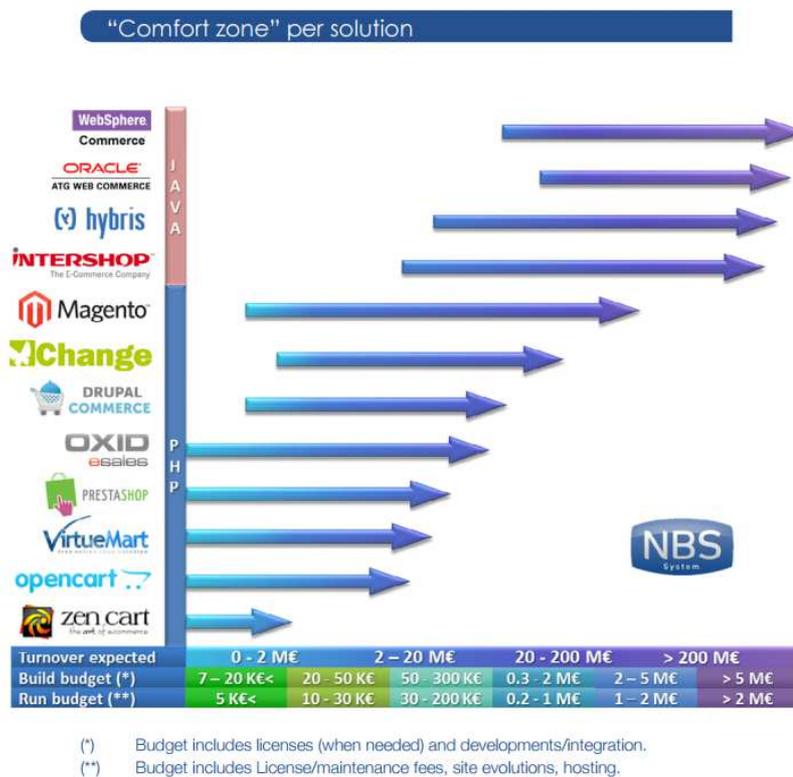


Figure 12: e-commerce solutions, installation and maintenance costs (Source: https://www.nbs-system.com/wp-content/uploads/benchmark_short_english.pdf)

4.3 Internationalizing Software (i18n)

If an online store wishes to develop its own software solution and does not want to rely on standard e-commerce platforms, it has to offer features such as outlined in section 4.1, and furthermore, build a platform that can be localized easily when needed.

The definition of Internationalization is “the design and development of a product, application or document content that enables easy localization for target audiences that vary in culture, region, or language. Internationalization is often written i18n, where 18 is the number of letters between i and n in the English word” (Ishida and Miller 2015).

Proper internationalization includes developing code to support local, regional, language, or culturally related preferences. This includes Unicode support, proper handling of legacy character encodings, handling of number and date/time formats as well as separating code from design and localized content

4.4 Website Localization (l10n)

Localization can be defined as “the adaptation of a product, application or document content to meet the language, cultural and other requirements of a specific target market (a locale). Localization is sometimes written as l10n, where 10 is the number of letters between l and n”(Ishida and Miller 2015). To allow for localization an e-commerce solution should be internationalized as outlined in Sections 4.2 & 4.3

4.4.1 Content

Hofstede has identified four cultural dimensions (Hofstede 1980) that affect parameters (see Section 4.1) which influence interface design and content (Tegarden, Dennis and Wixon 2013). For the purpose of this thesis a quick reference matrix has been created, containing those dimensions along with the impact on a website’s localized content:

Cultural Dimension	Definition	Impact on Content
Power Distance How the distribution of social power is dealt with in the	A culture with high power distance believes in authority, in a culture with	In high power distance culture a website should emphasize on the “greatness”

culture.	low power distance people believe that power should be equally distributed.	of the leaders of the firm, “proper titles” should be used for executives and testimonials by “prominent” members of the society should be posted
Uncertainty Avoidance Explains to what degree a culture is comfortable with uncertainty.	Members of a culture with a high degree of uncertainty avoidance avoid taking risks, value tradition and are comfortable in a rule drive society.	In cultures with a high degree of uncertainty avoidance more customer service needs to be provided, local contacts need to be available, trust seals should be used and relationship of local culture to products should be pointed out
Individualism vs Collectivism Shows the level of emphasis the culture places on the individual or collective ,or group	In North America and Europe individualism is rewarded while in East Asia it is believed the group is more important	Collective societies need information on how the company is “giving back”, to the community, supports “member” and “loyalty” programs. Individualistic societies need more personalization on the website, emphasis on the uniqueness of the products a
Masculinity vs Femininity How well masculine and feminine characteristics are valued by the culture.	In a Masculine culture characteristics such as being aggressive , assertive, ambitious and competitive while feminine cultures value characteristics such as being encouraging, compassionate,	In masculine societies emphasis should be given to the effectiveness of the products offerings while in feminine societies focus should be on aesthetics

Table 4: Cultural Dimension's Impact on Website Content (Tegarden, Dennis and Wixon 2013)

4.4.2 Culturability

Culturability is a term which was introduced by Barber and Badre, and means the merging of culture and usability (Barber and Badre 1998). Cultural factors such as color, writing orientation and other cultural markers should be taken into account for website usability.

As example, the Table bellow illustrates the meaning of colors in some countries:

Color	China	Japan	Egypt	France	United States
Red	Happiness	Anger	Death	Aristocracy	Danger
		Danger			Stop
Blue	Heavens	Villainy	Virtue	Freedom	Masculine
	Clouds		Faith	Peace	
			Truth		
Green	Ming	Future	Fertility	Criminality	Safety
	Dynasty	Youth	Strength		Go
	Heavens	Energy			
Yellow	Birth	Grace	Happiness	Temporary	Cowardice
	Wealth	Nobility	Prosperity		Temporary
	Power				
White	Death	Death	Joy	Neutrality	Purity
	Purity				

Table 5: Color - Cultur Chart (Barber-Badre 1998)

4.5 Customer Relationship Management (CRM) systems

“Customer Relationship Management (CRM) systems, capture and integrate customer data from all over the organization, consolidate the data, analyze the data, and then distribute the results to various systems and customer touch points across the enterprise. A touch point (also known as a contact point) is a method of interaction

with the customer, such as telephone, e-mail, customer service desk, conventional mail, Web site, wireless device, or retail store” (Laudon and Laudon 2012).

CRMs are a broad topic. For the purpose of this thesis we will focus on which user data should be collected and how it can be used to support internationalization efforts. Furthermore the issue of international customer support is discussed.

4.5.1 Collecting Data

An online store, as any organization, collects data when interacting with users. Examples of data are email addresses when a user sign up for a newsletter, personal information such as name or address when a user becomes a customer and more. Online stores collect more information, such as browsing behavior, user location etc by using cookies. This data can be used to predict future user behavior. Figure below illustrates such a Customer Behavior Model (CBM) (Sadath 2013)

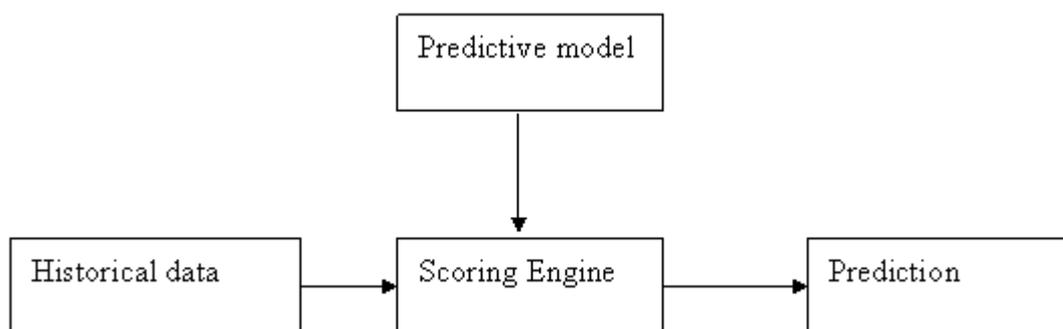


Figure 13: The Customer Behavior Model (CBM) (Sadath 2013)

4.5.2 Using data for effective internationalization

It is important to segment user data by user location, as this affects the way of interacting with the user for marketing and sales purposes.

User entered data such as emails, telephone etc usually can be used for email marketing, postal letters and printable coupons, sms messages etc As outlined above when discussed the impact of cultural differences when communicating with a cross border audience, it is obvious that email messages (Jenkins 2009), sms etc should use local color preferences and wording.

User behavior data and its evaluation using the CBM can be used to personalize the users' online experience. But, it can be used along with sales data to predict user behavior in countries that have similar cultural dimensions. In chapter 6, the case study of Lazada, shows the company used data of their Malaysian presence for their internationalization to other 5 countries of similar culture in South East Asia.

4.5.3 Customer Support

Customer support is usually done by email, online chat or phone, using in-house personnel or outsourced to call and support centers. As with every online store - customer cross border communication, cultural differences need to be considered. Moreover a local telephone number can be an advantage in cultures with a high degree of uncertainty avoidance (see Section 4.4.1).

Even small online stores that want to take advantage of a global customer base can use local telephone numbers (or even toll free numbers). Those numbers basically are 'virtual' as they forward calls to the store's call center. Examples of companies that offer worldwide virtual phone numbers are FlyNumber, GlobalCallForwarding, VirtualPhoneLine etc

4.6 Payment Methods

Online store owners may assume wrongly that consumers around the world use credit cards to purchase goods online (Edgar Dunn and Company 2015). This is not the case. Consider these three key global markets :

- In China, only 1% of shoppers pay with international credit cards.
- In Brazil, only 30% of credit cards can make international payments.
- And in Germany, three quarters of shoppers prefer not to use credit cards when making an online purchase.

As payments methods vary by country an online store needs to examine the target country's customer preferences and offer them. The figure below illustrates payment method share in various countries.

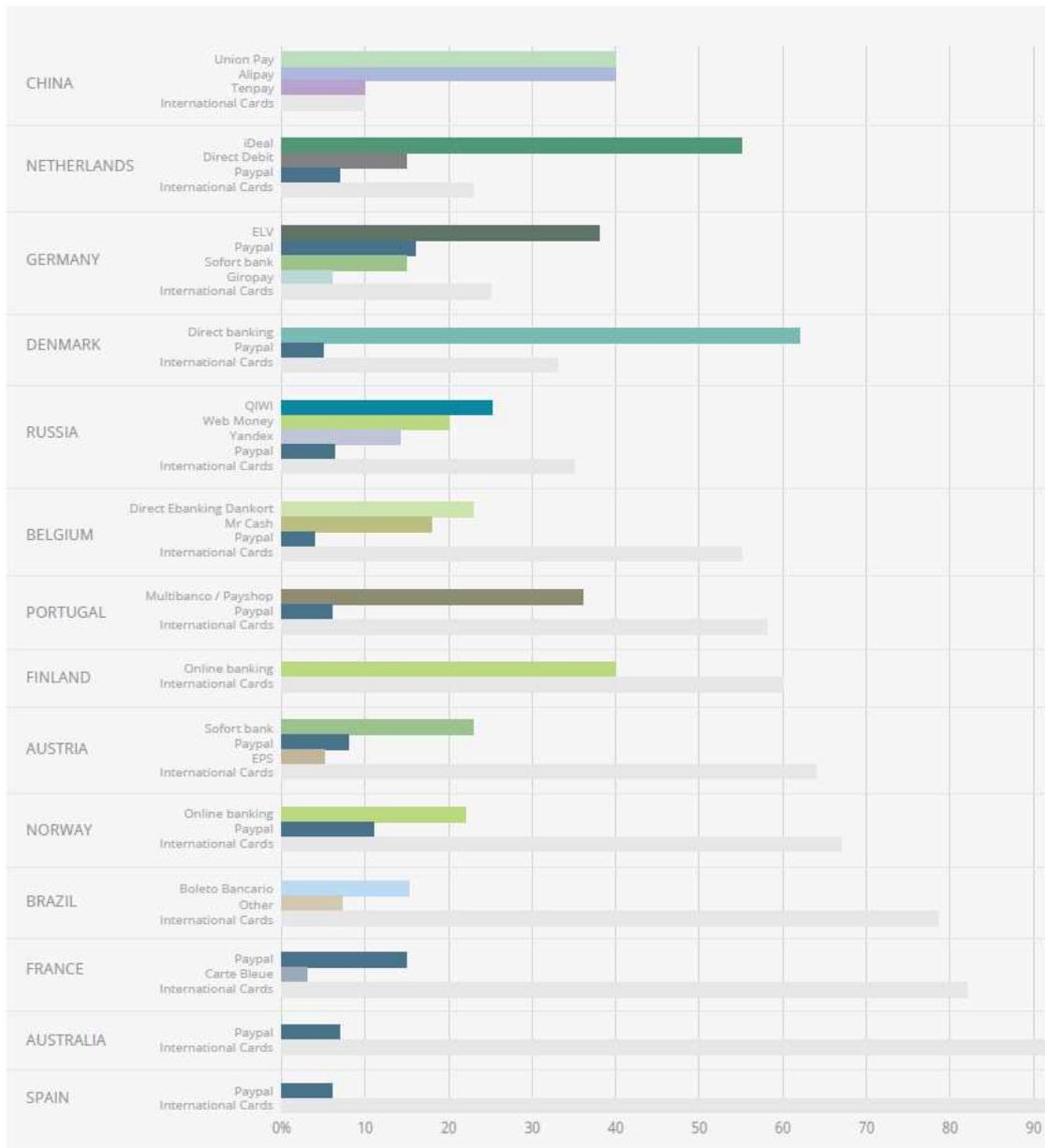


Figure 14: Payment Methods Share by Country
 (Source: <https://www.adyen.com/dam/documentation/whitepapers/Adyen-Edgar-Dunn-Company-Report-Optimizing-Payments.pdf>)

4.7 Logistics and Order Fulfillment

An online store, with a presence in multiple countries, need to consider all available methods to store and to ship its products. Stocking location and available shipping methods depend on the countries taxes and customs, transportation system and infrastructure. The ‘last mile’ delivery, which is discussed over the next sections, is a common challenge in underdeveloped countries.

4.7.1 Order Fulfillment

Orders by an online shop are stored and shipped to the customers in the following locations and ways:

- **Store’s Warehouse or Premises**

This is the ‘ordinary’ way of storing and shipping. The store keeps product’s in its warehouse, packages and ships to the customer from there

- **Supplier’s Warehouse (Dropshipping)**

The order is forwarded to the supplier who stores and shippes the products to the customer using neutral packaging. This is useful if the supplier location is close to the customer’s area/country.

- **Contractor’s Warehouse (Order Fulfilment)**

The suppliers ship products to a fulfillment company which takes care of customs (if needed), stores the products and it warehouse and ships the order to the customer. The online store pays the order fulfillment company a fee for declaring, shipping and storing the products. This is a useful approach for online stores that don’t wish to invest in a warehouse or sell to countries where customs apply.

Examples of such fulfillment companies are Shipwire, Amazon Fullfilment, 360Zebra, Webgistix etc. The Figure below illustrates the order fulfillment process by third party providers:

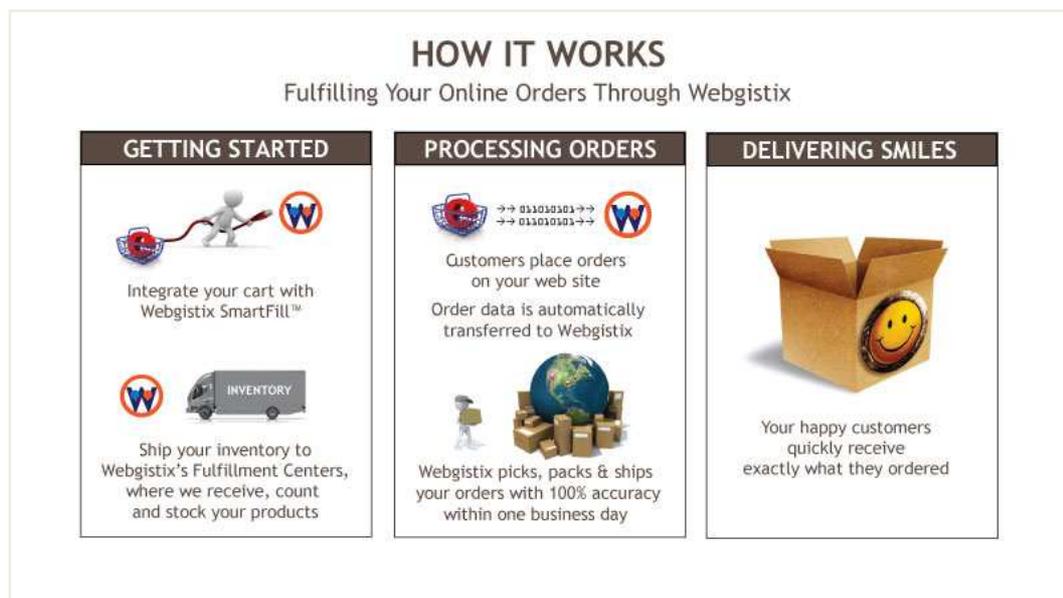


Figure 15: Order Fullfilment Process (Source:Webgistix.com)

4.7.2 Last Mile Delivery Problem

In e-commerce the “Last Mile” is the distance from the nearest to the customer logistic hub to the customer. The Last Mile problem occurs when the recipients’ locations cannot be served by the courier company (eg in an country area, or in underdeveloped countries) (White 2015)

In many cases the only way to overcome the Last Mile problem is a direct investment entry mode with an in-house delivery service to as many locations as possible. Such an approach has been followed by Lazada in South East Asia, as discussed in Chapter 6

5. International online marketing

For years there was an ongoing debate about advertising should be standardized across countries or adapted to local culture (Agrawal 1995). Nowadays many marketing channels are available that differ by culture and country, so that marketing localization is a logical option. The figure below shows share of marketing spend by ad format in the first half of 2014

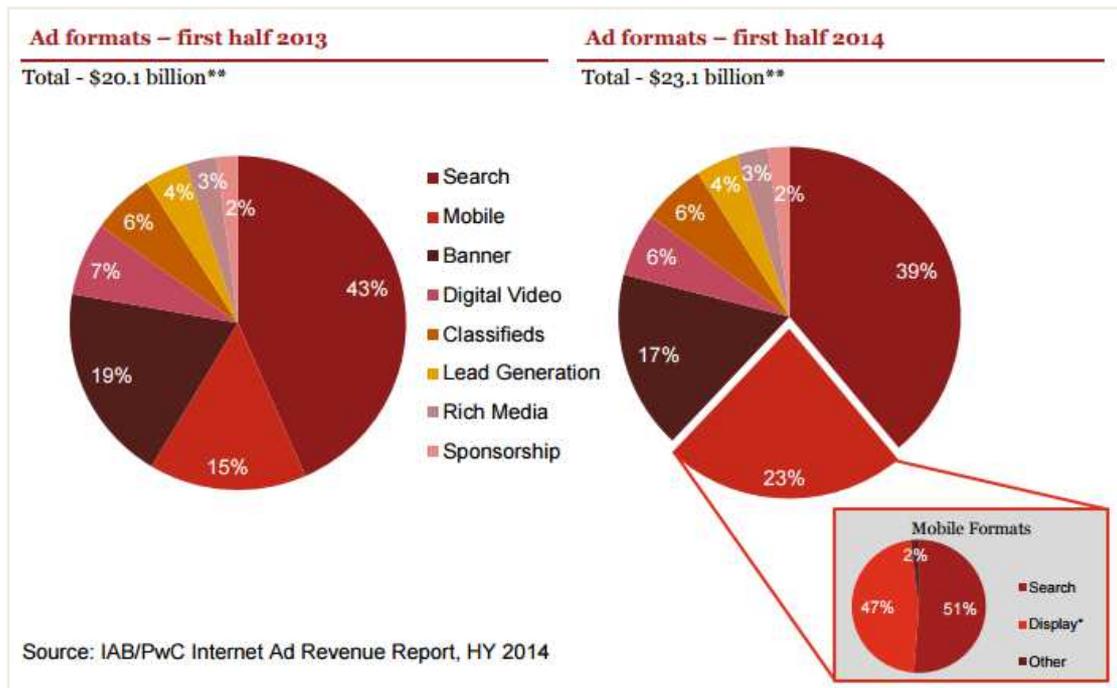


Figure 16: Ad Formats by Revenue, IAB Internet Advertising Revenue Report HY 2014

5.1 Search Engine Optimization

Search Engine Optimization is the process of performing certain actions on and off a website in order to archive higher organic rankings (unpaid) in search engines in order to increase the website's visibility.

Good organic placements in search engine result pages (SERPs) are an extreme valuable competitive advantage for online shops. Organic traffic is highly important to online shops as it is almost free compared to paid advertising and reduces in that way the cost per sale, allowing for higher profits.

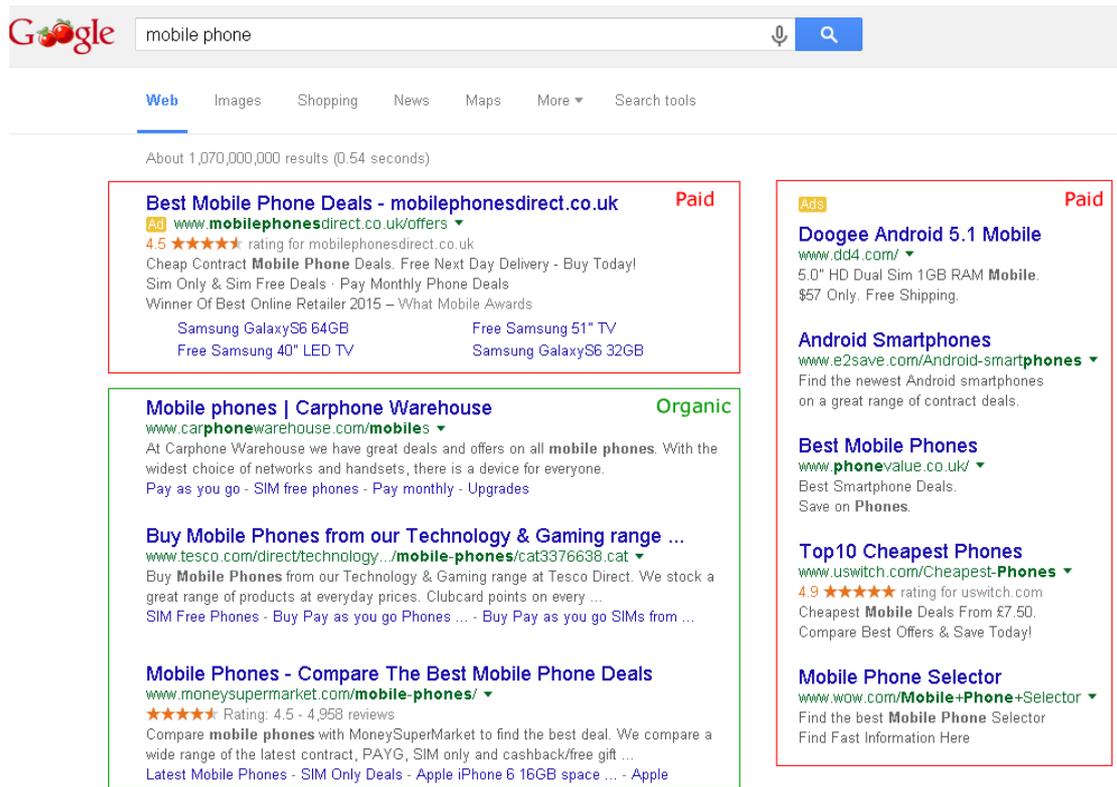


Figure 17: Google.co.uk organic and paid placements for "mobile phone"

While Google dominates by far the international organic and paid search market it does not mean that it is the dominating search engine in any country. When optimizing a web presence as part of internationalization efforts, it is important to check rankings for the top search engines in the target country (Moran and Hunt 2014).

To know which search engines are top in a country, specific market data can be obtained from websites such as Net Market Share (www.netmarketshare.com) and Statista (www.statista.com). The table below illustrates global market share of search engines and market shares in some countries where Google does not dominate.

Global ¹	China ²	Korea ³	Russia ⁴
Google 53.74%	Baidu 58.14%	Naver 73.62%	Yandex 54%
Baidu 31.32%	360Search 25.26%	Daum 18%	Google 34.7%
Bing 10.81%	Sogou 13.31%	Google 2.5%	mail.ru 8.6%
Yahoo! 3.52%	Google 1.55%	Nate 2.14%	Rambler 0.9%
AOL 0.15%	Bing 0.81%	Zum 0.37%	Bing 0.6%

Ask	0.07%	Yahoo	0.55%		Others	0.6%
Other	0.39%	Others	0.38%			

[1] Net Market Share Global Search Engine Usage (<http://www.netmarketshare.com/search-engine-market-share.aspx?qprid=4&qpcustomd=0>)

[2] CNZZ Top Chinese Search Engines of April 2014 (<http://www.komdat.com/blog/china-market-update-search-engines-q1-2014>)

[3] Neilson Korean Click May 2013 (<http://koreajoongangdaily.joins.com/news/article/article.aspx?aid=2971581>)

[4] Komdat Russia Search Engine Market Share (<http://www.komdat.com/blog/market-update-search-engines-russia-q1-2014>)

Table 6: Search Engine Market Share

There are not only different search engines across countries, but the same engines provide different SERPs for the same search term in each country. Below are the SERPs of the search term “mobile phone” at google.co.in (India) for which we previously searched at google.co.uk

The screenshot shows the Google.co.in search results for the query "mobile phone". At the top, the search bar contains "mobile phone" and the Google logo. Below the search bar, there are navigation tabs for "Ιστος", "Εικόνες", "Ειδήσεις", "Χάρτες", "Βίντεο", "Περισσότερα", and "Εργαλεία αναζήτησης". The results are categorized into "PAID" and "ORGANIC".

PAID Results:

- Cheap Unlocked Phones** (www.dhgate.com/): High Quality Chinese Smart phones \$30-\$90/pc, Free Shipping.
- China Mobile Phone** (www.made-in-china.com/Mobile_Phone): Good Price On Mobile Phone. Trusted, Audited China Suppliers.
- Mobile Phones on Aliexpress** (www.aliexpress.com/): 1M+ Products Up To 50% Off. Free Shipping Available. Order Online!
- Smartphones - Tablets** (www.phonemania.gr/): Ψάχνεις για Smartphone η Tablet; Τότε μπες στο phonemania.gr
- Discounts - up to 80% Off** (www.oony.co.in/Mobile+Phone+Shopping): Find The Best Deals Here. Check Out These Fantastic Offers!
- Φθηνά και Ποιοτικά Κινητά** (www.cshop.gr/): Quad-Core Απτο 99€ DG310, DG700. Octa-Core Απτο 178€ DG550, DG900
- Mobile Phones Shop Online** (www.webcrawler.com/): Search multiple engines for mobile phones shop online

ORGANIC Results:

- Mobile Phone - Amazon.in** (www.amazon.in/mobiles-accessories/b?...): Μετάφραση αυτής της σελίδας. Amazon.in: Buy Mobile Phones online at low prices in India at Amazon.in. Browse mobile phones from popular brands including samsung, micromax, apple, ... Electronics - Mobile Accessories - Radha sales - iBhejo
- Mobile Phone Brands: All Mobile Brands - NDTV Gadgets** (gadgets.ndtv.com > Mobiles): Μετάφραση αυτής της σελίδας. All Mobile Phone Brands including Nokia, Samsung, HTC, Micromax, Huawei, iBall, Blackberry, Sony Ericsson, Spice, Motorola, Lenovo, LG, Karbonn, Videocon ...
- Εικόνες για mobile phone** (Αναφορά εικόνων): Περισότερες εικόνες για mobile phone
- Mobiles: Mobile Phones with Lowest Prices in India - Shop ...** (www.snapdeal.com > Mobiles & Tablets): Buy mobiles online: Online mobile store for branded mobile phones at best prices in India. Check prices & user reviews. Shop for mobiles under 10000, 15000, ...

Figure 18: Google.co.in organic and paid placements for "mobile phone"

It is important to check search engine optimization efforts against the local version of the dominating search engines.

When it comes to optimizing a website for search engines the actions required do vary slightly across search engines. The most important steps and factors are Keyword Research, Domain Name Ending, Mobile Compatibility, The hosting server IP, On Page Factors, Off Page Factors. All factors are explained in detail over the next sections

5.1.1 Keyword Research

Keyword Research is basically the way of ‘finding out’ what people that speak a specific language, and are located in a specific country are searching for on the web. It is obvious that online shops with a presence in multiple countries need to know if and how people search for their products in each country. Keyword research is important as besides identifying trends in a country, it helps also identifying the exact search terms as well as synonyms and variations that need to be used in website elements (eg Meta Tags, Titles etc), page content for SEO and paid CPC advertising.

The main tools for conducting keyword research are Google Trends™, Google Keyword Planner, Yandex (Russian) and Baidu (Chinese) Keyword Tool

Google Trends

Google Trends is a tool that uses Google search data and shows top searches in a specific country over a set timeframe. It also compares searches for given keywords, which is useful for online shops when used with specific product names. Figures below show search trends for major mobile phone models in Germany and Brazil.

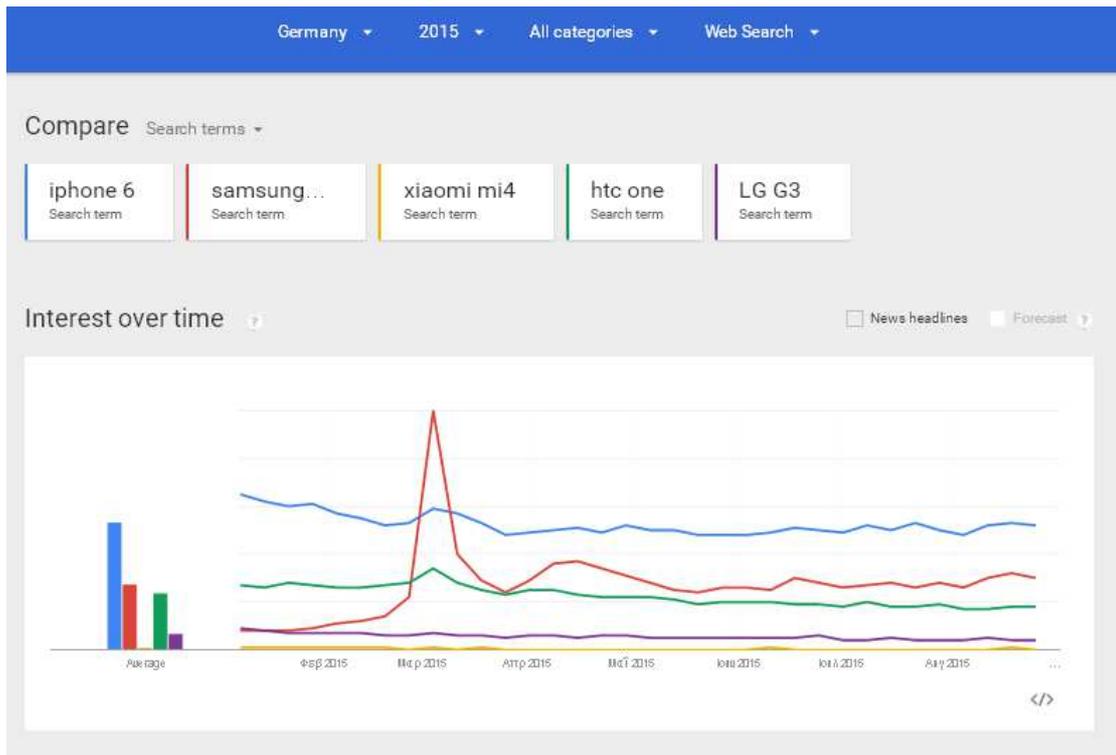


Figure 19: Search Trends 2015 of Mobile Phones in Germany

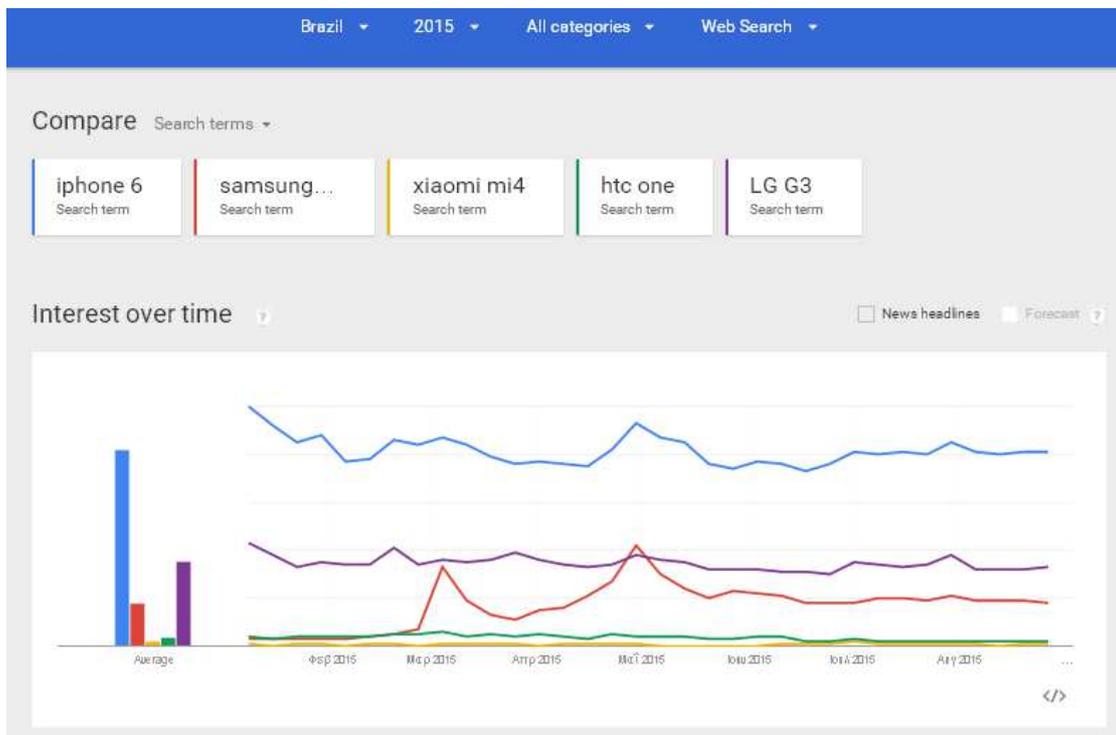


Figure 20: Search Trends 2015 of Mobile Phones in Brazil

The figures above indicate that an online shop which is active in Germany would need to pay more attention to the iPhone 6, the Samsung S6 and the

HTC One while the online shop in Brazil needs to take into consideration the popularity of the LG G3.

Google Keyword Planner

The Google Keyword Planner tool is part of Google Adwords and is mainly used to create CPC (Cost per Click, see Chapter 5.3) bidding lists. It is also quite useful to display search data and keyword ideas. The nicest feature is probably to scan competitor sites for keywords.

The use is quite simple: after entering a few keywords the tool displays search terms related to the keywords along with their monthly search data. Figure below shows the tool's output when using the keywords *s6*, *iphone 6*, *htc one*, *lg g3*, *xiami mi4* in the Philippines

Keyword	Currency	Avg. Monthly Searches (exact match)	Competition	Suggested bid
iphone 6	EUR	201000	0,01	0,59
lg g3	EUR	49500	0,11	0,11
iphone 6 price	EUR	33100	0,07	0,05
xiaomi	EUR	27100	0,11	0,04
xiaomi mi3	EUR	22200	0,01	0,01
lg	EUR	14800	0,07	0,23
htc one m8	EUR	14800	0,07	0,21
xiaomi mi4	EUR	9900	0,07	0,21
iphone 6s	EUR	8100	0	0,15
s6	EUR	6600	0,07	0,36
htc one	EUR	6600	0,02	0,09
mi3	EUR	5400	0,01	0,07
lg g3 price	EUR	4400	0,24	0,07
lg g3 review	EUR	3600	0,02	0,09

Figure 21: Keyword Planner suggestions Mobile Phones in the Philippines

The output above means that iPhone 6 is the most popular mobile phone in the Philippines, followed by LG G3 and Xiaomi MI3 (not MI4). Moreover it shows that the words 'price' and 'reviews' extend the search reach significantly and should be included along with the model name when doing on page SEO and CPC Campaigns.

Yandex (Russian) and Baidu (Chinese) Keyword Tools

Yandex is a very popular search engine in Russia and Turkey while Baidu is the largest Chinese search engine. Both offer cpc advertising and provide a keyword tool similar to Google Keyword Planner™ relying on their own search data. When

targeting countries where the above search engines have a significant market share it is important to conduct keyword research with the above tools.

5.1.2 On Page Optimization

The basic key to on page SEO is to make a webpage as relevant as possible to a given search query and ensure that search engines can ‘read’ the website’s content(Dover and Dafforn 2011).

On Page SEO consists of optimizing webpage code elements (eg H1 headers, Meta Tags, Alt tag etc) and page content for specific keywords that have been identified during keyword research. While each major Search Engine applies a different weighting factor for on page optimization, most code, website structure and content characteristics are of common importance and are explained in brief below(Brockbank 2014).

Keywords in Code Elements

It is important to include the targeted keywords in the page title, in header tags (h1,h2 etc) and alt tags

Website Structure and Speed

- Canonicalization of Duplicate Content using the canonical tag
- The use of search engine friendly URLs if possible including the keyword (eg www.shop.com/mobile/iphones6/ instead of www.shop.com/product.php?id=397446)
- Page Speed, which matters mostly to Google. To evaluate page speed Google offers its own tool at <https://developers.google.com/speed/pagespeed/insights/> . As website speed is an important factor, the use a CDN (Content Delivery Network) is a necessity if targeting countries that are far away from the hosting server location

Content

Targeted Keywords should be included in original, naturally written content, not copied from other websites to avoid duplicated content penalties. Keywords should appear in variations and as well as synonyms.

5.1.3 Off Page Optimization

Off Page factors that influence search engine rankings are links to the website (Backlinks) and citations in social media

Backlinks and Page Rank

Using backlinks as a ranking signal was originally introduced when Larry Page and Sergey Brin invented in 1998 their page rank algorithm at Stanford University (Page et al. 1998) . The concept is simple, the more links exist towards a website the better this website ranks. If the linking websites have also a high authority (pagerank, which means they have many backlinks too) the higher is the backlink value.

Link building is the most important part of off page optimization. Link building basically means getting links from as many high authority websites as possible. This can be done by creating link worthy content and publishing it on social sites, article sites etc (white hat seo) or using automated methods such as block comments spamming, link farm participations or paying other webmasters for backlinks (black hat seo). Most large Search Engines are able to detect Black Hat Seo tactics and penalize them

It is obvious that link building needs to be done for each localized website (or country section) of an online shop separately with links coming from websites in the same language and country of the localized version (or section) of the online shop

When doing link building, the first step is to identify the link profile of the competitor in a specific country. This means finding out which high authority domains link to the competitor's online shop. There are several tools that are used by seo specialist for backlink analysis such as Open Site Explorer (moz.com/researchtools/ose/) Majestic Seo (majestic.com) and Ahrefs (ahrefs.com)

Let's assume an online shop with general merchandise that would like to enter the Philippine market. One of the key competitors is Lazada (Lazada.com.ph) which belongs to Rocket Internet in Berlin. After using ahrefs tool on the competitor the output would be:

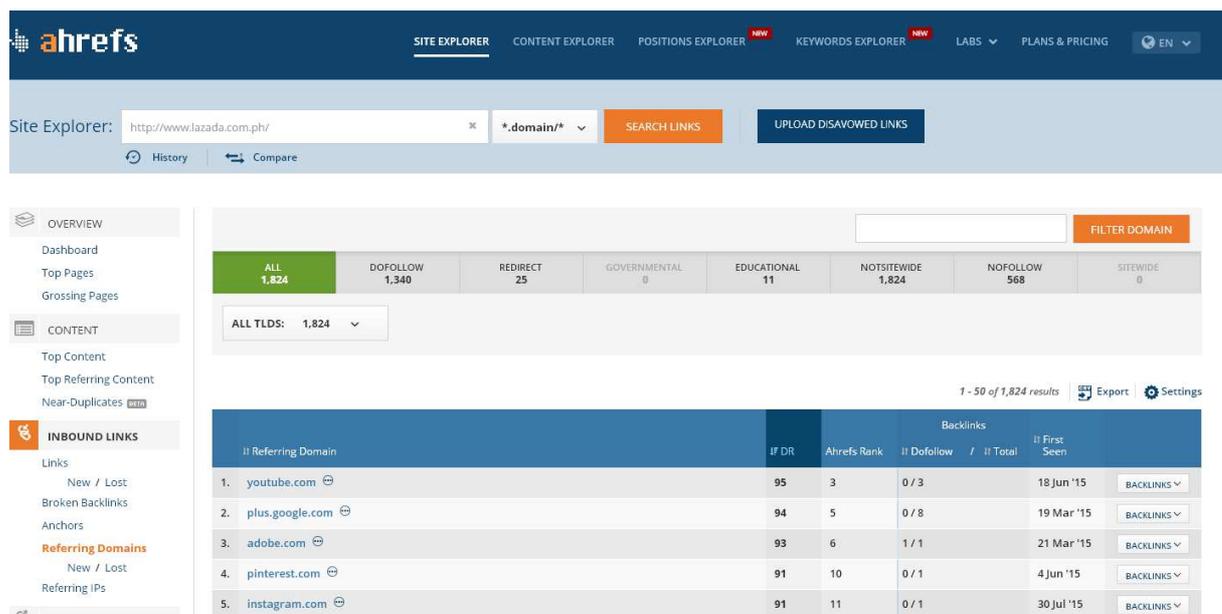


Figure 22: Ahref.com backlink analysis of Lazada.com.ph

The websites with the highest domain authority (DA) that link to lazada.com.ph are social sites such as pinterest.com, youtube.com, google plus etc which can easily be duplicated.

Link building is a continuous process in order to cover existing competitors back links as well as new coming in, which can also be found using the above tools.

Social Media Citations

Social Media Citations (and backlinks from there) have become lately ranking factors (Penson 2015). This simply means that for each local version (or country section) of an online shop it is advisable to have different accounts on social media networks that target local users.

5.1.4 Mobile Compatibility

Google has rolled out on April 21, 2015 a new mobile friendly search algorithm (Makino, Jung and Phan 2015) where mobile friendly websites rank better in mobile search results. This is a very important factor when taking into account the rapid growth of mobile use penetration across the world and the way it changes consumer behavior making it a possible competitive advantage against established competitors.

5.1.5 TLD and Hosting Server Location

In order to rank in a country local SERPs the a search engine must know which audience the website targets. A country TLD (Top Level Domain eg .de, .fr etc) or a server location in a target country is an indicator for serach engines to assign a website to a country. Google has made it easier for webmaster to define the website's target country through the Search Console (also known as Webmaster Tools). According to Google, if a website can use one of the other means to set geo targeting (ccTLD or Search Console's geo-targeting tool), there is no need to worry about the server's location. (Google 2012)

Other Search Engines besides Google tend to behave differently. While there is no clear evidence, some experiments have shown that Baidu seems to favor strongly websites with Chinese ip addresses (<http://martinkura.com/search-engines-prefer-locally-hosted-websites/>)

5.2 Social Media Marketing

Social Media sites engage billions of users everyday around the world. As objective of marketing is mainly putting products and services 'in front' of potential customers, social media marketing is highly important to business as it addresses a very large quantity of potential customers. The key in gaining advantage from social media marketing as an online shop is to know:

- which are the major social media platforms in a selected area for a given audience with certain demographic characteristics
- how to engage and communicate with users taking into account cultural differences in each geographic area

5.2.1 Social Media & Social Networks

Social Media are "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of user-generated content" (Kaplan A. 2010) while according to Boyd & Ellison "social network sites are web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list

of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site” (D. Boyd 2007)

5.2.2 Major Social Networks and Media

Figure 23 below show the largest Social Networks around the World:

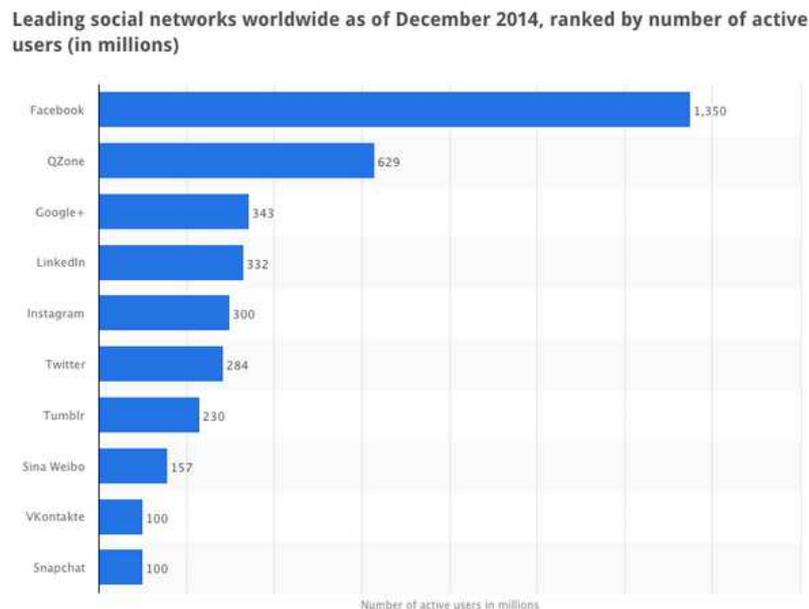


Figure 23: Largest Social Networks around the world (Source: <http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/>)

5.2.3 Social Networks and E-commerce

Social Media have given consumers control, information and power over the market process. Retailers need use social media to listen to customers in order to personalize the customers’ online experience, form advertising concepts based on product reviews and make in that way the customer a co-producer (Contantinides, Romero and Boria 2008). As customers are different across countries and cultures different channels of communication (eg Facebook Page) are needed for each area served.

“Social media is driven by text, photos, video, audio, and simulated environments. The goal of all social media in a business context is to engage people” (Safko and Brake 2009). Engaging people means basically Communication, Collaboration, Education and Entertainment. While each network needs its own

strategy, they should not be treated as standalone elements, but as part of an integrated system (social media plan) which needs a systematic approach and evaluation based on predefined performance indicators (Hanna, Rohm and Criteenden 2011).

A list of common actions across networks that an online shop's social media plan should include can be found below (Macarthy 2014):

- Building A Business Page
- Posting often using quick text
- Posting Images and Videos
- Adding 'Like' or similar buttons to each product page of the online shop
- Holding Contests
- Announcing exclusive offers and coupons
- Responding to queries and complaints
- Using hash tags
- Announcing Events
- Paid Social Media Advertising

5.3 Pay per Click (PPC) and Display/Banner Advertising

Pay per Click (or Cost per Click) is an online advertising model where publishers (website owners) get paid by an advertiser when his ads get clicked. While PPC can be applied to banner advertisements within a publisher's website it is more common to advertise using text ads while banner ads are usually paid using the cpm (cost per thousand impression) model and serve branding purposes.

PPC and banner ads are usually served by ad networks, which are displayed beneath organic search results (in case of ad network that cooperates with search engines) or on publisher websites that have partnered with the ppc vendor.

Lot's of online users are resistant ads and consider them annoying. PPC ads that are displayed based a users search terms next to organic results, have a higher acceptance as they respond to users' needs and "advertising is not actually advertising when it is information" (Geddes 2010). Figure below illustrates ads on the Baidu Ad Network for 'Hawaii Travel'



Figure 24: Baidu PPC Ads when searching for "Hawaii Travel" (Source: www.baiduadvertising.com)

5.3.1 International PPC Vendors

Google Adwords and Yahoo! Bing Ad Network compromise over 95% in the US market (Moran and Hunt 2014) and are the dominating PPC Vendor in many countries. Whoever, depending on the target country, online shops that wishes to internationalize need to check also for local vendors. A list of major PPC Vendors can be found below (Kennedy 2011) :

- Yandex (Russia)
- Baidu (China)
- Naver (S.Korea)
- Etarget (Central & Eastern Europe)

5.3.2 PPC Basics

Setting up a PPC campaign consists basically of defining (Geddes 2010):

- The ad format (Text, Banner, Video, Product Ads etc)
- The keywords that trigger the ads
- The max CPC the advertiser is willing to pay
- Depending on the network additional features are available, such as location, demographics & device targeting

It is critical that an internationalizing online shop needs to target each country differently, setting up different campaigns:

- Ad wording, style and colors should reflect language and culture specific characteristics as defined during strategic planning (Chapter 3)
- Keywords used are the keywords which were identified for the specific country/area during keyword research
- Max CPC should be defined according to:
 - a) Competitor's bidding strategy
 - b) Product margins and conversion rates (when advertising products)
 - c) Demand for specific product categories (identified by trending tools such as Google Trends)

Figure 25 below shows the advertiser's panel at Yahoo! Bing where text ads are setup:

The screenshot displays the 'Create an ad' interface for text ads on the Yahoo! Bing platform. The interface is divided into several sections:

- Text/Mobile:** A tabbed interface with 'Text' selected.
- Ad title:** A text input field containing 'Huge Labor Day Sale' (25 characters maximum).
- Ad text:** A text input field containing 'on all Labor Day party supply items. Sale ends 9/1' (70 characters maximum).
- Display URL:** A text input field containing 'www.TestLaborDaySale.com' (35 characters maximum).
- Destination URL:** A text input field containing 'http://www.TestLaborDaySale.com' (1007 characters maximum).
- Text ad preview:** A preview window showing the ad as it would appear, including the title, ad text, and display URL.
- Save/Clear:** Two buttons at the bottom of the form.
- Ads you have created:** A section below the form showing a table with columns for Ad title, Destination URL, Ad type, and Ad preview. The table is currently empty, displaying 'There are no ads.'

Figure 25: Text Ads Setup at Yahoo!Bing PPC network (Source: www.microsoft.com)

5.3.3 Location and Device Targeting

Location and device targeting are offered by most major PPC Vendors and allow deciding whether or not to show specific ads in certain areas or on browsing devices by usually modifying max CPC bids per area/device.

This feature is important when it comes to internationalizing online shops as shopping behavior and device usage varies highly in certain areas of the world.

For the purpose of the present thesis, the following situation was examined:

An online shop wishes to promote the Galaxy S6 in Japan and is on a limited budget. Using Google Trends it is possible to see demand by city :



Figure 26: Google Trends, search term "S6" in Japanese cities

The next step would be to examine the share of e-commerce by device in Japan:

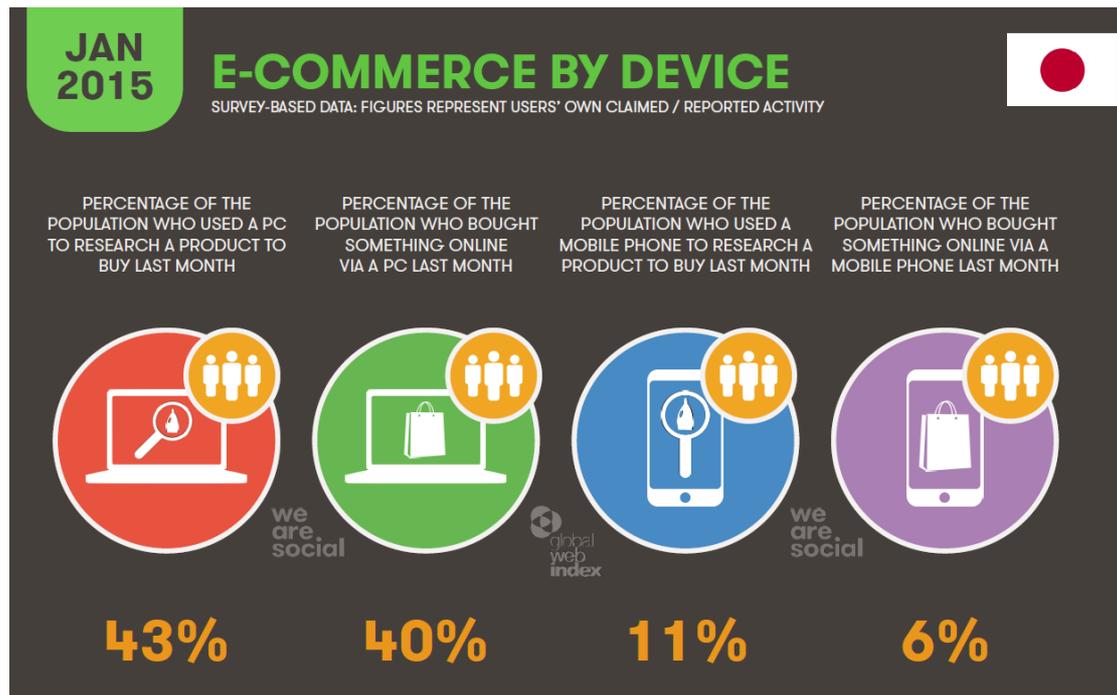


Figure 27: E-commerce by device in Japan, January 2015 (Source: www.wearesocial.com)

As seen above only 17% of Japan’s population search or buy products online via mobile phone. As a result, a suitable campaign would be targeting users in the cities Nagoya, Yokohama, Daisen who are using a PC to search for a galaxy s6 phone.

While the above example is simplified and user behavior (e.g. sales by area, device) will dictate further marketing efforts, it is good marketing practice when entering a market in a foreign country for the first time.

5.4 Mobile Marketing

Mobile Marketing is defined “a set of practices that enables organizations to communicate and engage with their audience in an interactive and relevant manner through any mobile device or network” (Mobile Marketing Association 2009) or according to the International Advertising Bureau “Mobile Interactive Advertising refers to advertising or marketing messages delivered to portable devices, either via a synchronized download or wirelessly over the air” (IAB 2008)

While most remember of (sometimes undesired) SMS or MMS messages when thinking of Mobile Marketing, technology has changed and with the rise of smartphone usage around the world, mobile marketing includes nowadays App Based Marketing, Location Based marketing, In-game Marketing and much more. Mobile

Marketing was in 2014 second in marketing spend after Search / PPC Advertising and, for the first time, above Banner advertising (IAB 2014)

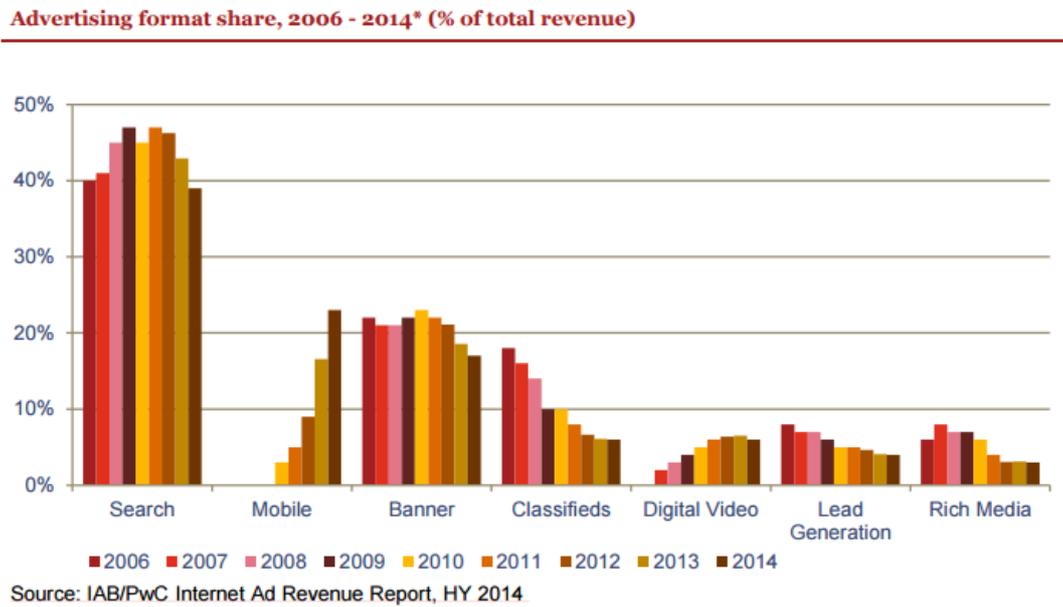


Figure 28: IAB internet advertising revenue report, advertising format share (Source: www.iab.com)

5.4.1 Why Mobile Marketing?

Mobile marketing is a powerful tool as mobile devices are personal (everyone has one or more), are pervasive (used all day by consumers) and have proximity (as carried with the customer) allowing marketers to use location to analyze consumer marketing behavior (Mobile Marketing Association 2014)

Mobile phones usage is growing rapidly which means that more and more people are “exposed” to mobile marketing (WeareSocial.sg 2015). Mobile usage is a factor that needs consideration when internationalizing an online shop as mobile penetration rate in the target country plays an important role when considering website mobile features or planning advertising spend across devices.

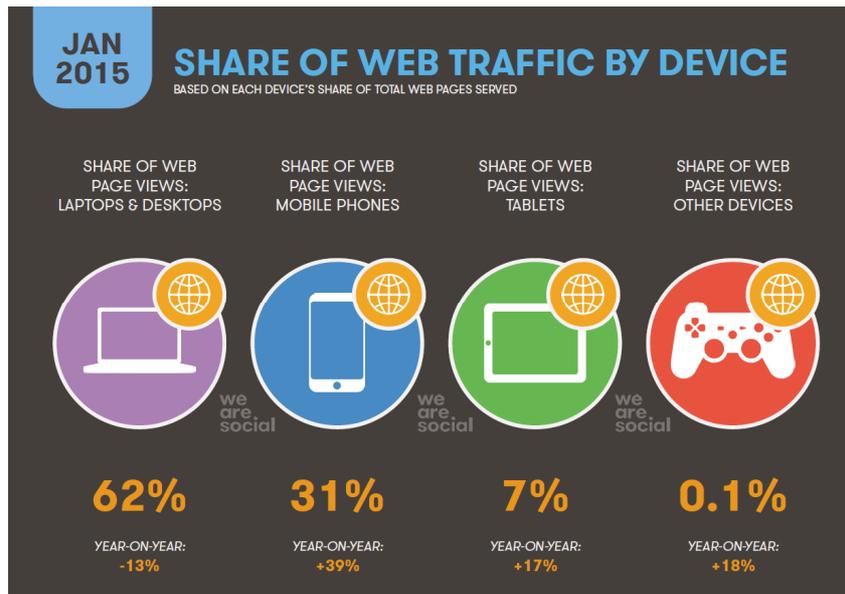


Figure 29: Share of web traffic by device (source:Wearesocial.sg)

5.4.2 Mobile Marketing Strategies

Mobile marketing is worldwide ‘boom’, but has not been utilized as much as possible across the world. Online Shops that wish to enter a market in a foreign country might have a ‘first mover’ advantage when implementing mobile strategies.

Some of the most used mobile strategies, which can be applied by an online shop, depending on industry and country, can be found below (Marrs 2013)

- **App-based marketing:** Mobile ads appear within third-party mobile apps. Advertising networks which display this type of ads are Google AdMob and Facebook Promoted Post Ads
- **In-game marketing:** Mobile ads appear within mobile games, as image ads, banner pop-ups or video ads



Figure 30: Angry Birds In-Game Mobile Ads (Source:www.phandroid.com)

- **QR codes marketing:** QR codes allow users to scan them in order to be taken to an advertisers website
- **Location-based marketing:** Ads appear depending on the location of the user e.q. ads displaying discount coupon of brick and mortar shop in a range of 1km around the location of the user
- **Mobile search ads:** PPC Search ads as mentioned in section 5.3 with add-on extensions like click-to-call or maps

Some of the applications above allow “the creation and exchange of user generated content” which Andreas M. Kaplan defines as “Social Mobile Media” (Kaplan 2012). Examples of those apps are Facebook, Twitter and Foursquare where the user posts locations by ‘checking-in’ or is able to communicate and posts reviews in real time. Those apps offer even more mobile advantages, besides ‘standard’ mobile advertising, from which companies can benefit, such as:

- Marketing Research
- Communication
- Sales promotion and Discounts
- Relationship development and loyalty programs

5.5 Affiliate Marketing

As defined by Evgenii Prussakov, one of the most respected affiliate marketing experts, “Affiliate marketing is basically performance-based marketing, whereby affiliates/partners promote a merchant’s product/service and get remunerated for every sale, visit, or subscription sent to the merchant. The most frequently used payment arrangements include: pay-per-sale, pay-per-lead, and pay-per-click compensations. Affiliate marketing is one of the most powerful and effective customer acquisition tools available to an online merchant today” (Prussakov 2007).

Affiliate marketing involves a Merchant, an Affiliate and an Information System which attributes a Lead/Sale to an Affiliate. This system can be software provided by the Merchant (in-house affiliate program) or an Affiliate Network. An affiliate network hosts a directory of Merchants for Affiliates to choose from and takes also care of the lead/sale attribution process and the Affiliate’s payment after

collecting affiliate provision from the Merchants. An Affiliate usually generates Leads using a website or an email subscriber list.

5.5.1 Why Affiliate Marketing?

Affiliate marketing plays an important role in the internationalization process of an online shop. Affiliate marketing is cheaper than conventional online advertising, has a wider reach as it is not limited by budget and, in some cases, can lead to valuable backlinks (and better Search Engine Rankings) from affiliate websites at no cost.

However, when targeting a country as online shop it makes sense to reach out for affiliates that have a local user base on their website or email subscribers to assure higher conversion rates. Moreover it might be advisable to choose a local affiliate network as it usually gathers more local affiliates.

5.5.2 International Affiliate networks

While there are lots of US and European Affiliate networks that have a global affiliates base, some affiliate networks that work locally in specific areas gather the interest of local based merchants and affiliates.

A table of the largest affiliate networks by area can be found below:

AMERICA	EUROPE	ASIA
Global:	Global:	AccessTrade.net (Japan)
Advertising.com	Advertising.com	Alimama (China)
Affiliate Window	Affiliate Window	Allyes (China)
Affili.net	Affili.net	Baidu Union (China)
Commis. Junction	Commis. Junction	Chinese AN (China)
DGM	DGM	ClickValue.cn (China)
LinkShare	LinkShare	clixGalore (Japan)
TradeDoublor	TradeDoublor	DGM-India.com (India)
Webgains	Webgains	ILikeClick (Korea)
Zanox	Zanox	JANet (Japan)
		Kavanga.ru (Russia)
Local:	Local:	LinkShare (Japan)
Afilio (Brazil)	2Parale (Romania)	LikePrice (Korea)
Batanga (Latin America)	7Reach (Denmark)	Linkwise (Turkey)

Lomade (Brazil) Shareasale (US) RevenueWire (Canada) Vorcu (Latin America)	Geazen (Spain) Avangate (Netherlands) Afilo (Poland) Affiliator (Sweden) Click2Sell.eu (Lithuania) eHub.cz (Czech) Linkwise (GR and CY)	MiraLinks.ru (Russia) MixMarket.biz (Russia) U2Mee.com (China) UltimateCash.ru (Russia, Kazakhstan) ValueCommerce (Japan) Zanox (Japan)
AFRICA	Novem (Poland)	AUSTRALIA
Affiliate.co.za (South Africa) OfferForge (South Africa) Traffic Synergy (South Africa)	Potenza (Czech)	Check My Stats Commission Monster The Affiliate Gateway

Table 7: Affiliate Networks around the globe

5.5.3 Choosing Affiliate Network and Provision Model

A starting point when choosing an affiliate network, besides its reach in the target country, would be insights gained during the internationalization planning phase. During the completion of the ECP Matrix, which was introduced previously in chapter 3, it is important to take notes of the networks that potential competitors trust

Another aspect is entry fees and network provision per sale, as both, the network and affiliates get paid per sale. A typical entry fee (if any) is around \$500 while the Network provision is usually about 30% of the affiliate provision.

When setting up and an affiliate program either in house or through a network that attributes affiliates for generated sales, the merchant needs to define a) the provision and b) cookie duration. Cookie duration defines the maximum period between the visit of a user to a merchants website, through an affiliate link, until the time a sale by the user is generated (Prussakov 2011).

As a rule of thumb both should be the same as used in other countries' networks were the online shop has a presence with temporary promotions to recruit affiliates (eg if the commission is 5% per sale and cookie lifetime 60 days, the shop can offer in a new country a startup offer for a month of 10% and lifetime cookie)

5.5.4 Creatives and Promotional Material

To be promoted, a merchant needs to make certain creatives and promotional material available to affiliates. These include usually banners, advertorial texts, coupon codes and product data feeds. All promotional material should target exclusively a single country or audience as affiliates need material that leads to conversions. For example when targeting the US market it is unavoidable to use discount coupon codes, as 'hunting' those coupons is in the very nature of the US consumer.

5.5.5 De-Duping, Example code in PHP

A very common problem in affiliate marketing when advertising towards different audiences or through many channels online, is the attribution model. Assume a merchant who uses a standardized approach using language targeting (which means he uses one website globally with many language sections eq /en, /de, /gr etc) and operates using two affiliate networks.

If a customer went to the website firstly through an affiliate link of network A, later through network B and purchases, then both networks will record a sale. The merchant needs to cancel one of the leads. The most usual approach is 'last click' attribution. This gets done when the merchant sets an attribution cookie.

As example consider 2 affiliate links towards the English and the Greek version of a website, where the tracking parameter of network A is affAid and of network network B is affBid:

Affiliate Link A : [www.myshop.com/ product.php?id=123&lang=gr&affAid=7899](http://www.myshop.com/product.php?id=123&lang=gr&affAid=7899)

Affiliate Link B : [www.myshop.com/ product.php?id=123&lang=en&affBid=7899](http://www.myshop.com/product.php?id=123&lang=en&affBid=7899)

For the purpose of the present thesis, a set of PHP code lines were developed, to facilitate a merchant who wishes to attribute the latest click:

CODE PLACED ON ANY SUBPAGE

```
<?php
```

```
If ($_GET['affAid']) {
```

```

// delete any cookie with name 'affnetwork' and create a new one assigning value A
setcookie('affnetwork', "", time()-300);

// delete old cookie by setting expiration to the past
setcookie('affnetwork', 'A', time() + (86400 * 30))

// 86400 is 1day in seconds which means cookie lasts 30 days from now
} elseif ($_GET['affBid']) {

// delete any cookie with name 'affnetwork' and create a new one assigning value B
setcookie('affnetwork', "", time()-300);

// delete old cookie by setting expiration to the past
setcookie('affnetwork', 'B', time() + (86400 * 30))

// 86400 is 1day in seconds which means cookie lasts 30 days from now

} ?>

```

CODE PLACED ON THE CHECKOUT SUCCESS PAGE

```

<?php
// get affnetwork cookie value and display the appropriate tracking code of the
affiliate network to record the sale

if($_COOKIE[$affnetwork]=='A') {
// display tracking code of network A

} elseif ($_COOKIE[$affnetwork]=='B') {
// display tracking code of network B

} ?>

```

5.5.6 Merchant - Affiliate Communication

Each merchant (online shop) usually assigns an affiliate manager (internal staff or contractor) to support, take care and communicate with affiliates. This involves the preparation of welcome messages to new affiliates, newsletters, responses to affiliate support enquiries etc.

It is obvious that the above communication as well as the communication with customers, needs to be held in a manner which takes into account language and cultural differences and cannot be universal for all countries

5.6 Web and Social Metrics - Evaluating Online Marketing Efforts

It is easy to collect visitor data such as number of visits, demographics, sales, bounce rates etc from an online store using the appropriate software such as Google Analytics, Piwik, Coremetrics, Omniture etc The difficult part is actually raising conclusions using all this data and to improve online conversions(Google 2010). Standard ways for non experts to interpret those figures are KPIs (Key Performance Indicators). Some appropriate KPIs for e-commerce are (Clifton 2010):

- Average Conversion Rate
- Average Order Value
- Average per-visit value
- Average ROI (Return of Investment)
- Customer on First Visit, the likelihood on transforming a visitor to a customer on his first visit.

Besides obvious conversions (sales) other metrics, called micro conversions (Kaushik 2010) , need to be considered too. Examples of micro conversions are newsletter signups, cart abandon rate, social sharing of products etc.

Social Media metrics can be accessed manually (e.g how many friend on Facebook, followers at Twitter, how many post likes etc) to estimate conversion of online efforts (Sterne 2010) or through Enterprise Listening Platforms (ELP) that allow for a management and statistics of multiple platforms at one (eg Brandmonitor, Wildfire etc) and Platform APIs such as Facebook Insights, SocialDon, PageLever etc (Vlachopoulou and Demetriades 2014)

6. Case Study : Rocket Internet

“Our mission is to become the world’s largest internet platform outside the United States and China”, this is Rocket Internet’s slogan and goal.



Figure 31: Rocket Internet Logo
(Source: www.rocket-internet.com/media)

“Rocket identifies and builds proven Internet business models and transfers them to new, underserved or untapped markets where it seeks to scale them into market leading online companies” is in brief the business model of Rocket Internet according to its CEO Oliver Samwer.

The above approach has been criticized by many as “copycat” strategy, as they seem to ‘steal’ and copy proven internet ideas.(Millian 2014) However, they deserve credit for the speed of setting up e-businesses and internationalizing them using standard, proven as successful over the years, procedures.(Li 2014)

6.1 Company Profile

Rocket Internet SE was founded in 2007 in Germany with headquarters in Berlin. The company operates in 110 countries and 6 continents employing more 30000 people.

Rocket Internet builds online business models mainly across four focus sectors:

- **e-commerce companies**, which include retail companies in the areas of fashion, general merchandise, home and living, office supplies and food and groceries
- **marketplace companies**, such as real estate and car online classified listings, travel and transport, and food delivery companies.
- **financial technology (FinTech) companies**, that focus on bringing together borrowers and lenders
- **travel companies**, addressing the rapidly growing online travel and transport sector

6.2 Internationalization Strategies

6.2.1 Criteria for choosing countries to Enter

Prior to its IPO at the stock exchange in Frankfurt, Rocket Internet revealed its criteria for choosing countries and areas to enter, in its company investor prospectus (Rocket Internet 2014). Rocket Internet targets high growth emerging markets because “their growth in terms of gross domestic product (“GDP”), population and Internet penetration, combined with the absence of a sophisticated offline retail infrastructure, presents a significant market opportunity to leapfrog the development of traditional brick-and-mortar retail industries” and Rocket likes complex markets as “A large number of our markets are challenging in their complexity, which we seek to turn to our advantage. The complexity of the markets in which we are present increases the barriers to entry significantly”.

6.2.2 Internationalization Approach and Setup

Rocket Internet has divided its world activities into Regional Internet Groups in Africa, Asia Pacific, Latin America and the Middle East in order to better address the local markets and internationalize their online shops. In that way the company has facilitated a regional commercial, strategic and investment partnerships which allows for local recruiting and sourcing.

Companies, Websites and Regions and internet Group:

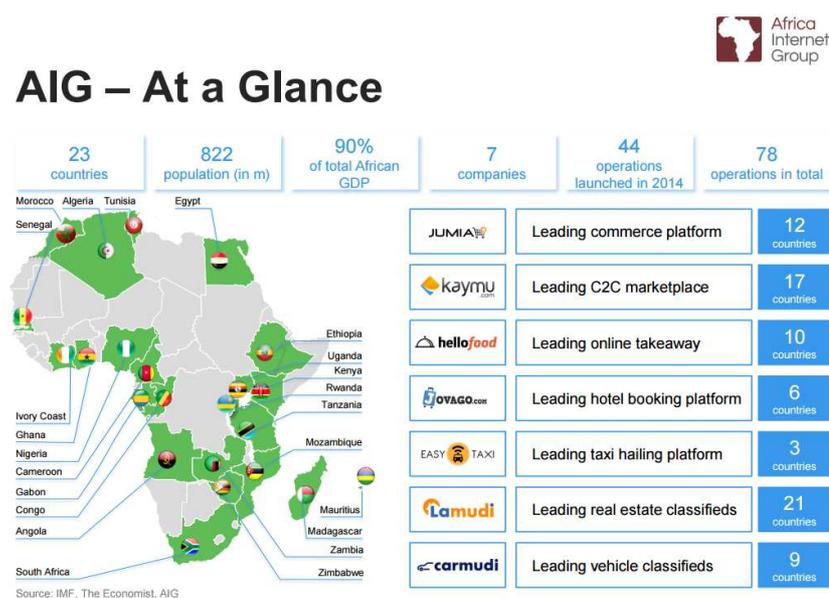


Figure 32: Africa Internet Group, Rocket Internet (Source: www.rocket-internet.com, Rocket Results FY 2014)

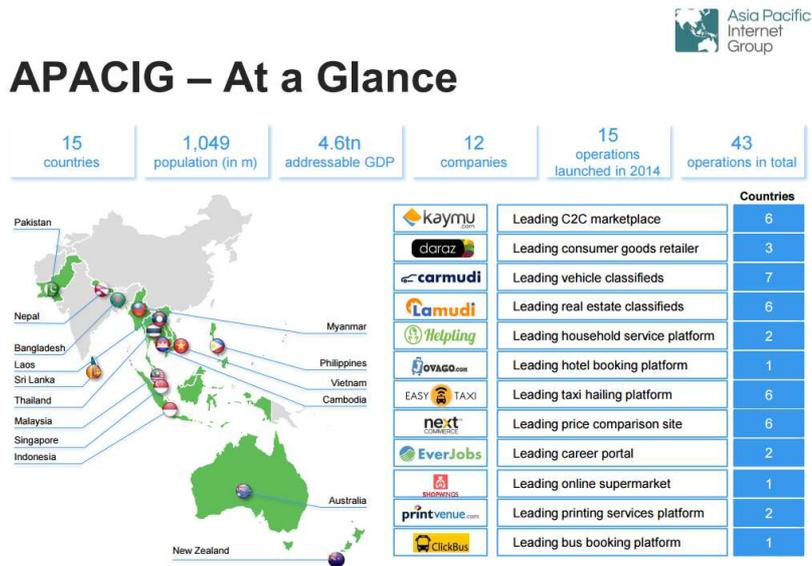


Figure 33:Asia Pacific Internet Group, Rocket Internet (Source: www.rocket-internet.com, Rocket Results FY 2014)



Figure 34:Middle East Internet Group, Rocket Internet (Source: Www.rocket-internet.com, Rocket Results FY 2014)

Latin America Internet Group – At a Glance



Figure 35: Latin America Internet Group, Rocket Internet (Source: Wwww.rocket-internet.com, Rocket Results FY 2014)

Rocket’s online shops expand usually to countries within a specific region (Internet Group). Rocket Internet scans countries, estimating growth trends, profit opportunities, entry barriers, cultural differences etc. An excellent strategic example is lazada.com. Operationally launched in March 2012, Lazada is Southeast Asia's (SEA) number one online shopping and selling destination, with presence in Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. Lazada works as an online shop, but offers also marketplace capabilities allowing other merchants to sell through it (similar to Amazon).

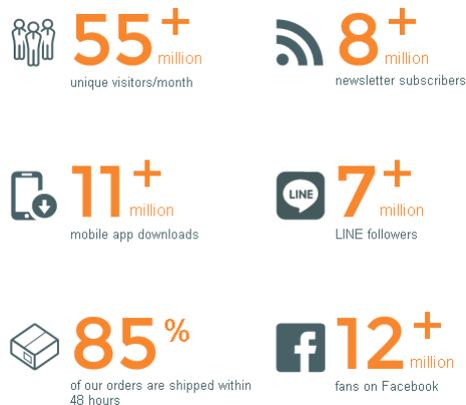


Figure 36: Lazada Facts SEA (Source: www.lazada.com/about-us)

Before deciding to launch Lazada across 6 distinct markets in SEA, Rocket Internet had to face major structural problems in the target countries (Rocket Internet 2015):

<p>Payments</p> <ul style="list-style-type: none"> • Low credit card penetration • Local alternatives preferred • Cash on delivery needed 	<p>Logistics</p> <ul style="list-style-type: none"> • Undeveloped infrastructure • Scattered logistics networks • Geographic diversity 	<p>Supply chain</p> <ul style="list-style-type: none"> • Fragmented local merchant networks • Inexperienced local merchants • Inefficient supply chain
<p>Regulatory</p> <ul style="list-style-type: none"> • Licensing different across 6 markets • Licenses needed for eCommerce, payments, logistics • Challenging import / customs environment across markets 		<p>Culture & Talent</p> <ul style="list-style-type: none"> • User behavior varies across and within 6 markets • Limited and inexperienced local talent pool • Language differences

Table 8:Lazada.com Challenges, Rocket Internet (Source: www.rocket-internet.com, Rocket Results FY 2014)

In 2012 a decision was made to start launching Lazada in 6 countries in SEA and turn the above difficulties into strategic advantages. Lazada decided to put in place their own infrastructure to overcome the above obstacles and create in that way market entry barriers for potential competitors.



Figure 37: Lazada Market Entry Challenges and Solutions (Source: www.rocket-internet.com, Rocket Results FY 2014)

The result of the above approach can be found on the following info graphic:



Figure 38: Lazada Current State Overview (Source: www.rocket-internet.com, Rocket Results FY 2014)

6.3 Rocket Internet Technology

Rocket Internet has developed an ecommerce platform named "Alice" which is used by most of its e-shops. Alice, apart from allowing easy deployment of new online stores, integrates the three components that are relevant for an e-commerce company, which are standard online store capabilities, warehouse management features and logistics covering the entire e-commerce value chain including last mile logistics.

Rocket Internet uses standardized processes to increase sales of internationalized stores using central and local approaches. The centralized process, includes customer acquisition, customer relation management (CRM), business intelligence, CRM tools and data warehouses while the localized process, involves our local operations, sales and local call centers and support. Using its centralized CRM and Data Warehouses all online stores manage to customize user experience, and reduce customer acquisition cost while increasing customer lifetime value. (Rocket Internet 2014)

Figure below illustrates Rocket's Westwings.com (Furniture) zero inventory sourcing model. Westwing operates in 15 countries of 3 continents



Figure 39: Westwing Zero Inventory Model

6.4 Rocket Internet Online Marketing

Rocket Internet achieves a significant amount of visitors using all means of search engine marketing, social media marketing, paid search etc

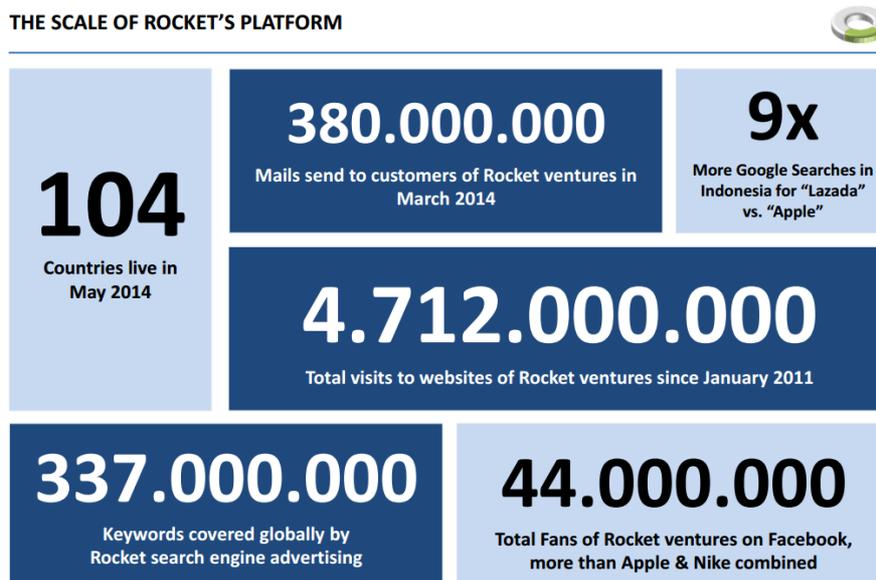


Figure 40: Rocket Internet CRM Data (Source: Adwords (w/o Westwing & Home 24), Google Keyword Tool, FB, Google Analytics)

Moreover Rocket Internet uses web metrics to improve SEM results as can be seen below:

EXAMPLES FOR DATA-DRIVEN OPTIMIZATION (1/2)
ONLINE MARKETING

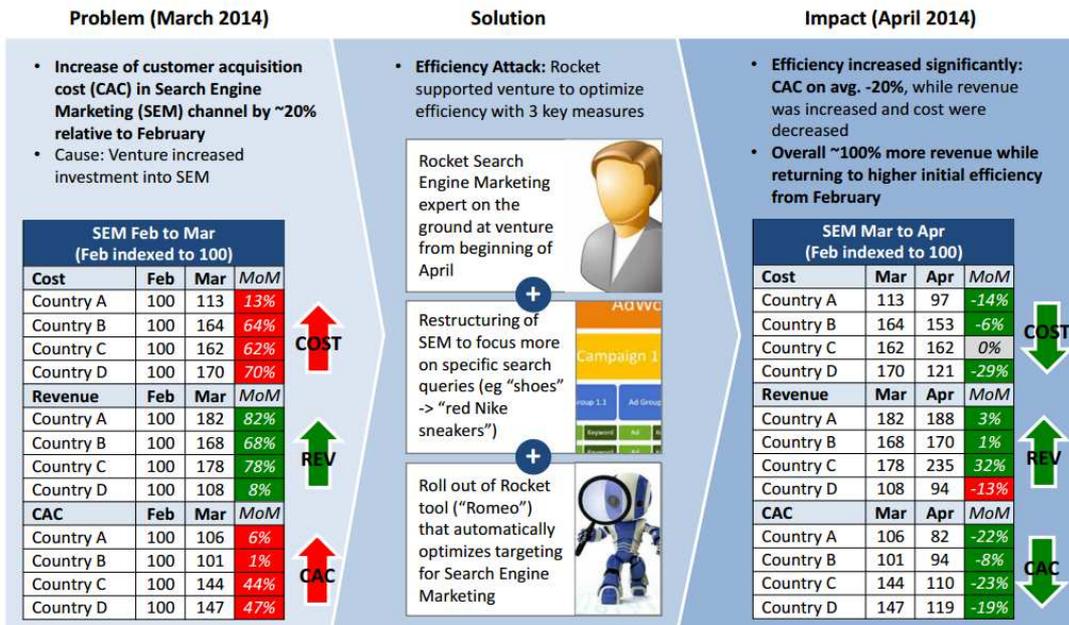


Figure 41: Rocket Internet SEM Reporting

Rocket Internet has increased purchasing power against marketing and technology vendors, and has entered special framework agreements:

BUNDLING OF PURCHASING POWER AND VOLUME ACROSS PORTFOLIO PROVIDES NASCENT AND MATURE ROCKET COMPANIES WITH IMPROVED COMMERCIAL TERMS

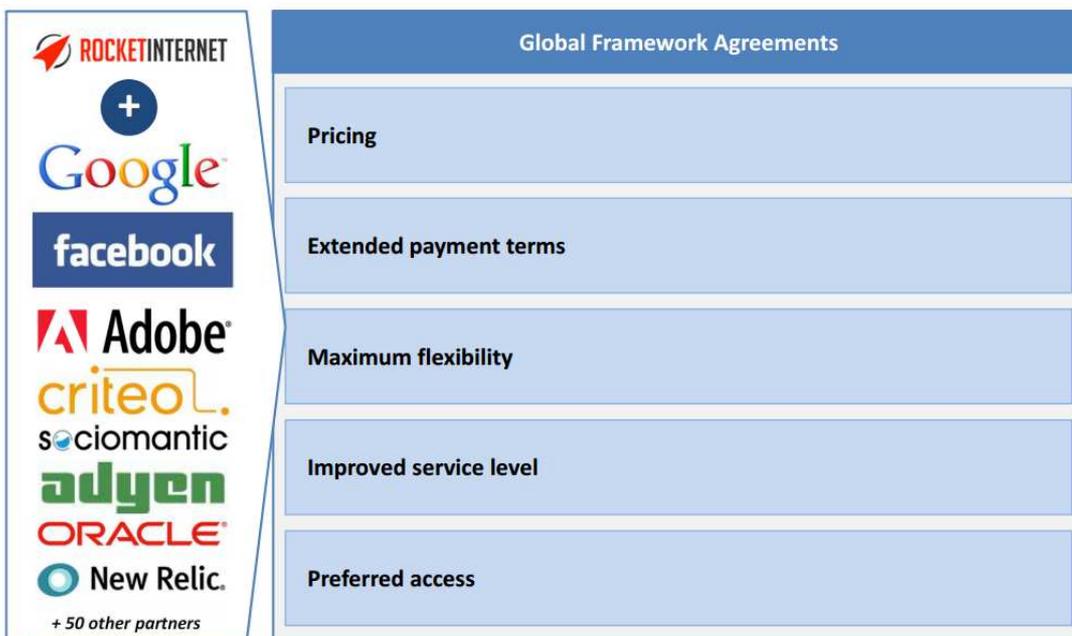


Figure 42: Rocket Internet Framework Agreement with Technology and Marketing Providers

Conclusions and Suggestions for Further Research

E-commerce is a very interesting topic, that becomes even more exciting when practiced all over the world without limitations and boundaries. This study has proposed in a theoretical and practical manner ways to achieve a successful presence in one or more foreign countries.

This thesis has shown that the foundations of the successful internationalization of e-commerce companies lay in the preparation of successful entry strategy planning, a reliable IT infrastructure and a conversion optimized online marketing plan for each target country.

Moreover simple code in PHP that has been developed for the purpose of this thesis as well as online tools that are available, prove that internationalizing can be achieved, to some degree, easily by smaller companies with a little technical knowhow and intelligence available online at a very low cost.

There is room for further research, as there can be detailed strategies for each target country and mode of entry.

Islamic Commerce is a new trend in e-commerce that could be researched, as it requires internationalization along with a high degree of product localization.

Specific Predictive Models and Benchmarks can be developed to estimate chances of internationalization success.

Last but not least, further development of the *E-Commerce Competitor Profiling (ECP) Matrix*, would be helpful too, as it can be a handy tool for every online store that wish to internationalize.

References

- Agrawal, M. (1995). Review of a 40-year debate in international advertising. *International Marketing Review*, , Volume 12, Issue 1, p.26-48.
- Avlonitis, G.I., Lymperopoulos, K. and Tzanavaras, V. (2010). *Σύγχρονες Στρατηγικές Μάρκετινγκ για διεθνείς αγορές*. 1st ed., Rosili.
- Barber, W. and Badre, A. (1998). Culturability: The Merging of Culture and Usability. In: *Human Factors and the Web*..
- Bin, Q, Chen, S.-J. and Sun, S. Q. (2003). Cultural Differences in E-Commerce: A Comparison between the U.S. and China. *Journal of Global Information Management (JGIM)*, , Volume 11, Issue 2, p.48-55.
- Brockbank, J. (2014). *Search Engine Journal*. [online]. Last updated 11 April. <http://www.searchenginejournal.com/seo-101-getting-page-seo-basics/97871/>
- Chen, M. J. (1996). Competitor Analysis and Interfirm Rivalry: Toward a Theoretical Integration. *The Academy of Management Review*, Jan, 1, 21, p.100-134.
- Clifton, B. (2010). *Advanced Web Metrics with Google Analytics*. 2nd Edition ed., Sybex.
- Constantinides, E. (2004). Influencing the online consumer's behavior: the Web experience. *Internet Research*, , Volume: 14, Issue: 2, p.111-126.
- Contantinides, E., Romero, C. L. and Boria, M. (2008). Social Media: A New Frontier for Online Retailers. *European Retail Research*, 10 March, 22, pp.1-28.
- Czepiel, J. A. and Karin, R. A. (2009). *Competitor Analysis*. Leonard N. Stern School of Business New York University.
- D. Boyd, N. Ellison (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, October, 13, 1, 210-230.

- Dover, D. and Dafforn, E. (2011). *Search Engine Optimization (SEO) Secrets*. First Edition ed., Willey.
- Edgar Dunn and Company (2014). *Cross-Border Payments, Opportunities and Best Practices For Going Global*. [online].
<https://www.adyen.com/dam/documentation/whitepapers/Adyen-EDC-Report-Cross-Border-Payments>
- Edgar Dunn and Company (2015). *The Global E-Commerce Payments Guide*. [online]. <https://www.adyen.com/home/business-intelligence/white-papers>
- Einav, L., et al. (2015). Growth, Adoption, and Use of Mobile E-Commerce. *American Economic Review*, May, 104, 5, p489-94.
- Eisenberg, B., Quarto-vonTivadar, J. and Davis, L. (2008). *always be testing*. 1st ed., Sybex.
- Farris, P. W., et al. (2010). *Marketing Metrics, the definite Guide to Measuring Marketing Performance*. 2nd ed., Pearson Education.
- Geddes, B. (2010). *Advanced Google Adwords*. 1st ed., Sybex.
- Google (2012). *Google Faq Internationalisation*. [online].
<https://sites.google.com/site/webmasterhelpforum/en/faq-internationalisation#q9>
- Google (2010). *Improving Online Conversions for Dummies*. 1st ed., Wiley.
- Hanna, R., Rohm, A. and Criteenden, V.L. (2011). We're all connected: The power of the social media ecosystem. *Business Horizons*, May–June, 54, 3, p.265-273.
- Hofstede, G. (1980). *Culture's Consequences*. vol.5. Abridged ed., Sage Publishing.
- Hofstede, G. (1984). *Culture's Consequences*. vol.5. Abridged ed., Sage Publishing.
- Humeau, P. (2013). *Benchmark : an analysis of 12 e-Commerce solutions*. [online]. Last accessed 14 July. https://www.nbs-system.com/wp-content/uploads/benchmark_short_english.pdf

- IAB (2014). *IAB internet advertising revenue report*. [online].
http://www.iab.net/media/file/IAB_Internet_Advertising_Revenue_Report_HY_2014_PDF.pdf
- IAB (2008). *IAB Platform Status Report: A Mobile Advertising Overview*. [online].
http://www.iab.net/media/file/moble_platform_status_report.pdf
- Ishida, R. and Miller, S.K. (2015). *w3.org:Localization vs. Internationalization*. [online]. Last updated 9 April. <http://www.w3.org/International/questions/qa-i18n>
- Jarboe, G. (2009). *Youtube and Video Marketing, one hour a day*. 1st ed., Willey.
- Jenkins, S. G. (2009). *The Truth about Email Marketing*. 1st ed., Pearson Education.
- Johanson, J. and Vahlne, J. E. (1977). The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Market Commitments. In: *Journal of International Business Studies*, Palgrave Macmillan Journals, p22-32.
- Kaczmarek, J. (2014). *Die Paten des Internets*. 1st Edition ed., FBV.
- Kaplan A., Haenlein M. (2010). Users of the world, unite! The challenges and. *Business Horizons*, January, 53, 1, 59-68.
- Kaplan, A. M. (2012). If you love something, let it go mobile: Mobile marketing and mobile social media 4x4. *Business Horizon*, March–April, 55, 2, p.129-139.
- Kaushik, A. (2010). *Web Analytics 2.0*. 1st ed., Sybex.
- Kennedy, A. (2011). *Global PPC: How to Get Started in Countries Beyond Your Borders*. [online]. Last updated 31 May.
<http://webmarketingtoday.com/articles/kennedy-global-ppc/>
- Kumar, V. and Subramaniam, V. (1997). A Contingency Framework for the Mode of Entry Decision. *Journal of World Business*, 20 March, 32, 1, 53-72.
- Laudon, K. and Laudon, J. (2012). *Management Information Systems*. 12th ed., Pearson.
- Laudon, K. and Traver, C. (2014). *E-Commerce 2014, Business, Technology, Society*. 10th ed., Pearson.

- Li, C. (2014). *Doing it the Rocket Internet way: an inside look at what it's like to build companies at lightning speed*, Tech.eu. [online]. Last updated 28 August. <http://tech.eu/features/2553/rocket-internet-profile-modus-operandi/>
- Macarthy, A. (2014). *500 Social Media Marketing Tips*. Winter 2014 ed., Andrew Macarthy.
- Makino, T., Jung, C. and Phan, D. (2015). *Google Webmaster Central*. [online]. Last updated 26 February. <http://googlewebmastercentral.blogspot.gr/2015/02/finding-more-mobile-friendly-search.html>
- Manktelow, J. (2015). https://www.mindtools.com/pages/article/newTMC_09.htm. [online]. Last accessed 5 August. https://www.mindtools.com/pages/article/newTMC_09.htm
- Marrs, M. (2013). *What is Mobile Marketing and Why Does it Matter? (So So Much!)*. [online]. Last updated 19 August. <http://www.wordstream.com/blog/ws/2013/08/19/what-is-mobile-marketing>
- Millian, M. (2014). *Germany's Samwer Brothers Take Their Web Copycat Act Global at Bloomberg Business*. [online]. Last updated 15 May. <http://www.bloomberg.com/bw/articles/2014-05-15/germanys-samwer-brothers-take-their-web-copycat-act-global>
- Mobile Marketing Association (2009). *Mobile Marketing Definition*. [online]. <http://www.mmaglobal.com/wiki/mobile-marketing>
- Mobile Marketing Association (2014). *The Mobile Marketing Playbook*. [online]. <http://www.mmaglobal.com/mobile-marketing-playbook>
- Moran, M. and Hunt, B. (2014). *Search Engine Marketing, Inc.: Driving Search Traffic to Your Company's Website*. 3rd Edition ed., IBM Press.
- Newman, M. and Lake, C. (2010). *The Internationalization of E-commerce*. 1st ed., October, Econsultancy.com Ltd 2010.
- O'Conner, Tom (2010). *Strategic Planning for Distributors: Execution Isn't Everything—It's the Only Thing!* 1st ed., NAW Institute for Distribution Excellence.

- Page, L., et al. (1998). The PageRank Citation Ranking: Bringing Order to the Web. *Technical Report*, 29 January, Stanford InfoLab,
- Pan, Y. and Tse, D. (2000). The Hierarchical Model of Market Entry Modes. *Journal of International Business Studies*, Fourth Quarter, 31, 4, p.535-554.
- Papadakis, V. (2002). *Στρατηγική των Επιχειρήσεων*. 2nd Edition ed., Benoy.
- Peng, W. M. (2008). *Global Business*. Cengage Learning.
- Penson, S. (2015). *Has Google Turned up Social Signals as a Ranking Factor?* [online]. Last updated 25 May. <http://searchenginewatch.com/sew/how-to/2409919/has-google-turned-up-social-signals-as-a-ranking-factor>
- Plakoyiannaki, E., et al. (2014). Family business internationalisation through a digital entry mode. *Marketing Intelligence & Planning*, , Vol 32, Issue 2, p.190-207.
- Porter, M.E. (2008). The Five Competitive Forces That Shape Strategy. *Harvard Business Review*, January, Harvard Business School Publishing,
- Prussakov, E. (2007). *A Practical Guide to Affiliate Marketing*. 1st ed., Prussakov Publishing.
- Prussakov, E. (2011). *Affiliate Program Management an Hour a Day*. 1st ed., Wiley.
- Rocket Internet (2014). *Rocket Internet AG Investor Prospectus*. [online]. Last updated 23 September. <https://www.rocket-internet.com/themes/rocket3/download/ipo-history/Rocket%20Internet%20Prospectus.PDF>
- Rocket Internet (2015). *Rocket Internet's Full Year 2014 results presentation*. [online]. Last accessed 5 May. https://www.rocket-internet.com/sites/default/files/investors/May_2015_-_Rocket_Results_FY_2014.pdf
- Sadath, L. (2013). Data Mining in E-Commerce: A CRM Platform. *International Journal of Computer Applications*, April, Volume 68, Issue 24,
- Safko, L. and Brake, D. K. (2009). *The Social Media Bible, Tactics, Tools and Strategies for Media Success*. 1st ed., Willey.

Saroiu, S., et al. (2002). The Analysis of Internet Content Delivery Systems. *ACM SIGOPS Operating Systems Review - OSDI '02: Proceedings of the 5th symposium on Operating systems design and implementation*, Winter, Volume 36, Issue SI, p.315-327.

Security Standards Council, PCI (2015). *Payment Card Industry (PCI)*. [online].
[Payment Card Industry \(PCI\) Data Security Standard](#)

Singh, N. (2012). *Localization Strategies for Global E-business*. 1st Edition ed., Cambridge University Press.

Sinkovics, N., Sinkovics, R. and Jean, R. (2013). The internet as an alternative path to internationalization? *International Marketing Review*, January, Vol.30, Issue 2, p.130-155.

Sterne, J. (2010). *Social Media Metrics*. 1st ed., Wiley.

Tegarden, D., Dennis, A. and Wixon, B. H. (2013). *System Analysis and Design with UML*. 4th ed., Wiley.

Vlachopoulou, M. and Demetriades, S. (2014). *e-business and marketing (ηλεκτρονικό επιχειρείν & μάρκετινγκ)*. 1st Edition ed., Rosili.

WeareSocial.sg (2015). *Slideshare: Digital, Social and Mobile 2015*. [online]. Last accessed 20 January. <http://www.slideshare.net/wearesocialsg/digital-social-mobile-in-2015>

White, B. (2015). *Last Mile: The New Frontier in the Retail Supply Chain*, *Industry Week*. [online]. <http://www.industryweek.com/last-mile>

Zarrella, Dan and Zarrella, Alison (2011). *The Facebook Marketing Book*. 1st ed., O'Reilly.