

Vu Luong

**The application and feasibility of WordPress in creating
an online store: case KVS Valaistussuunnittelu Oy**

Thesis

Fall 2015

School of Business and Culture

International Business



SEINÄJOKI UNIVERSITY OF APPLIED SCIENCES

Thesis Abstract

Faculty: School of Business and Culture

Degree programme: International Business

Specialisation: -

Author: Vu Luong

Title of thesis: The application and feasibility of WordPress in creating an online store: case KVS Valaistussuunnittelu Oy

Supervisor: Osmo Mäkinieni

Year: 2015

Pages: 77

Number of appendices: 7

The main objective of this study is to find out the applicability and possibility of using WordPress, a content management system used mainly for online blogging, to build an online store.

The thesis is conducted in two parts. The theoretical part includes an overview of E-commerce as well as the characteristics of an online store and WordPress. The second part covers the case study that describes the process of building an online shop on WordPress' WooCommerce, authorized by KVS Valaistussuunnittelu Oy, a company specialized in LEDs and lighting designs.

During the establishment, challenges and opportunities were identified and evaluated. The results reveal that even though there are other powerful and more specialized E-commerce options, WordPress' WooCommerce seems to be a beneficial choice for small companies as the platform is highly customizable and powerful. Furthermore, it does not require advanced information technology knowledge to operate.

At the end, suggestions for the future project are presented, as to how KVS Valaistussuunnittelu Oy can improve their online store after publishing.

Keywords: Online store, E-commerce, E-commerce software, WordPress, WooCommerce, plug-ins, Finland, KVS Valaistussuunnittelu Oy

TABLE OF CONTENTS

Thesis Abstract.....	2
TABLE OF CONTENTS.....	3
Tables and figures.....	6
Terms.....	8
1 INTRODUCTION.....	9
1.1 Purpose.....	9
1.2 Research questions	9
1.3 Research methods.....	9
1.4 KVS Valaistussuunnittelu company information.....	10
2 E-COMMERCE OVERVIEW.....	12
2.1 E-commerce Definition	12
2.2 Advantages of E-commerce	12
2.2.1 Ubiquity.....	12
2.2.2 Global reach.....	13
2.2.3 Universal standard	13
2.2.4 Richness	13
2.2.5 Interactivity	13
2.2.6 Information density.....	14
2.2.7 Personalization and Customization.....	14
2.2.8 Social technology	14
2.3 Disadvantages of E-commerce	15
2.4 E-commerce business models	15
3 ONLINE STORE.....	17
3.1 Definition.....	17
3.2 What to consider when opening online store.....	17
3.2.1 Goal/purpose	17
3.2.2 Choosing software, domain name and web hosting service.....	18
3.2.3 Design.....	19
3.2.4 Choosing products to sell online.....	20
3.2.5 Identify customers and competitors	20

3.2.6	Choosing E-commerce software	21
3.2.7	Online payment and shipping methods	22
3.2.8	How to attract customers?	23
3.2.9	Track online store performance	26
4	WORDPRESS	28
4.1	Definition	28
4.2	Advantage/disadvantage of using WordPress to create an online store ...	28
4.3	Why KVS Valaistussuunnittelu Oy uses WordPress to build an online store	30
5	ESTABLISHMENT OF AN ONLINE STORE: CASE KVS VALAISTUSSUUNNITTELU OY.....	31
5.1	Choosing domain name and host server.....	32
5.1.1	Local host versus popular international host	33
5.2	Install WordPress	34
5.3	Themes and design	36
5.3.1	General settings	36
5.3.2	Navigations	37
5.3.3	Shop pages	40
5.3.4	Color and style.....	44
5.4	E-commerce software	44
5.4.1	Advantages and disadvantages.....	45
5.4.2	Integration and settings.....	45
5.4.3	Emails settings	47
5.4.4	Reporting	48
5.5	Product input and inventory management	49
5.5.1	Adding single product	49
5.5.2	Inventory management	53
5.5.3	Necessary WordPress plug-ins for products	53
5.6	Order handling process	55
5.7	Payment methods	56
5.8	Delivery methods.....	58
5.9	Final testing	61
6	Summary and recommendation.....	63

6.1 Summary.....	63
6.2 Recommendations	64
6.2.1 On marketing	65
6.2.2 On personnel	65
BIBLIOGRAPHY.....	67

Tables and figures

Table 1. Major types of E-commerce	16
Table 2. The eight most important factors in successful E-commerce site design (Laudon & Traver 2014, 210).	19
Table 3. Traditional online marketing tools.	23
Table 4. Advantages and Disadvantages when using WordPress to create an online store.	29
Table 5. KVS Valaistussuunnittelu Oy SWOT analysis.	31
Table 6. Hosting options for bulbstore.fi. (Vainio, HostGator, bluehost).	33
Table 7. Payment gateways comparison (Klarna, Checkout, Paytrail).	57
Figure 1. E-commerce technologies used by the top 100 000 websites (Ecommerce Usage Statistics 2015).	21
Figure 2. Popularity of digital marketing technologies 2015 (Salesforce 2015).	25
Figure 3. Web analytics and the online purchasing process (Laudon & Traver 2014, 437).	26
Figure 4. Server environment report (bulbstore.fi).	34
Figure 5. 'Coming soon' page (bulbstore.fi).	35
Figure 6. Homepage and header (bulbstore.fi).	37
Figure 7. Home page and footer (bulbstore.fi).	39
Figure 8. Single product page (bulbstore.fi).	41
Figure 9. Original Add-to-cart button.	42
Figure 10. Category page with left sidebar (bulbstore.fi).	43
Figure 11. WooCommerce settings (bulbstore.fi).	46
Figure 12. Example of processing order emails, HTML version and Plain text version.	48
Figure 13. Product-on-sale category (bulbstore.fi).	50
Figure 14. Product edit page (bulbstore.fi).	52
Figure 15. bulbstore.fi product bulk edit page (bulbstore.fi).	54
Figure 16. Simple order handling process.	55
Figure 17. Single order processing page (bulbstore.fi).	56

Figure 18. Payment and delivery choices in checkout page (bulbstore.fi).....	58
Figure 19. Shopping cart page (bulbstore.fi).....	59
Figure 20. Order details and tracking page in customer view (bulbstore.fi).....	60
Figure 21. bulbstore.fi search result display in Google search.	61
Figure 22. Shipment tracking interface (bulbstore.fi).	62

Terms

Online store	A website consists of products and categories, shopping carts, orders processing and payment system; where customers can browse, purchase and make payment digitally over the Internet.
Plug-in	An additional component that provides extra functions to existing software.
SEO	Short for Search Engine Optimization, the process of making a website appear earlier and more frequent in search engines' unpaid results.
SKU	Short for stock keeping unit, SKU is a unique code assigned to merchandized items by vendor as their own reference.
SWOT analysis	Analysis that describes one's strengths, weaknesses, opportunities and threats.
WooCommerce	A free E-commerce software built for WordPress.
WordPress	A free, open-source content management system originally used for online blogging.

1 INTRODUCTION

1.1 Purpose

The purpose of this study is to present a plan that helps KVS Valaistussuunnittelu Oy expand to E-commerce and open their own online store, using WordPress. The thesis will provide theoretical information about developing an online business, what to consider when establishing an online store with WordPress, as well as the empirical experience in the actual process, what the challenges are and how to overcome them, as well as the opportunities, and how they will be utilized.

1.2 Research questions

The thesis will answer its final question whether it is beneficial to use WordPress, a tool used mainly for online blogging, to help KVS Valaistussuunnittelu Oy open an online store. In addition, a sub-question, how to maintain friendly user interface and search engine while offering wide ranged products, will be solved.

The online market is full of potential and this is an inevitable move for small and young companies like KVS Valaistussuunnittelu Oy. With the power and capability of WordPress nowadays, small firms can create and manage WordPress without advanced programming skills.

1.3 Research methods

In order to answer the research question, a mixed approach of using case study and qualitative data collection via semi-structured interview will be executed. The theoretical framework is built from different literature materials and online sources. At the same time, the empirical part will be collected from reports, to describe the development process of an online store, from planning, developing to establishing and day-to-day managing.

Case study is a research method based on realistic, complex, and evident-rich contexts to presents an experimental investigation of a specific event or subject (Robson 2002, 178). The case study approach is capable of providing a deep level of understanding to a context (Saunders et al. 2009, 146). However the researcher has to keep in mind the inability to be generalized of the case study.

Semi-structured interview is a flexible interview method with predetermined topics. Depending on the encountered context, the interviewer can leave out, add or change the order of the question set to best suit the research concern (Saunders et al. 2009, 146). The advantage of interview method, firstly, is a high respond rate and cooperation by the participants (op. cit., 324). The interviewees should be decision-makers in relation to the discussed case and be able to give reasons for their decisions. In an interview, any misunderstanding about the question can be easily clarified. Further than that, an interview also allows its participants to reflect back to their opinion and possibly come up with something they have not thought about before. All of those lead to the result of detail-rich data.

The disadvantages of this method are geographical barriers and generalization. Also as the number of participants is limited, the result might not be widely generalized.

1.4 KVS Valaistussuunnittelu company information

KVS Valaistussuunnittelu Oy was founded in 2013 by Jukka Asp in Seinäjoki. The company started its business by selling lighting designs and LED products, which are mostly imported by the company itself. Now it has expanded to house automation packages and interior design under the sub-brand "KVS Sisustussuunnittelu". KVS Valaistussuunnittelu Oy's customers range from individuals and families to businesses and organizations as it offers turn-key energy-efficient lighting solutions, which include electrical planning and installation, for buildings and public infrastructures, both new and renovated. The company is partnered with Helatukku, Pramia, Josira Oy, Kokkolan Sähköpalvelu and is the authorized representative and seller of Talomat house automation system in the Ostrobothnia region. KVS Valaistussuunnittelu Oy currently has five official

employees who are also board members and the chief executive officer is Jukka Asp (Vainio 2015).

Bulbstore online retailing is part of KVS Valaistussuunnittelu Oy's brand. Along with brick-and-mortar store, which will be opened in 2015, the company requires a new online store to showcase and to sell and market products online. Therefore, the owners have started a project with the author of this thesis to build a web store.

LED lamps will gradually replace old fashioned halogen ones, especially on the public sector market, for example, in municipality lighting. The company had managed to gain profit even during the recession time in Finland and is expecting a growth spurt after opening its own showroom and online shop (Asp & Vainio 2015).

2 E-COMMERCE OVERVIEW

2.1 E-commerce Definition

Electronic commerce or in short, E-commerce is the process of conducting business through the Internet, using digital technological devices such as computers or mobile phones (Laudon & Traver 2014, 50). These digitally enabled transactions happen when values are exchanged outside of organizations or individuals. In a wider definition, Schniederjans et al. (2014, 4) argue that E-commerce also includes supporting steps of a transaction, which are marketing, after sale services, payment, and delivery.

2.2 Advantages of E-commerce

According Laudon and Traver (2014, 52) there are eight features of E-commerce technology that bring both advantages and disadvantages to involved parties. The parties here refer to organizations, consumers and society. Those eight features are ubiquity, global reach, universal standard, richness, interactivity, information density, personalization and customization, and social technology. Each of them is focused on more in detail in the following paragraphs.

2.2.1 Ubiquity

Unlike the traditional marketplace's geographical limitation and restricted opening time, E-commerce brings availability to its fullest: about anywhere, at any time. For organizations, the opportunity to serve customers is greatly increased, and customers save lots of time, money and cognitive energy compared to going to a physical store. From society's point of view, customers do not need to travel, which means less traffic, saved energy and reduced pollution.

2.2.2 Global reach

With the advancement of internet technology, E-commerce overpasses both physical and cultural boundaries and reaches the world-wide population. Organizations will be able to attain more customers and on the other hand consumers will have more options available. Small and remote societies, unreachable from traditional markets, will also have access to new products and services.

2.2.3 Universal standard

E-commerce creates an integrated system worldwide based on internet technology that makes the standards for handling E-commerce universal, or in simple words accepted by all nations. Thanks to standardized procedures, companies can greatly reduce time and costs when entering different markets while customers need less effort to find a suitable product at a comparable price. Society will profit from what Laudon and Traver (2014, 54) defined as network externalities – the perk that occurs when everyone uses the same technology and the need for modification or adaptation is avoided.

2.2.4 Richness

According to Business Dictionary (2015) Information richness is the amount of detail and complexity provided in a piece of textual, graphic, audio, or video message. Organizations utilize the richness of E-commerce technology to bring complicated, information-dense products and services to their customers.

2.2.5 Interactivity

E-commerce allows mutual communication between seller and buyers, also amongst consumers in form of reviews. Unlike the one-way interaction of traditional commerce, mutual interactivity helps businesses understand their

customers better; and by providing useful information, customers are rewarded by more suitable offers.

2.2.6 Information density

Information density refers to the quantity and quality of intelligence that can be reached by all the involved parties in the market. Digital business not only reduces the cost of collecting, storing, updating information but also make it more transparent. Thanks to that, consumers are becoming more knowledgeable of what the product actually is worth. Increased amount of quality data also helps vendors segment their customers into different levels, price sensitive or quality sensitive, hence planning their strategy accordingly. For society, digitalized information means a significant reduction in paper and printing related resources.

2.2.7 Personalization and Customization

E-commerce technology makes it possible for merchants to personalize their marketing messages to certain individuals by their own information. Furthermore, it gives buyers room for product customization. Personalization and customization are viable by virtue of the interactivity and information density nature of E-commerce.

2.2.8 Social technology

Social technology includes social networking and user content creation. For E-commerce, social technology is becoming more and more important than ever before, as contents are generated by users, not by mass media then distributed to audiences. Consumers have more power with respect to merchants as their reviews can be seen broadly in a social network. Firms with strong social networking and social media marketing channels will certainly be more competitive. By contrast, a company's public image is monitored not only by auditors or non-profit organizations but also by the whole society, considering the

strength of social media. As a result, companies have to think more carefully about society issues such as environment, etc.

2.3 Disadvantages of E-commerce

Bidgoli (2002, 58) and an online education organization called Tutorials Point (2015) have categorized the drawbacks of E-commerce to technical and business practice (non-technical) disadvantages.

Technical disadvantages mainly related to software, infrastructure, security and human issues. E-commerce software keep changing rapidly, require merchants to react fast while maintaining the compatibility and integrity of the whole system. Under-developed infrastructure in either company or consumers' area will for example cause interrupted communication. Security thread such as sensitive information leaking, hacking or credit cards fraud can be a great threat to both parties in the market.

Non-technical disadvantages revolve mainly around human matters. First of all not all customers are familiar with technology, they will have some certain hesitation when transacting with faceless sellers. Communication virtually can be less trustworthy than face-to-face ones. Second problem is the lack of real experience such as touch, feel or try-on with tangible product. In brick-and-mortar store buyers have option to try product before making decision. That leads to the third disadvantage, return rates. In US, the average product return rate was 8.6 percent in 2013 while this number in online retail is as much as one third of total sales (Banjo 2013, according to The Retail Equation 2013, 3).

2.4 E-commerce business models

One most common way to categorize E-commerce business models is defining the seller-buyer relationship, who is selling and who is purchasing. According to Laudon & Traver (2014, 59) three major types of E-commerce are Business-to-consumer (B2C), Business-to-business (B2B), Consumer-to-consumer (C2C) and

their smaller variants which are Social E-commerce, Mobile E-commerce (M-commerce) and Local E-commerce. Their definition and examples are explained in Table 1.

Table 1. Major types of E-commerce

E-commerce type	Definition and examples
B2C	Transactions happen between online businesses and personal consumers Examples: Amazon, Hotels.com, verkkokauppa.com
B2B	Transactions happen between an online business to others Examples: Alibaba.com, partstore.com
C2C	Transactions happen amongst consumers Examples: Craigslist, huuto.net
Social E-commerce	Transactions enabled through social networks and online social relationships Example: Facebook commerce
M-commerce	Transactions enabled through mobile devices Examples: making transactions, booking, banking via smartphones and tablets
Local E-commerce	E-commerce that focus on specific geographic locations Example: Groupons, Facediili.fi

Beside the major models, there are other E-commerce types which were mentioned by Bidgoli (2002, 50–56) and Tutorials Point (2015). They are:

- Consumer-to-business (C2B)
- Business-to-Government (B2G)
- Government-to-Business (G2B)
- Government-to-Citizen (G2C)

3 ONLINE STORE

3.1 Definition

An online store is an essential part of the E-commerce system. It is a website where customers can browse, purchase and make payment digitally over the Internet. A typical online store consists of products and categories, shopping carts, orders processing and payment system. (Online store definition 2015)

3.2 What to consider when opening online store

Before you start building something, it is always worthwhile to gather everything needed and make a plan. Companies regardless of the size, which does not have a systematic plan, will not be able to stand out from similar rivals and will be highly exposed to today's competing market environment (Scarborough 2012, 38). Online businesses are no exception in that statement. By asking what must be thought of before making E-commerce presence, companies are basically preparing fundamental steps of a business plan.

3.2.1 Goal/purpose

It is vital to determine the absolute goal of company's online presence. Focusing on goal(s) facilitates the company's decision-making process and prevents it from drifting out of its track. An online web store can be a main selling channel or a supplemental channel beside physical store, a way to help company expand market etc. Whatever the goal is, it should be determined clearly in order to create consistency and prevent different channels from suppressing each other.

3.2.2 Choosing software, domain name and web hosting service

These are the first steps to the establishment of an online store. Besides hiring a professional web designer to build an online store, entrepreneurs can choose to do it their own thanks to the birth of many online stores designing software such as Shopify, Bigcommerce, Volusion, Squarespace and so on. Furthermore there is an inexpensive and universally used website building tool, WordPress. With the support of plug-ins and widgets, WordPress can also operate as an online store (Laudon & Traver 2014, 186).

To understand what a domain name is, we must know about IP address first. IP (short for Internet Protocol) address is a unique string of numbers separated by full stops that identifies each computer in the network (Definition of IP address 2015). But it will be hard for people to remember a series of numbers, so domain name has been invented as a natural language representative to IP address (Laudon & Traver 2014, 108). According to Fishkin (2007) a right domain name should be short, unique, easy to remember, easy to type and most importantly relevant to content. When domain name is relevant, audience will be able to guess what content they might find there. For example a furniture retailer should not use totally irrelevant domain names such as guns.com, pizza.com etc. Furthermore, the domain name must not contain misleading information that could attract children to inappropriate content like pornography. This is according to the 2002 Domain Names Act (Laudon & Traver 2014, 584).

Company can choose to host website by their own or outsource to a web hosting provider. Web hosting is a service provided by companies that leasing hard disk space for clients to store their website and maintaining its connectivity to the Internet. Popular services that offered by web hosts are hardware, software maintenance, data backup and security. (Definition of web hosting 2015). When outsourcing web host, company will not have to worry about the technical and staffing cost to set up and maintain server. However, it depends totally on web host, whether the security and stable connectivity is guaranteed or not (Laudon & Traver 2014, 188). Therefore, it is recommended to choose well-known web-hosting providers like Bluehost, Host Gator or Web.com.

3.2.3 Design

Laudon & Traver (2014, 210) have listed eight most important factors in successful E-commerce site design. The website should avoid having weighty content such as huge sized photos, unnecessary flash content to ensure the pages load fast and audiences do not get distracted. The product, main objective of E-commerce site, should be in places that get most attention and should be as informative as possible. Navigation is highly required and it should be structured clearly with categories and sub-categories. The pages need to be compatible with most popular Web browsers, namely Google Chrome, Safari, FireFox, Opera, Internet Explorer.

Table 2. The eight most important factors in successful E-commerce site design (Laudon & Traver 2014, 210).

FACTOR	DESCRIPTION
Functionality	Pages that work, load quickly, and point the customer toward your product offerings
Informational	Links that customers can easily find to discover more about you and your products
Ease of use	Simple fool-proof navigation
Redundant navigation	Alternative navigation to the same content
Ease of purchase	One or two clicks to purchase
Multi-browser functionality	Site works with the most popular browsers
Simple graphics	Avoids distracting, obnoxious graphics and sounds that the user cannot control
Legible text	Avoids backgrounds that distort text or make it illegible

A simple checkout process and wide variety of payment options help significantly increase purchasing conversion rate. Imagine how frustrated customers will feel when they have filled every information, just to realize there is no suitable payment option for them. In addition, visual appearance should be simple. The number of colors used should be kept rational and they should complement with seller's brand logo.

3.2.4 Choosing products to sell online

Even though anything can be found on the Internet nowadays, some products are better suited for trading online than other. According to Scarborough (2012, 412) products with low profit rate and high market volume like computer hardware, clothing and consumer electronics are most likely to be purchased online

However those are only tangible products. There are also intangible, digitalized-downloadable products, the most unique goods that only available online. Those are eBooks, digital music, apps etc. The benefits of this product type are no packaging, shipping or stocking cost, and customers can get them almost immediately. Nevertheless there are great risks of copyright and piracy as any digital things can be hacked shared freely. Online merchant selling downloadable products need to consider these matters seriously.

3.2.5 Identify customers and competitors

Like traditional business, online business has its specific customers and competitors. Online competition is just as, if not more fierce than its normal counterpart. Company can no longer consider only local competitors, as all the available contestant are only few mouse clicks from customers. At the same time, the internet makes it easy for company to identify its competitors just by a few keyword searches (Scarborough 2012, 419–420). Comparing between competitors, company might be able to come up with its competitive advantage to differentiate from the rest.

Depend on business model, customers range from individuals, organizations to governments. Identifying online customers does not confine only on their demographics, but it also studies their frequency and scope of internet usage, accessing devices, type of connection and online behavior. (Laudon & Traver 2014, 368–372)

3.2.6 Choosing E-commerce software

Instead of building their own E-commerce software from scratch, most companies choose to buy a ready-made E-commerce suite. An E-commerce server suite consist of many software applications working together to provide necessary functions and capabilities in an online store. Some of the most important functions are shopping cart, product catalog, order management, etc. (Laudon & Traver 2014, 201)

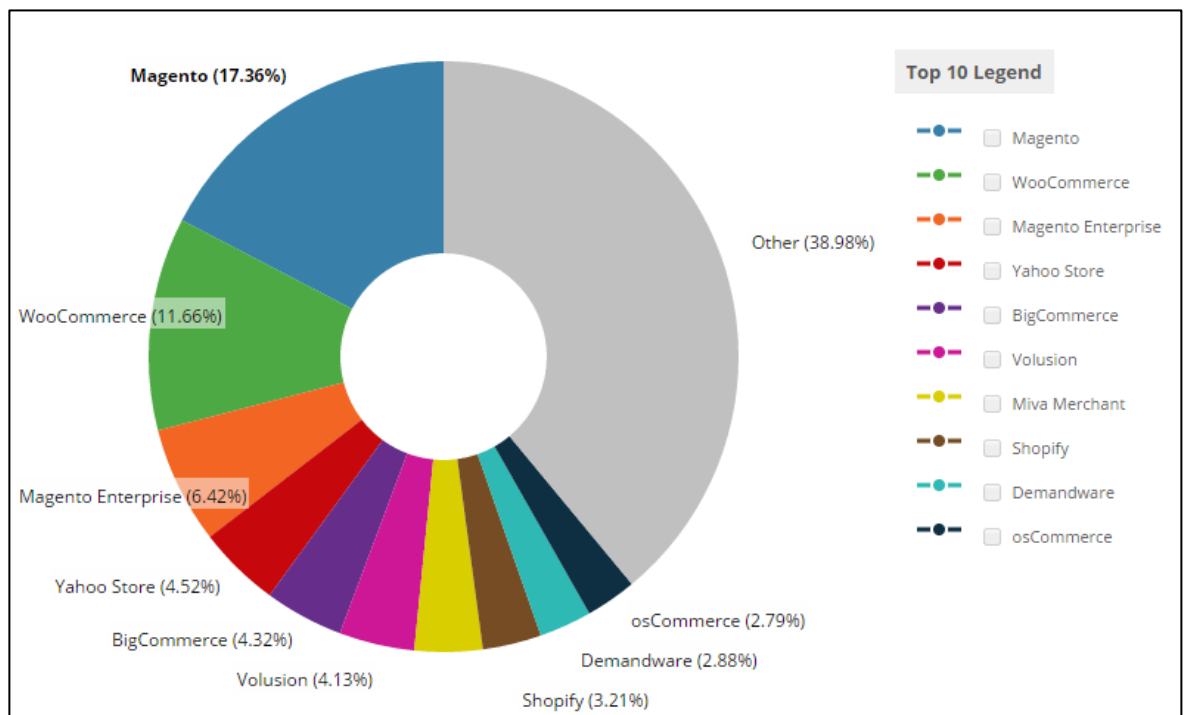


Figure 1. E-commerce technologies used by the top 100 000 websites (Ecommerce Usage Statistics 2015).

There are many available E-commerce suites on the market with increased functionality, while the price is getting cheaper and cheaper. Figure 1 demonstrates ten most common E-commerce platforms used by top hundred thousand websites in the world. It is shown that two kinds of open-source software, Magento and Woocommerce for WordPress, are the most popular choices as they together account for almost 30 percent of total share. The reason is most likely because they are free, easy to use and universally applicable to any business. However this does not mean that they are the two best options. Enterprises and corporations usually use high-end solutions IBM WebSphere

Commerce, Oracle ATG Web Commerce, Demandware, Magento Enterprise etc. While they may not be listed on top ten because of small count, they are still powerful tools for large businesses.

It is not easy to choose the suitable one from vast options. Depend on characteristics of the business, company needs to determine what the most necessary elements are for them. Nine key factors that need to be looked at, according to Laudon & Traver (2014, 201–202) are:

- Required Functions
- Capability with different business models
- Tools for modeling business procedure
- Visual friendly user interface and reporting
- Performance and scalability
- Compatibility with current business system
- Level of standardization
- Options for global and/or multicultural targets
- Supports for different regional tax and shipping rules

In additional, company should investigate thoroughly pricing model of different packages in order to minimize incurred cost. Some offer onetime payment for full suite while others charge monthly, annual fee and there might be optional purchase for extensions.

3.2.7 Online payment and shipping methods

Online payments methods vary depend on different parts of the world. In the United State, the dominant form of online payment is credit or debit card. While in Europe it is online bank transfer and bank debit card. Customers in China, on the other hand, prefer to pay by cash when pick up the goods at local store. Mobile payment method is becoming a big trend, especially in Japan and some European countries (Laudon & Traver 2014, 287–289). Therefore it is vital for vendor to find out target market's preferred payment methods and offer convenient choices for their customers

According to Scarborough (2012, 421) the most common reason why customers abandon shopping cart is because of the high shipping cost. Before choosing suitable postal provider and building a proper shipping rate structures, company also need to compare the shipping price with other competitors as this can be one deciding factor for customers buying online. Maguire (2006) comes up with two options when building a shipping rate table. Company want to intensely attract customer should be willing to decrease profit on shipping cost; offering free delivery for orders excess some defined amount is very effective and frequently used technique. On the other hand, some companies choose to make small profit from high delivery cost, as long as the rate is similar compare to competitors. Regardless of the options, available shipping methods and rates should always be presented clearly and as early as possible during the checkout process.

3.2.8 How to attract customers?

There are too main strategies to attract audience to a website. The first strategy is to use traditional online marketing tools and the second one is to get customers through social, mobile, and local marketing channels. (Laudon & Traver 2014, 382–399)

Table 3. Traditional online marketing tools.

Tools	Explanations
Search engine marketing	Utilize results from search engine like Google, Bing etc. to attract viewers and raise awareness.
Display ad marketing	Place digital advertisement on online environment such as webpages, streaming media.
E-mail marketing	Send advertisements by e-mail to targeted consumers.
Affiliate marketing	Attract potential customers by introduction from affiliate Websites, often involve commissions.

Viral marketing	Get customers to recommend company to their friends, family and colleagues
Lead generation marketing	Generate leads for other businesses who can later become customers.

Amongst the traditional marketing tools demonstrated in Table 3, search engine marketing and display ad marketing are the most used channels in the United States (Laudon & Traver 2014, 384–387). Search engine marketing there are three main products offered by search engines. In sponsored link program, company can pay a fee to have their website listed in search result and receive suggestions to improve search ranking. In keyword advertisement for example Google’s AdWords, companies bid for keywords to have their presence in result whenever those particular keywords are searched. Search engine context ads, namely Google’s AdSense, let merchants place ads on other websites, which have relevant content with merchants’ website. Besides paying search engine operators, companies can increase their website’s search result rank by optimize the page design and content so it can be indexed efficiently by search engines. This process is called search engine optimization (Laudon & Traver 2014, 386).

Three display ads that have the most spending in the US are: banner ads which display an advertising message in a small box on a webpage; rich media ads whose content utilize interactivity, animation and sound effect; and video ads that display an in-page commercial video at designated time (Laudon & Traver 2014, 388–389).

Regardless of challenge from spam filter tool, e-mail marketing remains a popular way to attract and retain customers. The main reason is its low cost and relatively high response rates (Laudon & Traver 2014, 393). An online store can keep customers coming back by sending them newsletters to inform them about best deals or new products.



Figure 2. Popularity of digital marketing technologies 2015 (Salesforce 2015).

The second strategy which uses social, mobile and local marketing are becoming more and more popular nowadays. As shown in Figure 2, social media and mobile marketing channels are amongst the most used tools. Those three channels are closely connected to each other, as customers use social network on mobile to find local traders. On the other hand, traders use social network to find out more about customers and notify their presence (Laudon & Traver 2014, 456).

An online store can draw customer by making its appearance on social networks like Facebook, Twitter, forums and integrate social log-in on the site. Furthermore, product sharing and reviewing on social network are recommended.

Mobile marketing includes mobile ads, quick response (QR) codes and building mobile apps. For example S-Group have built a mobile app to inform food deals from stores close to their location or let customer purchase food online through their smartphone.

3.2.9 Track online store performance

Unlike traditional store, online store provides merchant options to automatically measure its activities and performance, with the help of Web analytics software. Web analytics software is a tool to track, keep and present analyzed data from audiences' activities when visiting a website.

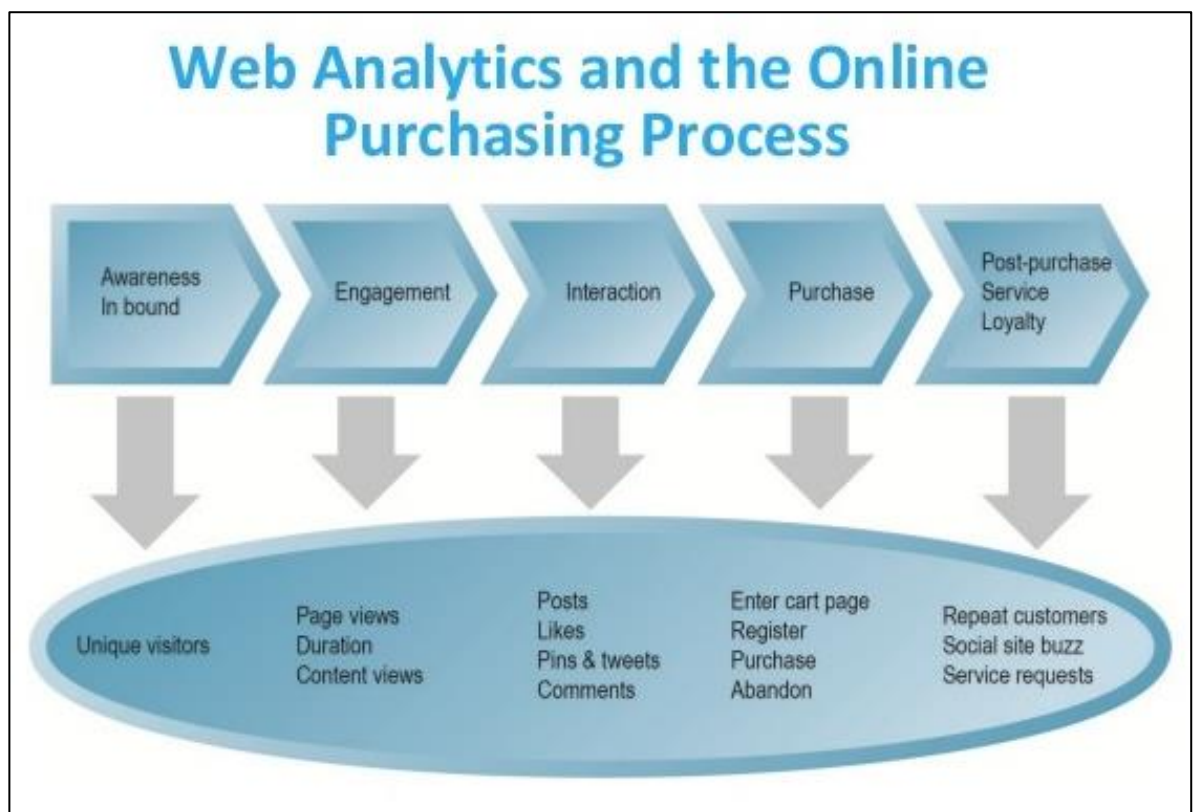


Figure 3. Web analytics and the online purchasing process (Laudon & Traver 2014, 437).

Figure 3. Web analytics and the online purchasing process (Laudon & Traver 2014, 437) by Laudon & Traver demonstrates what data web analytics collect from five main steps of online purchasing. Firstly, the sources which lead audiences to website are identified, for example if they come from search, directly typed URL, social media channels etc. also what device they use. When customers are on-site, the software will record their activities and interest, like what contents are viewed and for how long; is there any comment posted or social media engagements (likes, pins, tweets). In the purchasing process, commonly collected

data are success transaction rate and abandonment rate. These data help firms find out how many percent of customers actually make final payment and why they lose potential buyers. Finally in the aftersales process, web analytics analyze customers' behavior in form of reviews, whether it is positive or negative; and percentage of returning customers.

Without web analytics, it is very difficult for businesses to evaluate their E-commerce strategy. Therefore, when choosing E-commerce software, entrepreneurs should make sure that web analytics are supported. The most commonly used web analytics package is Google Analytics, a free open-source program provided by Google.

4 WORDPRESS

4.1 Definition

WordPress is a free, open-source software originally used for online blogging, but later it has developed to be a full content management system. WordPress provides powerful, unlimited customize options thank to its plug-ins, widgets and theme templates system (About WordPress). According to W3Techs' survey (2015), over 23.6 percent of the top 10 million websites in the world used WordPress by March 2015.

WordPress is web software you can use to create a beautiful website or blog. We like to say that WordPress is both free and priceless at the same time. (WordPress).

It is necessary to clarify the difference between WordPress.org and Wordpress.com. The former website supports WordPress software download and installation hence gives user unlimited power of customization. The latter provides also domain name, hosting service and WordPress-based blog. With second option, user can start writing blog in seconds at a cost of less flexibility. In this thesis, WordPress will be solely referred to as Web software, not a service provider.

4.2 Advantage/disadvantage of using WordPress to create an online store

Compared to traditional E-commerce specialized software, vendors using WordPress for online store encounter its unique advantages and disadvantages in different way. Table 4. Advantages and Disadvantages when using WordPress to create an online store demonstrates the strengths and weaknesses of the tool when used for E-commerce.

The first and most well-known advantage of WordPress is its ability to customize. With the help of some E-commerce plug-ins, the blogging tool can build a completely functional online store with all necessary components (Khurana). There

are also large number of themes, either free or not, made explicitly for commercial purpose. Users only need to find which plug-ins and theme fit their business the most. Depend on user's preference, extra functions for example shipment tracking, payment methods, product pre-order and so on can be added or removed by install/uninstall plug-ins. The vast number of E-commerce plug-ins and themes found on WordPress points out the high demand of using WordPress to sell online, as a simple rule of demand-supply relationship.

Secondly, the software is totally free, with open source code. In simple word, WordPress' programming code can be accessed by anyone, so users with coding skill can change it to better accommodate their needs. Besides, the user interface of WordPress is rather friendly, so that even users with basic computer skills can still manage a small online shop by their own. The software is also search engine optimizable as there are many plug-ins and guidelines available on the Internet provided for that purpose, for instance Yoast's WordPress SEO plug-in. (Mandigma 2011)

Table 4. Advantages and Disadvantages when using WordPress to create an online store.

Advantages	Disadvantages
<ul style="list-style-type: none"> – Highly customizable – Free and open-source – Supported by most well-known hosting service provider – User friendly and Search engine friendly 	<ul style="list-style-type: none"> – Compatibility when upgrade – Customization might get overwritten when updated – Security – Helps and supports – Limited product capacity

On the contrary, the integration of different plug-ins also has its drawback. As those plug-ins are from different developers, there is a risk of incompatible when updating them or upgrading WordPress (Khurana). Also the modification made personally by user might get overwritten by new update data. The third disadvantage of WordPress, when compare to mainstream E-commerce software, is security. Because of its popularity and open source characteristic, WordPress

continually undergo many kinds of attack from hackers. For online business, security is of utmost importance and this disadvantage is seen as one of the biggest barrier that prevents online vendors from choosing WordPress.

At the time of this study, current WordPress E-commerce plug-ins is only capable of limited amount of product. The online store using WordPress can handle one to two thousand product types, but should not be more than that. But to be fair, only huge corporates manage that much goods and they are capable of building their own online store without using the software. Small entrepreneurs who use WordPress to create online store do not normally have more than couple of hundred products.

Finally, since WordPress is created and distributed freely, there is no official support channel by developers. The only available way to find help is through documentations on their website or in forums where users help each other. The same apply to non-commercial plug-ins and themes.

4.3 Why KVS Valaistussuunnittelu Oy uses WordPress to build an online store

The company's incentive when opening an online store is to introduce products and company itself to wider population. Since KVS Valaistussuunnittelu Oy do not want to focus completely on online retailing, the web store will operate as online catalog, a supporting channel beside main sale channel which is physical store. Therefore it is not necessary for them to use powerful and complicated E-commerce software.

Company owners are aware of online store developing tools like Shopify; they have also used Magento before and find it complicated to operate. However they have never used WordPress before. In another words, KVS Valaistussuunnittelu Oy has chosen WordPress because of the software's popularity and simplicity and the assumption that it is suitable with their initial purpose when creating an online store (Asp & Vainio 2015).

5 ESTABLISHMENT OF AN ONLINE STORE: CASE KVS VALAISTUSSUUNNITTELU OY

Before making online presence, it is crucial to understand the company's inner characters and the impact from market by conducting a SWOT analysis (Table 5).

Table 5. KVS Valaistussuunnittelu Oy SWOT analysis.

<p>Strengths</p> <ul style="list-style-type: none"> – Authorized seller of Talomat system – Price-competitive products – Turn-key solutions – Easy navigation (online store) – Simple design (online store) 	<p>Weaknesses</p> <ul style="list-style-type: none"> – No Web design expertise – No existing customer database – Employees have other job
<p>Opportunities</p> <ul style="list-style-type: none"> – Potential market shares – Growing LED market – End of recession – High-end market segment – Asuntomessut trade fair 2016 	<p>Threats</p> <ul style="list-style-type: none"> – Imitation from competitors – Fast technological development – Cyber security threats – Increasing competition

As mentioned in company information, KVS Valaistussuunnittelu Oy is the authorized seller of Talomat system in Ostrobothnia region. This technology is relatively new, it takes advantage of 12V LED lamps which consume less energy than normal 230V ones and are dimmable. The company is capable of offering full package solutions which include design and installation of light and electricity network (Vainio 2015). For online store, they aim at simple yet effective design. However none of the employee is expert in Web design and E-commerce. They have not yet built a customer database systematically and they all have other jobs, which prevent them from spending full time with KVS Valaistussuunnittelu Oy

From market aspect, the company has a potential share from growing LED market. Europe countries are planning to ban halogen bulbs in 2018, so the alternatives like LED lamps are expected to have promising market growth (European Commission 2015). In addition, during the economic recession time in 2014 the company still makes profit of more than 20,000 Euros and 200,000 euros of turnover. Therefore it is expected to profit even more when the recession period is over (Vainio 2015). Threats from market include increasing competition, as competitor can also develop their online presence. Furthermore the fast development in online technology and constant cyber security threat require the company to keep up to date constantly.

Based on the SWOT analysis, KVS Valaistussuunnittelu Oy can consider ways to utilize its strengths and to prevail weaknesses during the development of online store.

5.1 Choosing domain name and host server

As mentioned before, a good domain name should be short, easy to remember and reflective to content it leads to. In KVS Valaistussuunnittelu Oy's case, the company has come up with the name "Bulbstore.fi". The name is simple, easy to remember as "bulb" and "store" are universally understandable by both native and non-native English speakers. In addition, this domain name perfectly reveals the content behind it, a website that sell lighting products, in Finland as indicated by ".fi". The other side of the coin is that those two keywords are widely used so it will be very difficult for the website to compete in search engine index and appear in first or second page of search result. The company also shows interest in the domain name "bulbstore.com". Unfortunately, it has already been reserved.

Like domain name, the decision regarding hosting service had already been made before the author started the project with the company. The local hosting service Databros Services Oy was chosen, mainly because KVS Valaistussuunnittelu Oy's CEO has a good connection with them, and at that time he was not aware of the other global choices (Asp 2015).

5.1.1 Local host versus popular international host

Beside Databros Services Oy, there are many international hosting service providers. Two of the most popular WordPress hosting services, HostGator and bluehost were selected as comparison source for current choice (Table 6).

Table 6. Hosting options for bulbstore.fi. (Vainio, HostGator, bluehost).

Features	Databros	HostGator	bluehost
Suitable plan		Baby	Plus
Domains	1	Unlimited	1
Parked domains	No Answer	Unlimited	Unlimited
Sub domains	No Answer	Unlimited	Unlimited
Bandwidth	Unlimited	Unlimited	Unlimited
cPanel	No	Yes	Yes
PHP version	5.3.10	5.2 & 5.4	5.3 - 5.5
Free site transfer between hosts	Agreed	1 time	No
WordPress one-click installation	No	Yes	Yes
Additional services (extra costs)	On request	- SiteLock security - Daily Site Backup - Search Engine Visibility	- SiteLock security - Daily Site Backup - Search Engine Visibility
Price/month	Personal agreement	6.36\$(first 3 years)	5.95\$(first 3 years)

Databros is a local company and since the CEO of KVS Valaistussuunnittelu Oy has a good connection with them, bulbstore.fi can get a good hosting plan in term of price and fee. A familiar local company also brings better sense of security and reliability. However this does not necessary mean that Databros is the most suitable choice for creating online store with WordPress. At the time of writing, there is an issue concerning PHP version of Databros hosting server. PHP is the popular scripting language that is powering the online store and its E-commerce

software, WooCommerce. Databros only supports PHP version 5.3.10 while WooCommerce require minimum PHP version 5.4 and they will stop supporting lower version from September 2015 (Figure 4 & Appendix 1). The problem was brought to Databros, but they refused to update PHP version any time soon. Therefore, company should consider choosing other hosting options in order to maintain the site's security and performance, even though the process of transferring website might take time and affect its operation.

Server Environment	
Server Info:	[?] Apache/2.2.22 (Ubuntu)
PHP Version:	[?] 5.3.10-1ubuntu3.17 - We recommend a minimum PHP version of 5.4.

Figure 4. Server environment report (bulbstore.fi).

5.2 Install WordPress

The latest WordPress version can be downloaded for free from their main website WordPress.org. To upload and install the program, a file transfer protocol (FTP) client is required. FTP client is a program that let user download or upload files to a server. Also, a new database needs to be created for the website. On their codex page, WordPress provide a free and detailed instruction which makes installation steps possible even for user with basic computer skill.

Once WordPress is installed, the domain and website is accessible to everyone on the internet. In order to limit public access during the development process, KVS Valaistussuunnittelu Oy used a WordPress plug-in called Ultimate Coming Soon Page. When user without administration right enter bulbstore.fi, they will only see one page that notice the online store is currently building and will be available soon. This kind of page is commonly called coming soon page.

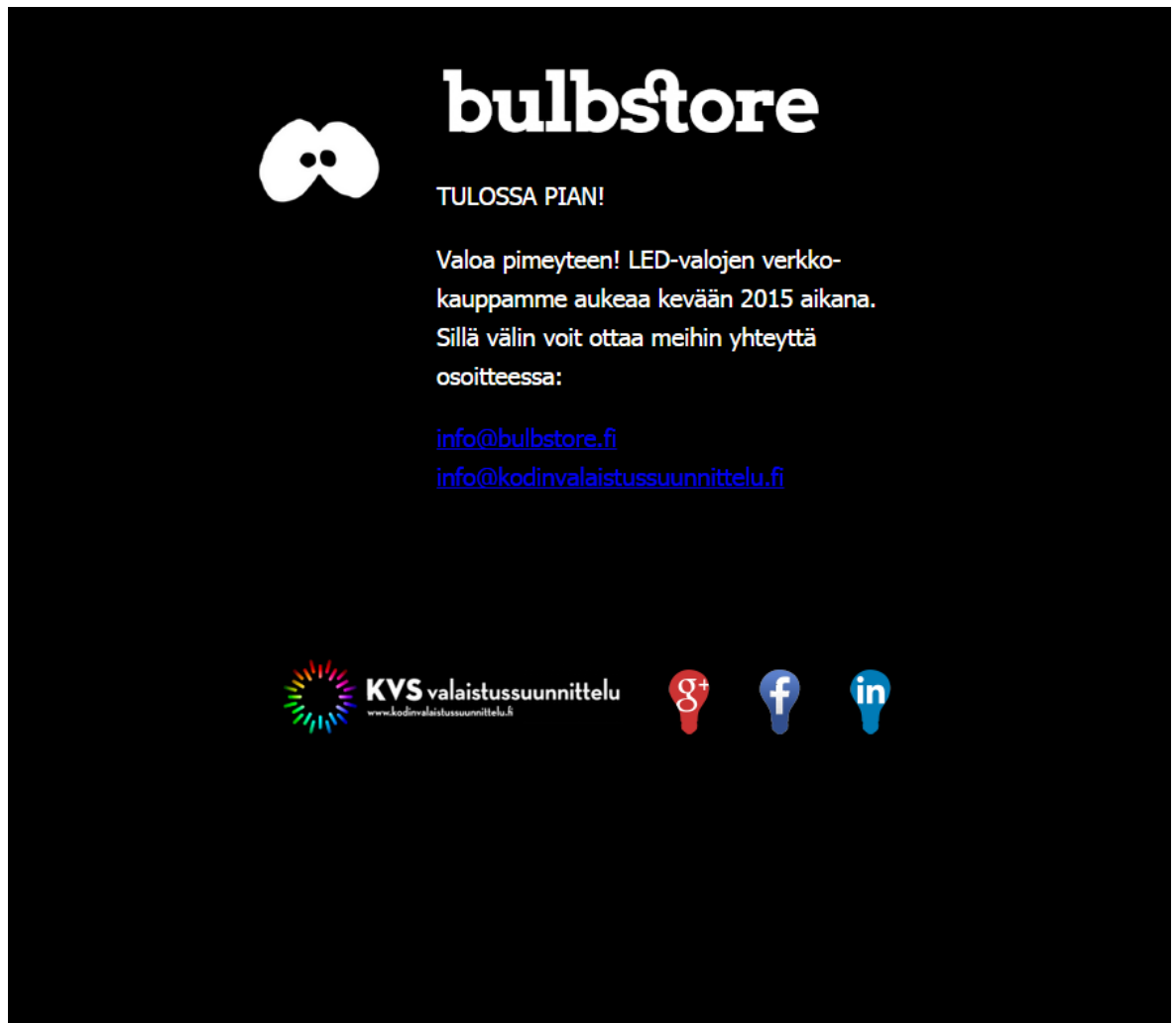


Figure 5. 'Coming soon' page (bulbstore.fi).

On the 'coming soon' page of bulbstore.fi, the online store and 'coming soon' notice is the most important message to customers, so they are displayed in the center (Figure 5). It is also necessary to leave contact information, and also social media page for user who wants to follow and get notification when the online store opens. It is a common practice to let user subscriber by email for opening notification. However this feature is neither free nor necessary from KVS Valaistussuunnittelu Oy's point of view as contact information and social media channel is enough for them.

5.3 Themes and design

After some finding and comparison, the company has chosen and bought The Retailer theme for its online store. The Retailer is a WordPress responsive theme, which means its layout adjusts to different devices' screen size thus provides an optimal viewing experience and navigation on mobile phones, tablets and computers. Although provided by other party than WooTheme, The Retailer is advertised to be fully compatible with WooCommerce and it is relatively cheaper than WooTheme's similar products.

5.3.1 General settings

After installed and activated, the theme settings can be found in Theme options under the Appearance panel. There are some small detail configurations like enable comments on pages, featured image for single post etc. but most importantly this theme allow user to choose between two layout styles. Instead of making content available in full width, which might result in too much information displayed at once, bulbstore chooses boxed layout. This layout style puts all contents in a centered box and leave out space on the sides, which will display desired background or color (Figure 6)

Since KVS Valaistussuunnittelu Oy creates bulbstore.fi solely for product sales and showcase, the home page is used to present the goods directly to customers, with three different slides: featured products, best-selling products and new arrivals (Figure 6 & Figure 7).

bulbstore

TILAUKSEN SEURANTA OMA TILII

CART 0,00€ / 0 items

SISÄVALAISTUS 12V & 230V ULKOVALAISTUS 12V & 230V TEOLLISUUS JA TYÖMAAVALAISIMET

AMMATTI- JA HARRASTEVALAISIMET TALOMAT JA YHTEENSOPIVAT TUOTTEET

Tietoa meistä Usein kysyttyä Yhteystiedot Tilausehdot

KVS Valaistussuunnittelu Oy

- Valaistus on enemmän kuin puoli sisustusta

Voimmeko auttaa?
Lähetä meille sähköpostia info@bulbstore.fi

ILMAINEN TOIMITUS YLI 200 EURON TILAUKSILLE

FEATURED PRODUCTS

TALOMAT-PAKETIT
Talomat Light – paketti
513,00€

ALASVALOT
LED alasvalo ulos 25W
96,14€

SPOTIT JA RUNGOT
Integroitu LED spotti
kytkimellä 2W NW
29,20€

TALOMAT YHTEENSOPIVAT TUOTTEET
LED spotti 5W
MR18/GU5.3 WW/NW
15,00€

Figure 6. Homepage and header (bulbstore.fi).

5.3.2 Navigations


Confusing navigation is one of the most disturbing issues in an online store (Laudon & Traver 2014, 209). In order to avoid that, bulbstore plans to design their menus as clear and comprehensive as possible.

There are three navigation menus supported in the theme. Top header menu located on the uppermost of the page with tracking order, user account options, search bar on the right side and social media connections on the left side. The primary menu is placed under the store's logo. Since store logo and navigation area use identical background color, it is necessary to separate them with a thin line in order to accentuate main menu and avoid the user's confusion. Primary menu is the most noticeable navigation on the website, so it should contain most important part of the online store: product categories. Bulbstore has five main product categories always visible on the menu and over thirty sub-categories displayed beneath them as dropdown menu. The product-on-sale navigation was later added in this menu, too. The last navigation menu, secondary menu, is located right under primary menu with smaller font size and different color. Secondary menu contains links to the store's relevant information pages like about owners, contact, frequently asked questions and terms & conditions. All of navigation menus' styles like layout, background color, font size and color can be modified in header setting of the theme options.


The Retailer theme offers two possible footers. However it is not optimal for Bulbstore to enable both of them as single footer is enough to provide necessary information. Moreover, using single footer provides simpler navigation and directs viewers' attention more on products. As a result, only dark footer which is the main footer and offers more customize options than light footer is enabled. The footer has 3 content: the online store's useful links, product tags and newsletter subscription. A list of accepted payment methods is displayed at the bottom of footer and it is visible on all pages of the online store so that customers are well aware of how they can pay for products (Figure 7).

← →


BEST SELLERS




ALASVALOT
LED alavalon ulos 25W
96,14€



TALOMAT YHTEENSOPIVAT TUOTTEET
LED spotti 5W
MR16/GU5.3 WWNW
15,00€




LATTIA-/PORRASVALAISIMET
LED-lattiavalaisin
Ø30*18.5mm IP67
6,75€




POLTTIMOT
LED nostalgia polttimo
4W E27 WW
19,22€

← →


NEW ARRIVALS




TALOMAT-PAKETIT
Talomats Oma – paketti



TALOMAT KOMPONENTIT
Talomats ohjauspaneeli



TALOMAT KOMPONENTIT
Talomats Node ohjausyksikkö



TALOMAT KOMPONENTIT
Talomats kytkinsovitin

BULBSTORE.FI

Oma tili
 Tilauksen seuranta
 Edit account
 Change address
 Lost password

Tietoa meistä
 Usein kysytyä
 Yhteystiedot
 Tilausehdot

KVS Valaistussuunnittelu Oy
 Vanhankylänkaari 13
 60320 Seinäjoki
 Finland
 044 972 6962
info@bulbstore.fi
kodinvalaistussuunnittelu.fi

AVAINSANAT


3W	4W	5W	6W	7W	9W
10W	12V	230V	ALUMIINILISTA		
E14	E27	E40	ETSINTÄVALO		
FEREİ	FILAMENT	GX53	INTEGROITU		
IP54	IP65	IP68	KÄMMENVALAISIN		
LATTIAVALAISIN	LED-LOISTEPUTKI				
LED NAUHA	LISTA	METSÄSTYSVALO			
MUUNTAJA	OTSALAMPPU	PANEELI			
PANEELIVALAISIN	POLTTIMO				
PORRASVALAISIN	PROJEKTORI				
PYÖRÄILYVALO	RGBW	SEINÄVALAISIN			
SPOTTI	SUKELLUSVALO	TALOMAT			
TASKULAMPPU	TYÖVALO	VALOKUITTU			
VALONHEITIN	VIRTALÄHDE				

NEWSLETTER

EMAIL ADDRESS:

NAME:

SUBSCRIBE



© Bulbstore MMXIV

Figure 7. Home page and footer (bulbstore.fi).


5.3.3 Shop pages

Shop pages generally include product category pages and single product pages. In larger context, result pages from keyword searches, product tags or filters can also be considered shop pages.

The main category pages are capable of displaying both their sub-categories and products. However, instead of putting products under their sub-category, this layout separates the latter into one group and the former into other group beneath. Therefore it is more optimal to only display the products (Figure 10).

In single product page the most important data, product images, price and info are displayed in center, most visible place of the page. Below are variation choices, "Add-to-cart" button and supplement information such as product code and tags. It is unarguable about the important of the "Add-to-cart" button as it is where the actual sale starts and the conversion rate count, yet original design from the theme, black background rectangular box and white text (Figure 9), is seen by KVS Valaistussuunnittelu Oy as unattractive and blended with the page. Therefore, the button is redesigned with round corners, gradient background color and shadow, all of which make the button looks like it protrude from the page and clickable (Figure 8). The same style is applied to conversion buttons in next purchasing steps like checkout button and place order button in order to avoid confusion and facilitate the process for buyers (Figure 18 & Figure 19).

Home > Kauppa > Talomat ja yhteensopivat tuotteet > Talomat yhteensopivat tuotteet > LED polttimo 3W E14 WW/NW



LED polttimo 3W E14 WW/NW

12,36€

Tuote:	E14 LED-poltin 3W
EAN-koodi:	6430056560205
Kanta:	E14
Käyttöjännite:	12VDC
Teho:	3W
Lumenit:	240lm
Värintoisto:	>80
Valaistuskulma:	>300
Vaionlähde:	SMD3528
Valon väriämpötila:	3000K WW 4000K NW
Rungon väri:	Alumiini
Himmennettävä:	Kyllä
Koko:	117×35,5mm
Paino:	40g
Ledien keskimäär. elinikä:	50,000 tuntia
Takuu:	2 vuotta

VALON VÄRI


NW

[Clear Selection](#)


1

ADD TO CART


SKU: KVS-DP3-1A-3W.
 Categories: Polttimot, Talomat yhteensopivat tuotteet.
 Tags: 12V, 3W, E14, polttimo.




SHARE ON FACEBOOK



PIN THIS ITEM



EMAIL A FRIEND



TWEET THIS ITEM


DESCRIPTION

ADDITIONAL INFORMATION


REVIEWS (0)

E14 LED-poltin 3W.


YOU MAY ALSO LIKE...



POLTTIMOT
LED nostalgia polttimo
4W E27 WW
19,22€



POLTTIMOT
LED polttimo 4W E14
WW/NW
16,06€



POLTTIMOT
LED filament polttimo 6W
E27 WW/CW
18,95€

Figure 8. Single product page (bulbstore.fi).

When entering the single product page, it was also noticed that the website header took too much space, which pushed the main content down and the user would have to scroll down to see the main content. In order to avoid that irritation, the header's spacing needed to be minimized.

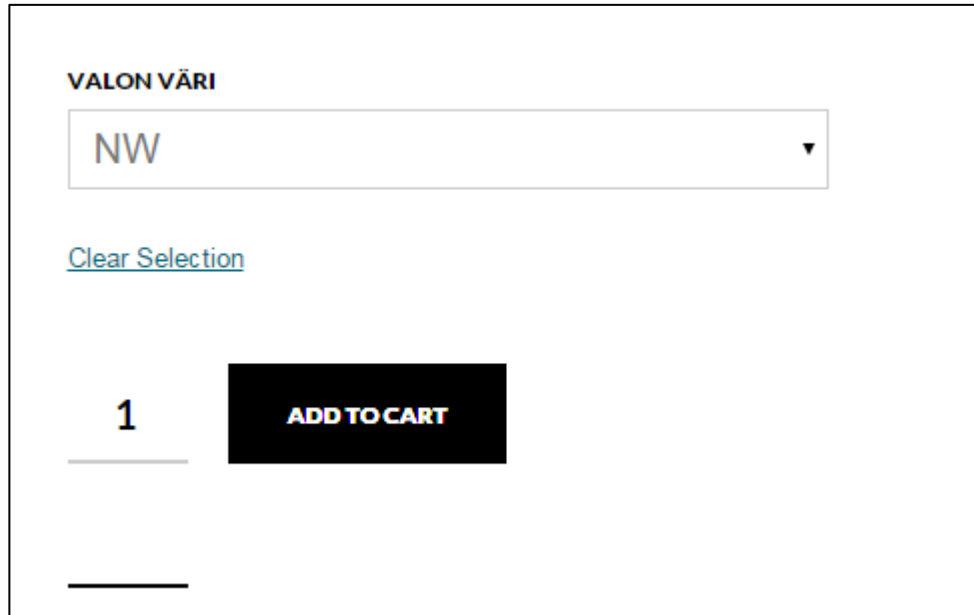


Figure 9. Original Add-to-cart button.

Every shop page, except single product pages, is displayed with a sidebar on the left side of the main content. There are many useful sidebar widgets offered by both WordPress and WooCommerce, but since the main purpose of shop pages sidebar is to help customer navigate and filter their products easily, only the most important ones are selected, such as search box, price filter, product attributes filters and categories list (Figure 10). Although The Retailer theme allows users to put sidebar on either side, it is optimal to place it on the left, as according to Nielsen (2006) users usually read web content in an F-shaped pattern which include scanning the website's left content vertically. There for this is where the navigation column should be. Moreover, people tend to look for, or even expect navigation on the left as most of the popular E-commerce websites put their sidebar on the left, for example eBay, Amazon, Asos, verkkokauppa, etc.

Sisävalaistus 12V & 230V

Search Products...

ETSI HINNAN MUKAAN

0€ - 491€ **FILTER**

VALON VÄRI

CW (12)

NW (45)

WW (56)

RUNGON

Alumiini (8)

Hopeinen (1)

Kiil.alumiini (1)

Kromi (2)

Kultainen (0)

Messinki (2)

Musta (3)

Valkoinen (11)

Vihreä (1)

OSASTOT

Ammatti- ja harrastevalaisimet

Sisävalaistus 12V & 230V

Alasvalot

Erikoisvalaisimet

Kiskovalaisimet

Home > Kauppa > Sisävalaistus 12V & 230V > Page 6 DEFAULT SORTING ▾



PEILIVALAISIMET

LED peilivalaisin 7W

95,64€



POLTTIMOT

Private: LED polttimo 3W E14 WW

8,15€



POLTTIMOT

LED polttimo 3W E14 WW/NW


14,45€



POLTTIMOT

LED polttimo 3W E14 WW/NW

12,36€



POLTTIMOT

Private: LED polttimo 3W E27 WW/NW

16,52€







Figure 10. Category page with left sidebar (bulbstore.fi).

Another customer's frustration with online store according to Laudon and Traver (2014, 209) is lots of mouse clicks needed to get to the product. Bulbstore.fi offers many different ways that users can access quickly to products. Firstly, customer can get to single product page right on the first click if the product is featured on home page or maximum of three clicks when access through category and sub-category. Secondly, if customers know product name or information, they can use search box in any page header area or tags list displayed in footer area. The third way is to search product by price range and attribute filter on sidebar in category pages.

5.3.4 Color and style

Laudon and Traver (2014, 209) believe that a splashy website often disturb viewers more than attract them. When all the content is highlighted by colors, nothing is attractive anymore. Following that, Bulbstore.fi limit it design to three main colors: black, white and blue. Those colors are considered by Kissmetrics (2013) as attractive to men, the store's main customer target.

There are three groups on the website affected greatly by color: text links, navigations and buttons. The color shade in each group will change to darker or lighter depend on its hierarchy and importance. For example in navigations group, top header menu has white text color and its own blue background; while primary navigation has dark blue text and secondary navigation has lighter blue. The same apply to text links in sidebar with black and gray colors. Most of the buttons on the online store have black background, except for conversion buttons which are changed to gradient orange background color. Even though Kissmetrics (2013) argues that orange is one of the color both men and women hate the most, the yellow-orange color group has been used for conversion buttons by many popular E-commerce site for example Amazon, Asos etc. This will make customers feel familiar and navigate easier. In addition since the shop uses mainly cool and neutral colors, buttons with warm color like orange will most likely get attention and higher chance for action.

5.4 E-commerce software

Among many available options, WooCommerce was chosen as the E-commerce software for the site. WooCommerce is the most popular choice, and statistically the best choice for those who want to open an online store on WordPress, with almost 12 percent of the top 100 000 websites using it (Figure 1). WooCommerce is a free, open-source plug-in developed by WooTheme.

5.4.1 Advantages and disadvantages

Like WordPress and other prevalent open-source software, WooCommerce is backed by a big community with supports. User can also get professional supports directly from WooTheme, along with its easy-to-navigate documentations and tutorial videos. Furthermore, WooTheme offers its own extensions and E-commerce themes; not to mention there are thousands of extensions available from the community. This greatly enhances WooCommerce's ability to adapt to various kinds of business.

However not all extensions are free. Even though WooCommerce itself is free of charge, it is necessary to buy some premium extensions in order to make online store fully functional. Complicated business which requires lots of functions can be quite costly. Another disadvantage of WooCommerce is that updating the plug-in can possibly makes it incompatible with the theme and other plug-ins. In Bulbstore.fi's case, most common conflict between WooCommerce and The Retailer theme is product quantity adjustment button. For example when updating WooCommerce from version 2.3.5 to 2.3.6, the plug-in conflict with theme and break the product quantity adjustment. Although a fix was deployed in the next update, this conflict could greatly decrease customer experience and purchasing decision in the online store.

5.4.2 Integration and settings

Installing WooCommerce to WordPress is rather simple, as user can find and one click install it just like any other WordPress plug-ins. After the installation and activation, the product and WooCommerce menu will appear in admin panel hence allow adding product or change E-commerce settings.

There are eight main settings in WooCommerce (Figure 11). For general setting, the business location and selling location is set to Finland, as KVS Valaistussuunnittelu Oy's aim is to operate in domestic market first. When this option is applied, any orders to address other than Finland will be refused; the country options can be easily added later when the company want to expand,

though. Accepted currency is Euros. Unlike countries, WooCommerce currently only accept one base currency for transaction. There is an extension which allows customers to convert the price to their currency of choice. However it is only for informational purpose as the price will switch back to base currency when customer process to checkout. For bulbstore, single currency is enough and it will not affect the online store performance in the near future.

The screenshot shows the WooCommerce settings interface for 'bulbstore.fi'. At the top, there are tabs for 'General', 'Products', 'Tax', 'Checkout', 'Shipping', 'Accounts', 'Emails', and 'Webhooks'. The 'Products' tab is active, and the subcategory 'General' is selected. Below the subcategory navigation, the 'Measurements' section contains two dropdown menus: 'Weight Unit' set to 'kg' and 'Dimensions Unit' set to 'cm'. The 'Reviews' section contains four checked checkboxes: 'Enable ratings on reviews', 'Ratings are required to leave a review', 'Show "verified owner" label for customer reviews', and 'Only allow reviews from "verified owners"'. The interface is light gray with blue accents for active elements.

Figure 11. WooCommerce settings (bulbstore.fi).

Four subcategories in product settings are General, display, inventory and downloadable products; but since the online store does not have digital products, the last setting is not necessary. In general product setting, the measurement units in product setting are set to kilogram and centimeter, which are suitable scale for LED and lighting products. According to the E-commerce in the Nordics 2014 (2014, 35), 45 percent of online consumers in Finland research products online before buying it. Therefore product reviews from customers should be allowed because it is an effective and trusted marketing channel. However in order to guarantee the reliability, only customers who purchased the product are allowed to rate and write review. In product inventory setting, stock management is enabled so that WooCommerce will automatically send email report to manager when

some product is low in stock. Since the company do not allow backorder, this option also prevent customer to place order on out of stock products.

Settings for account let company select what customer can do in their account page for example view order or edit information. Although bulbstore let buyers buy products without creating an account, the registration option is enabled in checkout page. The registration helps the company build customer database and know the market better, so it should be encouraged at any stage during purchasing process.

The prices for online products are already tax inclusive, so it is not necessary to enable taxes option. In checkout settings, only payment through a gateway is enabled; Checkout and shipping settings are discussed in detail in later part of the research.

5.4.3 Emails settings

WooCommerce provides several email templates that will be automatically send to customers when their order is processing, completed or when they create new account, reset the password etc. Manager also receives notification emails from the E-commerce software when orders have been placed or cancelled.

Each e-mail type has two alternatives; HTML version comes with background color, company logo and links while plain text version only has text (Figure 12). The HTML version may look better yet there might be e-mail software which only display text, plus customers who prefer plain text. Therefore the company decided to enable both versions and depend on customers' preference, appropriate email will be shown.

Thank you for your order																				
<p>Your order has been received and is now being processed. Your order details are shown below for your reference:</p> <p>Order #2872</p> <table border="1"> <thead> <tr> <th>Product</th> <th>Quantity</th> <th>Price</th> </tr> </thead> <tbody> <tr> <td>LED spotti 5W MR16/GU5.3 WW/NW (#KVS-MR16COB5WW/NW) Valon väri: WW</td> <td>1</td> <td>15,00€</td> </tr> <tr> <td>Subtotal:</td> <td></td> <td>15,00€ (ex. VAT)</td> </tr> <tr> <td>Shipping:</td> <td></td> <td>Local Pickup</td> </tr> <tr> <td>Payment Method:</td> <td></td> <td>Checkout.fi</td> </tr> <tr> <td>Total:</td> <td></td> <td>15,00€</td> </tr> </tbody> </table> <p>Your details Email: bulbstore.com Tel: 0415045986</p> <p>Billing address Vu Luong Puskantie 39 60100 seinäjoki</p>			Product	Quantity	Price	LED spotti 5W MR16/GU5.3 WW/NW (#KVS-MR16COB5WW/NW) Valon väri: WW	1	15,00€	Subtotal:		15,00€ (ex. VAT)	Shipping:		Local Pickup	Payment Method:		Checkout.fi	Total:		15,00€
Product	Quantity	Price																		
LED spotti 5W MR16/GU5.3 WW/NW (#KVS-MR16COB5WW/NW) Valon väri: WW	1	15,00€																		
Subtotal:		15,00€ (ex. VAT)																		
Shipping:		Local Pickup																		
Payment Method:		Checkout.fi																		
Total:		15,00€																		
<p>= Thank you for your order =</p> <p>Your order has been received and is now being processed. Your order details are shown below for your reference:</p> <p>-----</p> <p>ORDER NUMBER: 2872 27th April 2015</p> <p>LED spotti 5W MR16/GU5.3 WW/NW (#KVS-MR16COB5WW/NW) Valon väri: WW Quantity: 1 Cost: 15,00EUR</p> <p>=====</p> <p>Subtotal: 15,00EUR (ex. VAT) Shipping: Local Pickup Payment Method: Checkout.fi Total: 15,00EUR</p> <p>-----</p> <p>YOUR DETAILS</p> <p>Email: bulbstore.com Tel: 0415045986</p> <p>BILLING ADDRESS</p> <p>Vu Luong Puskantie 39 60100 seinäjoki</p> <p>-----</p> <p>...</p> <p>Bulbstore</p>																				
<p>Bulbstore – Powered by WooCommerce</p>																				

Figure 12. Example of processing order emails, HTML version and Plain text version.

The base color, background color and text color of HTML email templates can be changed easily in general option to match with design of the website. Both versions of the template can be modified with some basic programming knowledge. In general the built-in patterns are sufficient for bulbstore.fi and it is not necessary to make a change.

5.4.4 Reporting

WooCommerce offers visualized and comprehensive reports about E-commerce performances. By Accessing WooCommerce reports tab, manager can see sales reports by time, by product or by category (see Appendix 2). Customer reports shows buyer's purchasing history number of guest purchase versus registered user purchase. Inventory reports help manager's resource planning by showing

what products are low in stock, most stocked or out of stock. All those reports are essential and it is not mandatory for bulbstore.fi to have other reports.

5.5 Product input and inventory management

There are two main ways to put products to online store using WooCommerce: add one single product at a time or import the whole product list. The latter is useful when a company have built their product database in a comma-separated values (CSV) format file. A product importing plug-in is required for this method for example Product CSV Import Suite which offered by WooThemes for 200 US Dollars. There are also cheaper or free options available on WordPress plug-in markets; however user should carefully evaluate its compatibility and reliability. For bulbstore.fi inputting product one-by-one is more suited, although creating a product CSV file should be considered later for future use.

5.5.1 Adding single product

A single product can be added by choosing Add Product option in Admin panel (Figure 14). Necessary information to be added is: name, stock keeping unit (SKU), price, description and images. Product name should reflect precisely what the product is and its important characteristic(s). For instance light bulbs' name contain light colors like warm white, neutral white and cool white; while transformers' name include voltage and power information. In case of retail products, the company decided to keep the item's original name for instance the names of Ferei product lines are kept unchanged. Each product can have regular price and sale price. When the sale is activated, regular price will still display, but is greyed out. Products on sale will be put to sales category automatically (Figure 13).

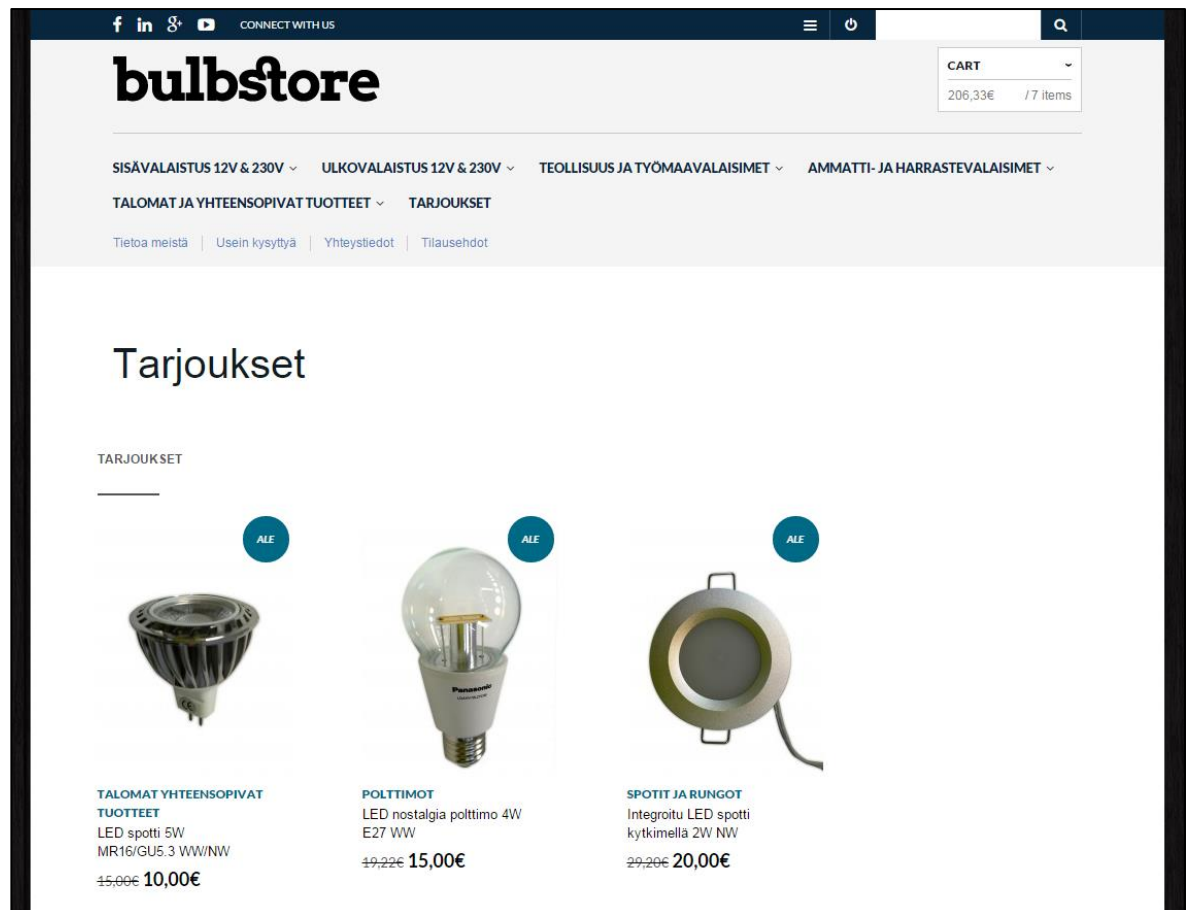


Figure 13. Product-on-sale category (bulbstore.fi).

Package weight and dimensions also need to be added since the shipping rates are based on weight. It is important to notice that package weight and dimensions are different from those of the product itself. Bulbstore.fi has once made a mistake by using product weight and dimensions for shipping, result in miscalculation of shipping price.

Product image is one of the most important elements in online store. The images need to look as real and detailed as possible since customer cannot see or touch products physically. At the same time image size should be light enough in order to avoid slow page loading and reduce customer experience. The recommended single product image size by The Retailer theme is 510x652 pixels and the same ratio 1:1.28 applied to every other image groups like catalog image or thumbnails. Using unedited image with different ratio will result in some part of the product being cropped out. Therefore the company decides to edit all photos before uploading it. The edited photos will have optimal ratio and three times lighter than

original ones. Indeed after all product images were resized, the website is 27 percent lighter and the product page loading speed increase significantly. Some of the products' image is not yet available, which causes displaying issue in categories. To solve this problem, a default grey photo was added to those photo-less products (see Appendix 6 & 7).

WooCommerce integrates up-selling and cross-selling in linked products tab. These are two necessary and useful marketing techniques to increase sale. Up-sells are the recommended, similar products which have better performance or cheaper compared to currently viewing one. The recommendation will appear in single product page (Figure 8). Cross-sells are suggested products to buy with the ones already added in cart. For example, when customer buys LED strip lights, the store will recommend suitable LED channels to come with it. Cross-sells recommendations are shown in shopping cart page (Figure 19).

Products with one or more different attributes for example light color are called variable products. Unlike simple products, variable products have variations setting which allow merchant to set price, SKU, image, available units etc. for each variation. Using variation helps merchant manage products easier and avoid customer frustration when browsing many similar products.

Edit Product [Add Product](#)

LED polttimo 3W E27 WW/NW

Permalink: <http://www.bulbstore.fi/kauppa/polttimot/led-polttimo-3w-e27-wwnw/> [Edit](#)

[View Product](#) [Get Shortlink](#)

[BACKEND EDITOR](#) [FRONTEND EDITOR](#)

[Add Media](#)

Visual Text

B I **ABC** [List icons] [Quote icon] [Link icon] [Table icon] [Fullscreen icon]

RevSlider

Paragraph [Underline icon] [Text color icon] [Background color icon] [Image icon] [Link icon] [Table icon] [Undo icon] [Redo icon] [Help icon]

LED-polttimo.

Word count: 1 Last edited by Vu Luong on 29.4.2015 at 12:47

Product Data — Variable product

General [Expand all](#) [Close all](#)

Inventory **Valon väri** [Remove](#)

Shipping Name: Valon väri Value(s): * NW * WW

Visible on the product page [Select all](#) [Select none](#)

Used for variations [Add new](#)

[Save attributes](#) Custom product attribute [Add](#)

Attributes **Variations** **Advanced**

Slug

led-polttimo-3w-

Product Short Description

[Add Media](#)

Visual Text

B I **ABC** [List icons] [Quote icon] [Link icon] [Table icon] [Fullscreen icon]

RevSlider

Paragraph [Underline icon] [Text color icon] [Background color icon] [Image icon] [Link icon] [Table icon] [Undo icon] [Redo icon] [Help icon]

[Quote:](#) E27 LED-poltin

Publish

[Preview](#)

Status: Privately Published

Visibility: Private [Edit](#)

Published on: Nov 9, 2014 @ 17:09 [Edit](#)

Catalog visibility: Catalog/search [Edit](#)

[Copy to a new draft](#)

[Move to Trash](#) [Update](#)

Product Categories

All Product Categories **Most Used**

- Listat
- Muuntajat ja tarvikkeet
- Nauhat
- Paneelit
- Peilivalaisimet
- Polttimot
- Putket & Integroidut putkivalaisimet
- Pöytävalaisimet

[+ Add New Product Category](#)

Product Tags


[Add](#)

Separate Product Tags with commas

* 12V * 3W * E27 * polttimo

[Choose from the most used Product tags](#)

Product Gallery



[Add product gallery images](#)

Featured Image




Figure 14. Product edit page (bulbstore.fi).

5.5.2 Inventory management

Online stock management can be enabled under product inventory tab in WooCommerce settings (see Appendix 5). WooCommerce inventory management offers the most essential functions like sending low stock/ out of stock notifications by email, holding stock hold receive order and hiding out-of-stock items. It is important to notice that if backorder is allowed, the out-of-stock items should not be hidden. Furthermore, inventory reports can be found in WooCommerce reports. It is also possible to connect WooCommerce with other inventory and order management software for example TradeGecko. This will synchronize stocks from Woocommerce and other sale channels into one.

5.5.3 Necessary WordPress plug-ins for products

Included search engine on Woocommerce does not support the search by product SKU while the company requires this function to be available for customers. At first the well-known plug-in called "Search Everything" was used. However the plug-ins has not been updated for long time and it seems to conflict with default WordPress search engine. Therefore the "Search by SKU for Woocommerce" plug-in was selected. This plug-in is simpler, lighter, compatible with current WordPress version and it meets the requirement exactly.

Originally, the WooCommerce software only allows users to edit one product at a time. With the help of a plug-in like Woocommerce Advanced Bulk Edit, the manager can save great amount of time changing product data. Woocommerce Advanced Bulk Edit transforms product database into table format, the manager therefore can edit the information of many products at once without having to open them in separate pages (Figure 15).

Another useful feature for online store is the ability to compare products. It is also possible to have that function WordPress-based online store by purchasing a plug-in called "WooCommerce Products Compare" or other equivalents. However after consideration, KVS Valaistussuunnittelu Oy decided this function is not necessarily needed at the moment. Moreover, adding too many functions increases loading

time and the risk of conflict. Therefore this plug-in will be reconsidered after the online store publication, depend on customer despondence whether they want this function or not.

Advanced Bulk Edit

Title: Categories: AND

Valon väri: Rungon väri:

Regular Price: Sale Price:

SKU: Tags:

ID:

Variations [?](#)

Add Duplicate Delete Selection Manager Bulk Edit Selected rows for bulk editing: 0 of 31

<input type="checkbox"/>	ID	Title	Image	Product Gallery	SKU	Product Short Desc...	Slug	Status	(attr) Valo...	(attr) Rungon väri	Stock ...	Regular Price
<input type="checkbox"/>	1861	LED filament polttim...			KVS-CA08- 03W	<table width="214"...	led-filame...	publish	WW, CW		✓	
<input type="checkbox"/>	1837	LED "maissilamppu"...			KVS-CB-80W-NW	<table width="250"...	led-maissil...	publish		Valkoinen, Vihreä		
<input type="checkbox"/>	1704	Kämmenvalaisimen ...			KVS-GX53-COB 7W	<table width="250"...	kammenv...	private	WW, NW	Hopeinen, Musta,...	✓	
<input type="checkbox"/>	1702	Kämmenvalaisimen ...			KVS-GX53-SMD-7W	<table width="250"...	kammenv...	private	WW, NW	Hopeinen, Musta,...	✓	
<input type="checkbox"/>	1700	Kämmenvalaisimen ...			KVS-GX53-COB 5W	<table width="250"...	kammenv...	private	WW, NW	Hopeinen, Musta,...	✓	
<input type="checkbox"/>	1697	Kämmenvalaisimen ...			KVS-GX53-SMD-5W	<table width="250"...	kammenv...	private	WW, NW	Hopeinen, Musta,...	✓	
<input type="checkbox"/>	1838	LED nostalgia poltti...			KVS-LDAHV10L27C...	<table width="250"...	led-nostal...	publish			✓	19.22
<input type="checkbox"/>	1706	Kämmenvalaisimen ...			KVS-GX53-SMD-7WB	<table width="250"...	kammenv...	publish	WW, NW		✓	
<input type="checkbox"/>	1836	LED "maissilamppu"...			KVS-CB-30W-NW	<table width="250"...	led-maissil...	publish				142.69
<input type="checkbox"/>	1834	LED polttimo 6W E1...			KVS-BAE14SMD6NW	<table width="250"...	led-polttim...	publish	WW, NW		✓	
<input type="checkbox"/>	1833	LED polttimo 3W E1...			KVS-DP3-1A-3W	<table width="250"...	led-polttim...	publish	WW, NW		✓	
<input type="checkbox"/>	1831	LED polttimo 6W E1...			KVS-C306-6W	<table width="250"...	led-polttim...	publish			✓	12.97
<input type="checkbox"/>	1829	LED polttimo 3W E1...			KVS-C306-3WE14	<table width="250"...	led-polttim...	private			✓	8.15
<input type="checkbox"/>	1828	LED polttimo 4W E1...			KVS-C306-4W	<table width="250"...	led-polttim...	publish	WW, NW		✓	
<input type="checkbox"/>	1825	LED polttimo 3W E1...			KVS-C306-3W	<table width="250"...	led-polttim...	publish	WW, NW		✓	
<input type="checkbox"/>	1708	Kämmenvalaisimen ...			KVS-GX53-COB-9W	<table width="250"...	kammenv...	private	WW, NW	Hopeinen, Musta,...	✓	
<input type="checkbox"/>	1822	LED polttimo 7W E2...			KVS-C305-7W	<table width="250"...	led-polttim...	publish	WW, NW		✓	
<input type="checkbox"/>	1821	LED polttimo 5W E2...			KVS-C305-5W	<table width="250"...	led-polttim...	private	WW, NW		✓	
<input type="checkbox"/>	1743	LED polttimo 3W E2...			KVS-C305-3W	<table width="250"...	led-polttim...	private	WW, NW		✓	
<input type="checkbox"/>	1742	LED polttimo 7W E2...			KVS-C304-7W	<table width="250"...	led-polttim...	private	WW, NW		✓	
<input type="checkbox"/>	1741	LED polttimo 5W E2...			KVS-C304-5W	<table width="250"...	led-polttim...	private	WW, NW		✓	
<input type="checkbox"/>	1740	LED polttimo 7W E2...			KVS-C303-7W	<table width="250"...	led-polttim...	publish	WW, NW		✓	

Figure 15. bulbstore.fi product bulk edit page (bulbstore.fi).

5.6 Order handling process

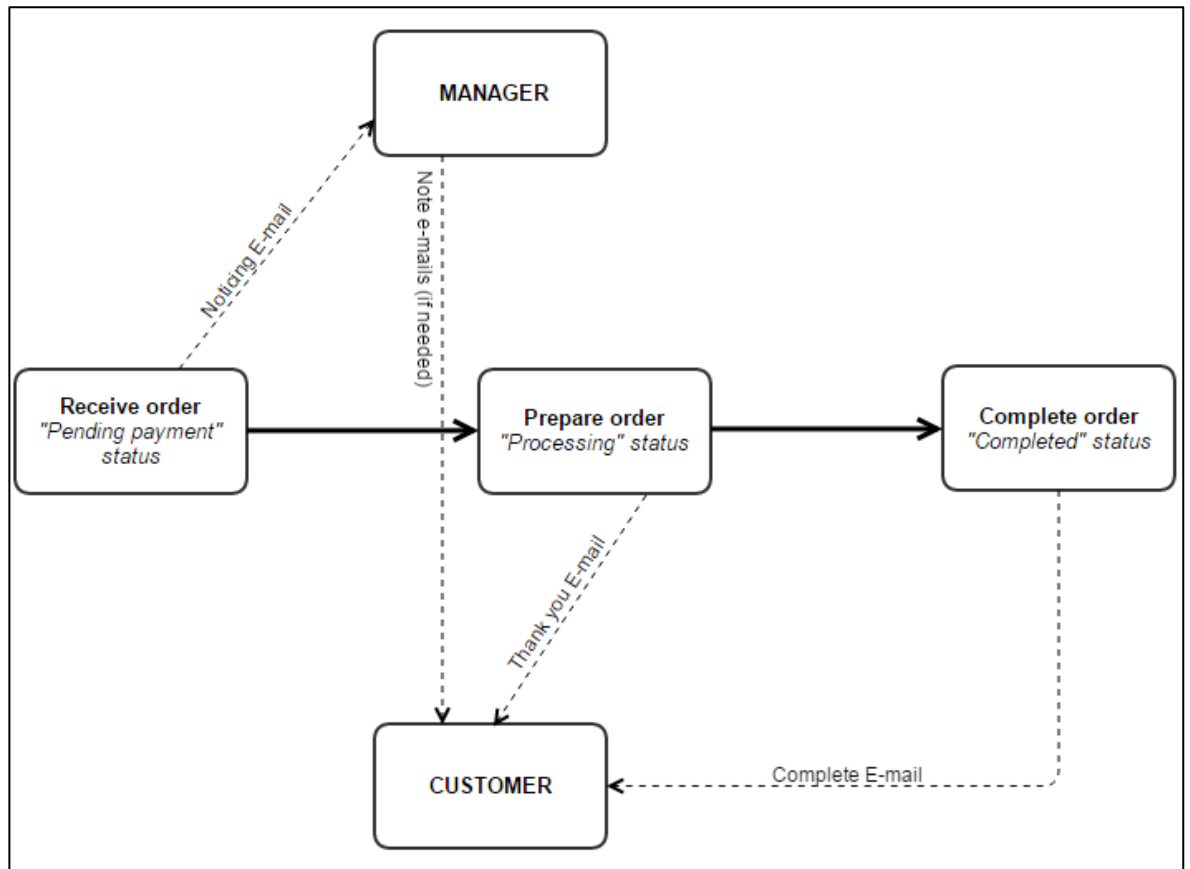


Figure 16. Simple order handling process.

The order handling procedures of bulbstore.fi are demonstrated in Figure 16. When customer places an order, WooCommerce will automatically notice merchant by email. All orders can be seen and processed under WooCommerce Orders page. New order will be marked with "Pending Payment" status and can be handled in single processing page (Figure 17). After confirming the payment, seller can update status to "Processing" and prepare the package. An email will be sent automatically to customer, thanking and noticing them that their order is being processed. When the package is ready to be picked up or shipped, the status should be changed to "completed". Another email will be sent to customer informing them that the order is shipped or available to be picked. In most cases customers will receive these two emails only. In order processing page, a note can be added and if it is a customer note, another email will be sent automatically to customer. Other order statuses, though not commonly used are "On hold", "Cancelled", "Refunded" and "Failed".

Order #2250 Details

Payment via PayPal. Customer IP: 94.22.163.128

General Details

Order date:
 @ :

Order status:

Customer:
 [View other orders →](#)

Billing Details

Address:
testi asdasd
asdasdasd
60100 seinäjoki

Email:
dasasdnvu@gmail.com

Phone:
0414799566

Shipping Details

Address:
testi asdasd
asdasdasd
60100 seinäjoki

Order Items

Item	Cost	Qty	Total
<input type="checkbox"/> KV5-MR16COB5WW/NW - LED spotti 5W GU5.3	15,00€	1	15,00€
<input type="checkbox"/> Normaali (5-7 arkipäivää)			5,70€
Discount [?]:			0,00€
Shipping [?]:			5,70€
Order Total:			20,70€
Refunded:			-0,00€

Actions *This order has been paid for and is no longer editable*

AfterShip

Carrier:

[Update carrier list](#)

Tracking number

Order Actions

Actions

- Actions
- Resend order emails
- New order
- Cancelled order
- Processing order
- Completed order
- Customer invoice
- Generate download permissions

status changed from Pending payment to Cancelled.

added on 7.2.2015 at 19:06 by Vu Luong
[Delete note](#)

Add note

Customer note

Figure 17. Single order processing page (bulbstore.fi).

5.7 Payment methods

According to the E-commerce in the Nordics 2014 by PostNord (see Appendix 2) online consumers in Finland prefer to use credit/debit cards, invoice or online banking for online payment. Therefore it is required to have at least these payment methods in the online store. The company has decided to use PayPal as it is already integrated with WooCommerce and one payment gateway.

Using payment gateway is a convenient and safe way to handle payment. Firstly a gateway acts as intermediary between company and banks. Company does not need to spend tremendous amount of time making contract with each banks to install their online banking connection on the site. Secondly, all the private information security will also be handled by professionals from the gateway.


Table 7. Payment gateways comparison (Klarna, Checkout, Paytrail).


Gateways	Klarna		Checkout				Paytrail
Options	Checkout	Lasku/erä	Checkout Puoti	Pankki Paketti	Laaja Paketti	Startti Paketti	
Invoice & installments	X	X	X	X	X		X
Online banks	6	6		11	11	11	11
Cards	V, M				V, V-E, M	V, V-E, M	V, V-E, M, DC, JCB
Monthly + Setup	49€/kk	29€/kk + 295€	10€/kk	25€/kk	45€/kk	0€/kk	59€/kk
Commission	2,49%/t	2,10 € + 2,75%/i	0,35€ + 2%/t	0,35€/t	0,35€/t (+2%/cr.)	0,50€ + 3%/t	0,35~0,50 (+2%/cr.)

After comparing between 3 popular payments gateways in Finland, which are Klarna, Checkout™ and Paytrail, KVS Valaistussuunnittelu Oy has decided to use Checkout™s “Pankki” package. This package not only support online banking from eleven banks in Finland and invoice, but its pricing plan also suit the business size. Although this package does not support credit or debit cards, customer willing to use this type of payment can use PayPal service on the website instead. Two payment options and its explanations can be seen when customer enter checkout page (Figure 18)

Your order

PRODUCT	TOTAL
Integroitu LED spotti kytkimellä 2W NW x 1	29,20€
SUBTOTAL	29,20€
SHIPPING	<input checked="" type="radio"/> Local Pickup (Free) <input type="radio"/> Express (2-5 arkipäivää): 8,20€ <input type="radio"/> Normaalit (5-7 arkipäivää): 5,70€
TOTAL	29,20€

PAYPAL  [WHAT IS PAYPAL?](#)

CHECKOUT.FI 

Pay via Checkout. You can pay with online bank account or invoice and installments.

I'VE READ AND ACCEPT THE [TERMS & CONDITIONS](#)




PLACE ORDER

Figure 18. Payment and delivery choices in checkout page (bulbstore.fi).

5.8 Delivery methods

Bulbstore.fi offers two shipping options. Customers can either pick up product from store for free or have it shipped to their address for a weight-based fee (Figure 19). KVS Valaistussuunnittelu Oy uses Itella Posti Oy and Matkahuolto Ab for shipping services. According to company's policy, order over 200 euros will be delivered for free. The local pick up and free delivery options can be enabled in shipping options page under Woocommerce settings.

Ostoskori

PRODUCT	PRICE	QUANTITY	TOTAL	
 LED nostalgia polttimo 4W E27 WW	19,22€	1	19,22€	x
 Integroitu LED spotti kohdistettava 3W WW/NW VALON VÄRI: WW RUNGON VÄRI: Kiil.alumiini	25,00€	5	125,00€	x
 LED nauha 48W 5m CW	61,40€	1	61,40€	x

COUPON

Coupon code

APPLY COUPON

CART TOTALS

SUBTOTAL **205,62€**

SHIPPING

Free Shipping

Local Pickup (Free)

Express (2-5 arkipäivää): 8,20€

Normaalit (5-7 arkipäivää): 5,70€


CALCULATE SHIPPING

TOTAL **205,62€**


UPDATE CART

PROCEED TO CHECKOUT

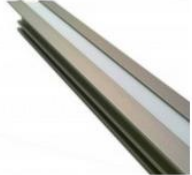
CUSTOMER ALSO BUY...



LISTAT
Upotettava alumiinilista LED nauhalle 3m
66,71€



LISTAT
Upotettava alumiinilista LED nauhalle 2m
35,96€



LISTAT
Upotettava alumiinilista LED nauhalle 2m
96,06€

Figure 19. Shopping cart page (bulbstore.fi).

Meanwhile additional plug-in is required in order to have weight-based shipping option. Instead of using Woocommerce' Table Rate Shipping plug-in which cost almost 200 US Dollars per year, the company have found and used a free plug-in on the market called Weight Based Shipping for Woocommerce. This plug-in is less powerful than Woocommerce' one in term of functions and multinational support. Nevertheless since bulbstore.fi only delivers products inside Finland at the

moment and there are few shipping choices, costly and complicated plug-in is not necessary.

Order #2108

Order #2108 was placed on 25.1.2015 and is currently Completed.

Your order was shipped via Itella Posti
Tracking number is CZ000092130FI

[Track](#)

Order Details

PRODUCT	TOTAL
KVS-DL4025W-NW × 1	96,14€
SUBTOTAL:	96,14€ (ex. VAT)
SHIPPING:	Free Shipping
PAYMENT METHOD:	Direct Bank Transfer
TOTAL:	96,14€

[ORDER AGAIN](#)

Figure 20. Order details and tracking page in customer view (bulbstore.fi).

During the process, it came to developer's mind that weight thresholds should be set lower than actual rates from delivery companies because when Woocommerce calculate shipment weight, packaging weight is not included. For example if the weight threshold of Posti Oy is 5 kilograms then it should be 4.9 or 4.8 kilograms in shipping plug-in' setting.

The online store also wants to offer shipment tracking service for customer. In WordPress' Woocommerce this option is possible through a plug-in called AfterShip - WooCommerce Tracking. When store manager receive tracking code from delivering company, he can add it to order processing page (Figure 17). Customer will then be able to track their delivery from the online store (Figure 20).

5.9 Final testing

Before publishing, the online store needs to be changed back to its main language, Finnish. Its appearance and function are then tested.

Since bulbstore.fi was put in maintenance mode, its title and description in search are only information from coming soon page. They can only be changed when the website open and search engine robot scan its content again (Figure 21).

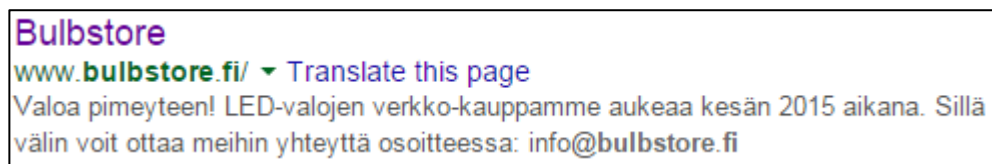


Figure 21. bulbstore.fi search result display in Google search.

The online store operates normally when tested with different browser, namely Google Chrome, Mozilla Firefox, Apple Safari, Internet Explorer 11. Its functionality is also tested when advertisement blocking tools enabled and java script disabled; because in some case user have advertisement blocking tools on their computer and the websites can misbehave.

The online store is also functional when tested with different device like smartphone and tablets, the social media icons on top left corner is hidden in smartphone and tablet portrait mode by theme's default and only visible in landscape display.

Proof reading is necessary to avoid grammar mistake. After changing to Finnish, only texts that belong to WooCommerce template were automatically translated. This is due to the fact that WooCommerce have Finnish language available and not The Retailer theme. As a result, before publishing bulbstore.fi, the company need to manually translate English texts that belong to The Retailer theme.

As a final test, bulbstore.fi was published for a short period so that the company can create a customer account, login and test the process of purchasing. The order is then paid using Pay Pal. During the process it is realized that some email services recognizes emails from bulbstore.fi as junk mail. Therefore the company needs to advise customers when they register new account to check also junk

mails box. The company also tested sending the package and e-mail tracking code to customer; AfterShip plug-in seems to work fluently with Itella Posti (Figure 22).

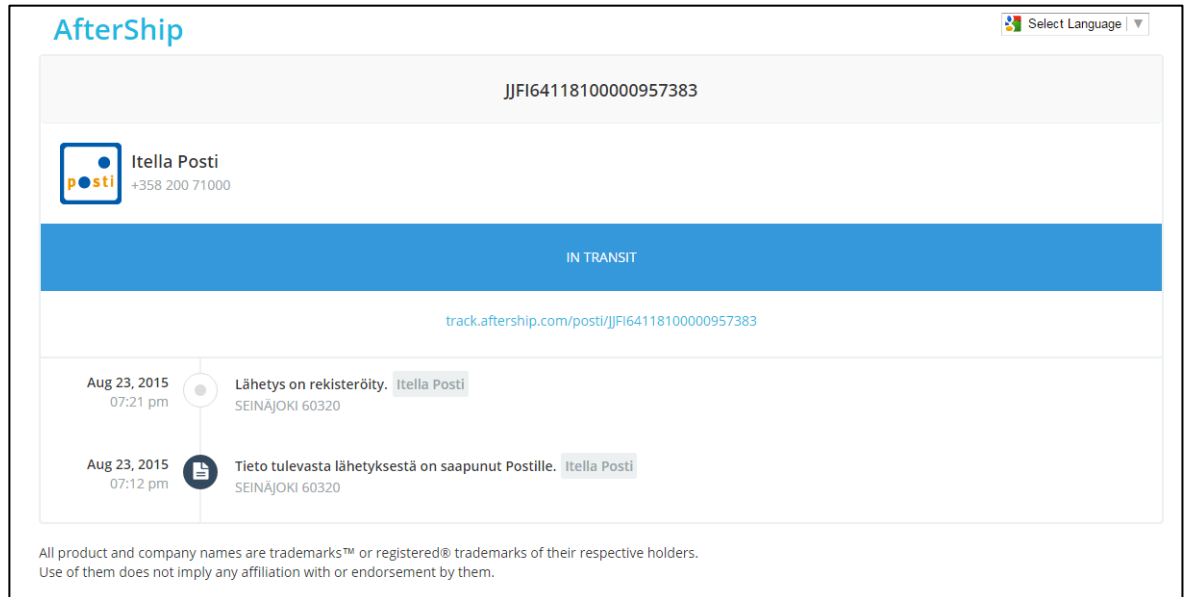


Figure 22. Shipment tracking interface (bulbstore.fi).

At the time of writing, the online store is fully functional and ready to be published. However due to inventory issue, KVS Valaistussuunnittelu Oy decided to postpone the launch date of bulbstore.fi until their inventory is sufficient. The information on coming soon page, therefore, needs to be updated accordingly.

6 Summary and recommendation

6.1 Summary

The main objective of this research was to find out the suitability of WordPress in creating an online store for small company like KVS Valaistussuunnittelu Oy. The key considerations suggested by Laudon and Traver (2014, 201–202) are used for evaluation during the case study.

Bulbstore.fi has essential functions required of an online store such as product categories, product search and filters, shopping cart, payments and reports. Other specialized functions like shipment tracking and auctions can also be added through plug-ins. User interface are highly customizable through themes in order to deliver the most comfortable experience to customers. Visualized reports of sales, customers or inventory by time period are easy to evaluate sufficient and it is not necessary to have other reports. Basic requirements of product management are also met. Manager can add and modify either single or many products at once. Order handling process is administered systematically with automated emails to buyers notify them if their order has been processed or completed and shipped. The company's expectation of wide range payment methods and shipping options are also fulfilled by using extra plug-ins.

In general, it seems like WordPress WooCommerce have met the online store requirement of KVS Valaistussuunnittelu Oy. However, during the study it is realized that even though shipment to countries is possible, WooCommerce only supports one base currency for payment. This makes it very difficult for companies who are looking for international market. On the bright side, companies in Finland like KVS Valaistussuunnittelu Oy and customers from other Eurozone countries have the advantage of unity currency, so it will not limit the company's chance of expanding in Eurozone countries. In addition, even though WordPress WooCommerce is capable of many E-commerce options such as auction, shipment tracking and social network login etc., they most likely come from third party developers. There is no compatibility guarantee. Conflicts have occurred

during the establishment of bulbstore.fi and customer purchasing experience will suffer while the online store waiting for a fix update from developers.

There are controversial opinions on how many products and orders WordPress WooCommerce can handle in an online store, as it depends on many involved factors such as number of third party plug-ins, website traffic and most importantly hosting services. Even the developers of WooCommerce themselves cannot answer the question properly (How many products...). While it is not possible to evaluate the matter on the not-yet-published bulbstore.fi, with around 300 products and estimated 30 to 50 orders a month (Vainio 2015), the online store is expected to have no stress problem.

6.2 Recommendations

The establishment of online store is a perpetual process, as the internet, E-commerce, and online user behavior are evolving continuously. Therefore, manager needs to keep him/herself up-to-date with the latest trend.

For future development, it is recommended that the company build product database systematically in a CSV file. CSV file format is widely standardized, company do not need to build different database for online and physical sale channels. Product addition or modification in large quantity in WooComemrce can be done efficiently by using CSV file.

Company that aims for international market should also have a multi-languages online store. This does not necessary mean the market is in another country, as there are non-Finnish speakers in Finland who would greatly appreciate the service in English for example. For this purpose, bulbstore.fi in the future should offer at least English and possibly Swedish translations. One of the most popular tools to make multi-languages website on WordPress is WPML (Multilingual WordPress)

Furthermore, here is a problem with hosting server mentioned earlier in this study, that WooCommerce recommends lowest PHP version 5.4 in order to operate efficiently and securely. The platform will eventually require even higher PHP

version after September 14th 2015 (Appendix 1). Bublstore.fi's hosting provider currently support lower PHP version 5.3.10, therefore in order to maintain the online store capability, the company should either ask current hosting provider to update PHP version, ideally later than version 5.4; or find alternative provider.

6.2.1 On marketing

It is recommended to initiate a multi-channel marketing campaign when the online store is launched. One of the most efficient ways to get the right customer to the store is to offer opening discount coupons when company attend trade fairs or through newsletters to company's current customers.

Online marketing and social media marketing are cost-effective channels to reach customers from different geographic areas in Finland. It is suggested that company should utilized at least Facebook for social media marketing. For example invite people to like or share company's Facebook page, post weekly product recommendations or get customer to share products on their page. Search engine optimization is also necessary to rank high in search results. Suggested keyword optimization include "LED lamppu", "LED valaisimet", "12v LED", "valaistussuunnittelu". Company can also add area specification to optimization like "Etelä Pohjanmaan" or "Seinäjäki. This will result in more chance to appear in location precise searches but less frequent in general ones.

6.2.2 On personnel

At the moment, Valaistussuunnittelu Oy has sufficient number of staff; the online store after establishment will be transferred over to logistic and E-commerce manager. In the future, if the online sales show potential to become a main sale channel and the company require further online expansion as suggested above, they should consider hiring extra personnel. The expansion of online store will not mean more daily task, but also require enhancement in its performance, search engine friendliness and security. In this case, the online store will no longer a supporting channel, but one of the main divisions of the company, thus specialized

personnel to help manager is essential. After all a secure, quick responded online store will increase customer satisfaction, thus raise conversion rate.

BIBLIOGRAPHY

- 2013 Consumer Returns in the Retail Industry. [Web page]. California: The Retail Equation. [Ref. 10 March 2015]. Available at: http://www.theretailequation.com/Retailers/images/public/pdfs/industry_reports/TRE3013_NRF_Retail_Returns_Survey_Canada_2013.pdf.
- 2015 State of Marketing. 2015. [Electronic publication]. Salesforce. [Ref. 31 July 2015]. Available in the Salesforce database. Registration required.
- About WordPress. 2015. [Web page]. WordPress. [Ref. 24 March 2015]. Available at: <https://wordpress.org/about/>.
- Asp, J. CEO. KVS Valaistussuunnittelu Oy. E-mail. 7.4.2015.
- Asp, J & Vainio, J. 2015. KVS Valaistussuunnittelu Oy. Interview on 3 May 2015.
- Bidgoli, H. 2002. Electronic Commerce: Principles and Practice. Massachusetts: Academic Press.
- Definition of information richness. 2015. [Web page]. Business Dictionary. [Ref. 07 March 2015]. Available at: <http://www.businessdictionary.com/definition/information-richness.html>.
- Definition of IP address. 2015. [Web page]. Oxford Dictionaries. [Ref. 12 March 2015]. Available at: <http://www.oxforddictionaries.com/definition/english/IP-address>
- Definition of web hosting. 2015. [Web page]. Business Dictionary. [Ref. 12 March 2015]. Available at: <http://www.businessdictionary.com/definition/web-hosting.html>.
- E-commerce in the Nordics 2014. 2014. [Electronic publication]. PostNord. [Ref. 23 April 2015]. Available at: <http://www.postnord.com/globalassets/global/english/document/publications/2014/E-commerce-in-the-nordics-2014.pdf>.
- E-commerce Quick Guide. [Web page]. Tutorials Point. [Ref. 10 March 2015]. Available at: http://www.tutorialspoint.com/e_commerce/e_commerce_quick_guide.htm.
- Ecommerce Usage Statistics. 2015. [Web page]. BuiltWith®. [Ref. 01 April 2015]. Available at: <http://trends.builtwith.com/shop>.

- Fishkin, R. 2007. 12 Rules for Choosing the Right Domain Name. [Web page]. Washington: Moz. [Ref. 12 March 2015]. Available at: <http://moz.com/blog/how-to-choose-the-right-domain-name>
- How Many Products Can WooCommerce Handle? 2015. [Web page]. WooThemes. [Ref. 24 August 2015]. Available at: <http://docs.woothemes.com/document/how-many-products-can-woocommerce-handle/>.
- Infographic: How Colors Affect Conversions. [Web page]. Kissmetrics. [Ref. 03 July 2015]. Available at: <https://blog.kissmetrics.com/how-colors-affect-conversions/>.
- Khurana, A. WordPress for Ecommerce. [Web page]. About. [Ref. 24 March 2015]. Available at: <http://ecommerce.about.com/od/ecommerceresources/a/Wordpress-For-Ecommerce.htm>.
- Laudon, K. & Traver, C. 2014. E-commerce: business. technology. society. Tenth edition. New Jersey: Pearson Education, Inc.
- Maguire, J. 2006. Starting An Online Store: The Essential Checklist - Part II. [Web page]. Small Business Computing. [Ref. 16 March 2015]. Available at: <http://www.smallbusinesscomputing.com/emarketing/article.php/3602041/Starting-An-Online-Store-The-Essential-Checklist--Part-II.htm>
- Mamdigma, N. 2011. Reasons Why Small Business Owners Prefer WordPress. [Web page]. Smart Foxes Inc. [Ref. 24 March 2015]. Available at: <http://www.smartfoxes.ca/blog/2011/10/24/reasons-why-small-business-owners-prefer-wordpress/>.
- Multilingual WordPress. 2015. Web page]. WordPress. [Ref. 31 August 2015]. Available at: https://codex.wordpress.org/Multilingual_WordPress.
- Nielsen, J. 2006. [Web page]. F-Shaped Pattern For Reading Web Content. Nielsen Norman Group. [Ref. 14 May 2015]. Available at: <http://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>.
- Online store definition. 2015. [Web page]. eMarketing Dictionary. [Ref. 31 March 2015]. Available at: http://www.emarketingdictionary.com/Internet_Marketing_dictionary_Online_Store_definition.html.
- Phase-out of inefficient lamps postponed to 1 September 2018. 2015 . [Web page]. European Commission. [Ref. 20 July 2015]. Available at: <https://ec.europa.eu/energy/en/news/phase-out-inefficient-lamps-postponed-1-september-2018>.

Robson, C. 2002. Real World Research. Second Edition. Oxford: Blackwell.

Saunders, M., Lewis, P. & Thornhill, A. 2009. Research Methods for Business Students. Essex: Pearson Education, Inc.

Scarborough, M.N. 2012. Effective Small Business Management: An Entrepreneurial Approach. Tenth Edition. New Jersey: Pearson Education, Inc.

Schniederjans, M., Cao, Q. & Triche, J. 2014 E-commerce operations management. Second edition. Singapore: World Scientific.

Usage Statistics and Market Share of Content Management Systems for Websites, March 2015. 2015. [Web page]. W3Techs. [Ref. 24 March 2015]. Available at:
http://w3techs.com/technologies/overview/content_management/all/.

Vainio, J. KVS Valaistussuunnittelu Oy. E-mail. 11.3.2015.

APPENDICES

APPENDIX 1. WooCommerce PHP version requirement.....	1
APPENDIX 2. E-commerce in Finland report by Nordpost.....	2
APPENDIX 3. Bulbstore.fi report page.	3
APPENDIX 4. Bulbstore.fi orders page.....	4
APPENDIX 5. WooCommerce inventory management options.	5
APPENDIX 6. Photo-less product alignment before adding grey photos	6
APPENDIX 7. Photo-less product alignment after adding grey photos.	7

APPENDIX 1. WooCommerce PHP version requirement.

PHP is the most popular server-side scripting language, powering millions of websites including most WooCommerce stores. If you got to this page from the notice in your WooCommerce store your store is running an **unmaintained** version of PHP. Not only is your website's performance (a lot) lower than it should be, you're also potentially open to security vulnerabilities!

What is PHP?

[↑ Back to Top](#)

PHP is a scripting language what most likely powers your WooCommerce webshop. PHP, just like all software, gets updated over time to patch security issues and improve it's features. And just like with other software, it's very important to keep your PHP version up to date. At this moment, **PHP 5.4** is the lowest still supported and maintained version but will stop being so **September 14th, 2015**.

Updating your PHP version

[↑ Back to Top](#)

In most cases you can't update your PHP version yourself and need to contact your host about this. The upgrade process is an easy process and should be something your host can do for you without affecting your website or charging you for it. Here's a letter you can send to your hosting company:

*Dear host,
I'm running a WooCommerce webshop on one of your server and WooCommerce has recommended PHP version of 5.4. WordPress, the CMS that WooCommerce uses, has also listed this version as the recommended PHP version on their requirements page: <https://wordpress.org/about/requirements/>
Can you please let me know if my hosting supports PHP 5.4 or higher and how I can upgrade?
Looking forward to your reply.*

My host doesn't support PHP 5.4

If your host doesn't support PHP 5.4 or higher we recommend you find a host which does. We've got a list of WordPress hosting solutions we recommend on the WooThemes website that all support PHP 5.4 or higher. If you contact an other host be sure to ask them what PHP version your website will run before purchasing.

APPENDIX 2. E-commerce in Finland report by Nordpost.

Research online before buying in a physical store is typical

» Many do research on webshops before buying in physical stores

Consumers in Finland often choose to do research online and then buy a product in a physical store. However, fairly few consumers do the reverse, i.e., test or look at a product in a store, and then compare prices online and buy from the cheapest source or where the correct size is available.

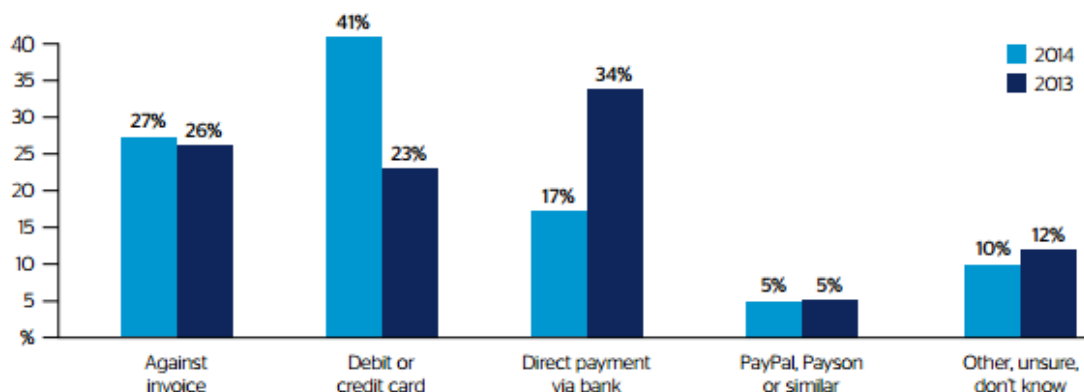
Only twelve percent of consumers in Finland tried a product in a store and then bought it online at some point in 2013. That is a significantly lower proportion than in Sweden and Denmark, but about on par with Norway. Consumers who did partake in that behavior at some point in 2013 primarily bought home electronics (31 percent), books (20 percent) or clothing (19 percent). Almost half (45 percent) of consumers used the Internet at some point in 2013 to research a product that they then bought in a store. However, this is a much lower proportion than in the other Nordic countries. This behavior was most common when buying home electronics (49 percent).

» Multiple payment methods are popular in Finland

The payment method that most consumers in Finland prefer is debit or credit card (41 percent), followed by paying against invoice (27 percent) and direct payment via bank (17 percent). Relative to one year ago, a significantly higher proportion prefer debit or credit card, and a lower proportion prefer direct payment via bank.

How popular the payment alternatives are

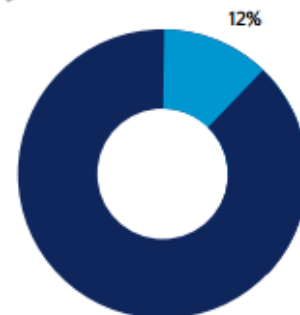
Which of the following methods do you prefer to use when you pay for a product you've bought online. Base: Have shopped online



Proportion that check out a product in a store first

Proportion that at some point in the last year looked at/tried a product in a store first, and then bought it online.

Base: All Finns aged 18-79

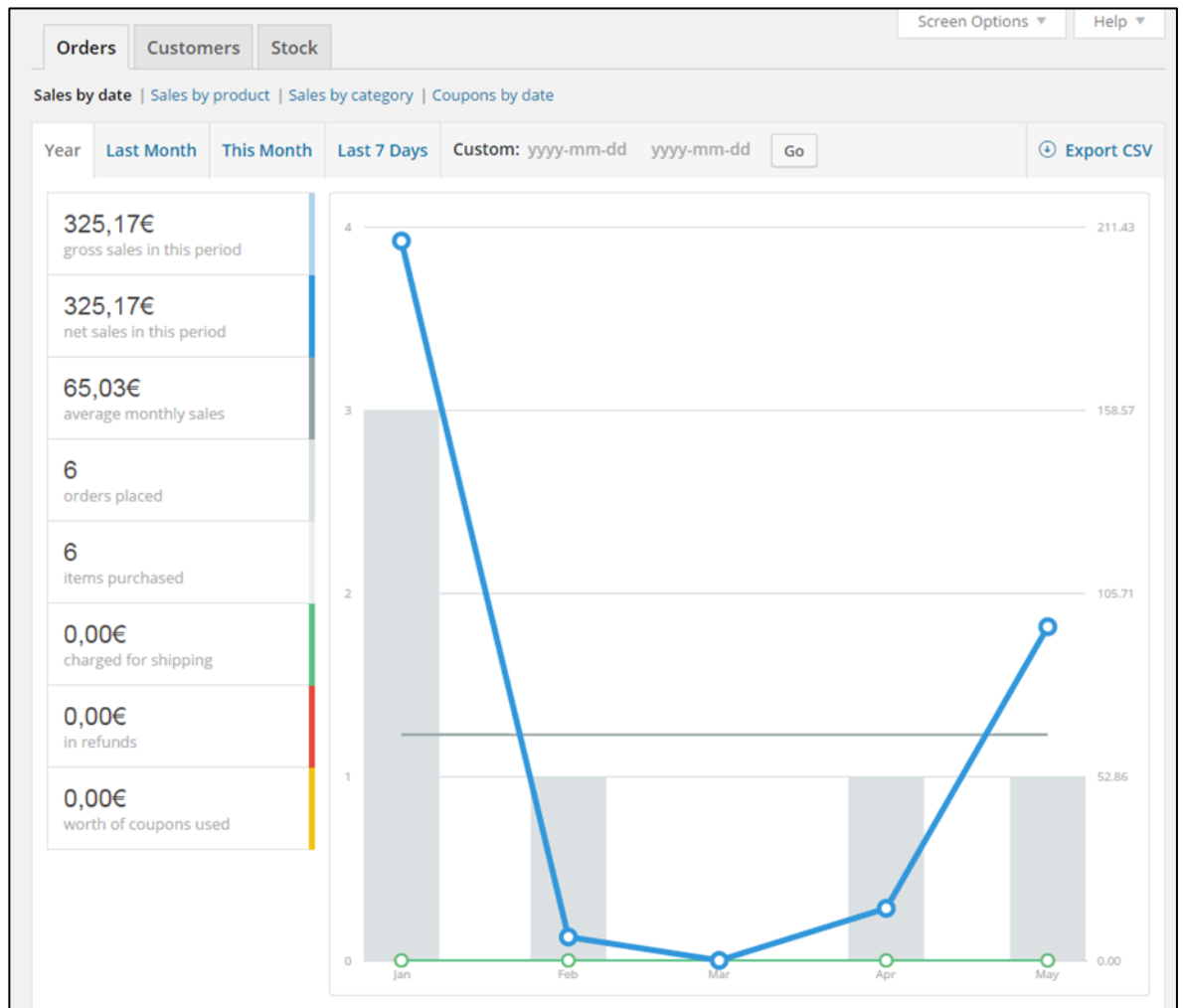


Research online before buying in a store

Proportion that at some point in the last year researched a product online first, and then bought it in a store. Base: All Finns aged 18-79










APPENDIX 3. Bulbstore.fi report page.



APPENDIX 4. Bulbstore.fi orders page.

Orders Add Order									
All (13) Processing (2) On hold (2) Completed (2) Cancelled (7)									
Bulk Actions <input type="checkbox"/> Apply All dates <input type="checkbox"/> Search for a customer... <input type="text"/> Filter <input type="button" value="Filter"/>									
<input type="checkbox"/>	<input type="checkbox"/>	Order	Purchased	Ship to	<input type="checkbox"/>	Date	Total	Actions	
<input type="checkbox"/>	<input type="checkbox"/>	#2952 by Jussi Vainio vuluongkvs@gmail.com	1 item	Jussi Vainio, koulukatu 35 a 11 b, 60100 seinäjoki Via Local Pickup	<input type="checkbox"/>	2015/05/03	96,14€ Via PayPal	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	#2951 by Jussi Vainio vuluongkvs@gmail.com	1 item	Jussi Vainio, koulukatu 35 a 11 b, 60100 seinäjoki Via Local Pickup	<input type="checkbox"/>	2015/05/03	29,20€ Via Checkout.fi	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	#2950 by Jussi Vainio vuluongkvs@gmail.com	1 item	Jussi Vainio, koulukatu 35 a 11 b, 60100 seinäjoki Via Local Pickup	<input type="checkbox"/>	2015/05/03	29,20€ Via Checkout.fi	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	#2872 by Vu Luong vuluong.kvs@gmail.com	1 item	Vu Luong, Puskantie 39, 60100 seinäjoki Via Local Pickup	<input type="checkbox"/>	2015/04/27	15,00€ Via Checkout.fi	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	#2383 by Jussi Vainio vainio.jussi.j@gmail.com	6 items	Jussi Vainio, koulukatu 35 a 11 b, 60100 seinäjoki Via Express (2-5 arkipäivää)	<input type="checkbox"/>	2015/02/21	236,89€ Via Checkout.fi	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	#2253 by Vu Luong vainio.jussi.j@gmail.com	1 item	Jussi Vainio, EMÄnnäntie 2 b2, 60200 seinäjoki Via Local Pickup	<input type="checkbox"/>	2015/02/07	6,75€ Via Checkout.fi	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	#2250 by Vu Luong dasasdnvu@gmail.com	1 item	testi asdasd, asdasdasd, 60100 seinäjoki Via Normaalii (5-7 arkipäivää)	<input type="checkbox"/>	2015/02/07	20,70€ Via PayPal	<input type="checkbox"/>	<input type="checkbox"/>












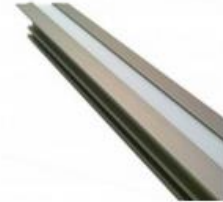
APPENDIX 5. WooCommerce inventory management options.

 General	Manage stock? <input checked="" type="checkbox"/> <i>Enable stock management at product level</i>
 Inventory	Stock Qty <input type="text" value="10"/> 
 Shipping	Allow Backorders? <input type="text" value="Allow, but notify customer"/> 
 Linked Products	
 Attributes	Sold Individually <input type="checkbox"/> <i>Enable this to only allow one of this item to be bought in a single order</i>

APPENDIX 6. Photo-less product alignment before adding grey photos

<p>LATTIA- /PORRASVALAISIMET LED-lattievalaisin 58*58*9mm IP67 12,61€</p>	<p>LATTIA- /PORRASVALAISIMET LED-lattievalaisin Φ58*9mm IP67 12,26€</p>		<p>TILATT AVISSA</p> 
		<p>ERIKOISVALAISIMET Himmennin + virtalähde 3W 230V WW 134,12€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 150W 12A vedenkestävä 89,13€</p>
			<p>TILATT AVISSA</p> 
<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 100W 8A vedenkestävä 70,32€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 60W 5A vedenkestävä 57,98€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 30W 2,5A 37,60€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 60W 5A 32,72€</p>
<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 36W 3A 28,99€</p> <p>TILATT AVISSA</p>		<p>TILATT AVISSA</p> 	
	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 30W 2,5A 37,60€</p>	<p>PEILIVALAISIMET LED peilivalaisin 7W 95,64€</p>	<p>LISTAT Upotettava alumiinilista LED nauhalle 2m 96,06€</p>

APPENDIX 7. Photo-less product alignment after adding grey photos

			 TILATT AVISSA
<p>LATTIA- /PORRASVALAISIMET LED-lattiavalaisin 58*58*9mm IP67 12,61€</p>	<p>LATTIA- /PORRASVALAISIMET LED-lattiavalaisin Φ58*9mm IP67 12,26€</p>	<p>ERIKOISVALAISIMET Himmennin + virtalähde 3W 230V VVV 134,12€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 150W 12A vedenkestävä 89,13€</p>
			 TILATT AVISSA
<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 100W 8A vedenkestävä 70,32€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 60W 5A vedenkestävä 57,98€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 30W 2,5A 37,60€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 60W 5A 32,72€</p>
 TILATT AVISSA		 TILATT AVISSA	
<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 36W 3A 28,99€</p>	<p>MUUNTAJAT JA TARVIKKEET Muuntaja 12V 30W 2,5A 37,60€</p>	<p>PEILIVALAISIMET LED peilivalaisin 7W 95,64€</p>	<p>LISTAT Upotettava alumiinista LED nauhalle 2m 96,06€</p>