# INTRODUCTION



#### Introduction

The long-awaited Magento 2 certification exams are now appearing. We are excited to prepare for them ourselves. In doing so, we want to help others in the community by making public this study guide.

Our guide is an annotated version of Magento's study guide for this test: <u>https://u.magento.com/certification-magento2-solution-</u> <u>specialist-1#.WYjDBneGO\_A</u>

We took their questions and study topics and are providing our own answers. If you have suggestions, updates or corrections, please feel free to email them to us at: joseph@swiftotter.com

We hope that you take the time to read through this document. Additionally, learn the frontend and backend of Magento 2. This will give context to our answers and provide a way for you to become more tuned to this powerful platform.

Here is a Magento 2 CE Demo Store access: <u>https://www.nublue.co.uk/</u> blog/magento-2-0-demo-admin-access-sample-data/

We wish you good success with your exam.

SwiftOtter Solutions

PS: Please send an email to joseph@swiftotter.com if this helped you pass the test.

2

## CONTENTS



#### Contents

#### Contents

4

	Introduction	1
1.	eCommerce	6
	1.1 Online Merchandising:	7
	1.2 Security:	11
	1.3 User experience:	13
	1.4 Laws and regulations:	14
	1.5 System development:	14
	1.6 Omnichannel:	15
	1.7 Data Analytics and Testing:	16
	1.8 Taxes:	17
2.	Magento 2 Architecture	26
	2.1 Basic Concepts: MVC, Templates and Layouts,	
	Open Source	27
	2.2 Magento APIs and Third-Party Integration	30
	2.3 Magento Websites, Stores, and Store Views	31
	2.4 Magento Edition Differences (Enterprise, Community)	34
	2.5 Magento Cloud	35
	2.6 Magento Solutions	36
	2.7 Search Architecture	37
	2.8 Infrastructure Requirements	38
	2.9 Cookies	39
	Questions:	40
3.	Features and Functionality of a Magento Commerce Site	
	of a Magento Commerce Site	51
	3.1 Magento Admin: Concepts, Features, and Usage	52
	3.2 Content Staging and Previews	54
	3.3 Catalog	55
	3.4 Shopping Cart	60
	3.5 Payment Methods	64

#### Contents

	3.6 Shipping	69
	3.7 Checkout	71
	3.8 Order Processing (Order Management, Fulfilment,	
	Order Statuses)	73
	3.9 Security	76
	3.10 Extensions and Customizations	78
	3.11 Customers (Segments, Groups)	81
	3.12 Using CMS	83
	3.13 Promotions and Pricing Rules (Catalog Rules,	
	Shopping Cart Rules)	87
	3.14 Import and Export (of Customers, Orders, Products)	91
	3.15 Reporting	93
	3.16 Transactional Emails	94
4.	Application of Knowledge to Business Goals to Business Goals	96
	4.1 Requirements Gathering	97
	4.2 Internationalization / Multisite	97
	4.3 Third-Party Integrations	99
	4.4 Promotions	101
	4.5 Customer Loyalty	102
	4.6 Laws and Regulations	102
	4.7 Catalog Management	103
	4.8 User Experience (UX)	104
	4.9 Customization vs. Native Features	104
	4.10 Returns (RMA)	105
	4.11 Checkout	106
	4.13 Conversion Rate Enhancement	106
	Questions:	107
	Practice Test	114

# ECOMMERCE

General Knowledge Overview

1.



## **1.1 ONLINE MERCHANDISING:**

#### Marketing strategies:

- Omnichannel: available in literally every touchpoint that a customer wants to interact with the brand. This likely includes a brick-andmortar presence, website, social, phone and more. This also includes the notion of a customer being able to easily switch channels through their buying process.
- Multichannel: non-integrated touch points. A customer cannot switch channels through the buying process. This more has to do with silos of communication than anything else. (reference: <u>http://</u> <u>multichannelmerchant.com/blog/omnichannel-vs-multichanneldifferent/</u>)
- Affiliate marketing: using incentives such as cashback and other rewards to encourage people to recommend your brand.
- Social marketing: the use of social media (Facebook, Twitter, Instagram, Pinterest, LinkedIn, etc) to spread the word about your company and interact with customers.
- Email marketing: the use of email to continue brand awareness.
  This remains as one of the most effective means of communication.
- Word of mouth marketing: the most effective marketing strategy. A customer loves your brand so much that they tell others about it.

#### Basic steps of setting up a new online store:

- Strategy (90%): who is your competition. and what will set you apart? What are you offering that your competitors will not offer? Why do you want to get into this business?
- Technology (10%):
  - Determining the platform to start with. If this is a small company with limited funds, Magento is likely not the best option. A SaaS platform is likely to be the best option. It has a low cost of entry (monthly fees) and has many features.
  - Hosting: We like MageMojo, but there is a plethora of hosting options on the market. It is good to talk with the hosting company to determine the server specifications necessary to find the right balance between computing power and paying too much.
  - Deployment: getting the site going. Launching a new site is much easier than migrating existing websites. You just have to point the domain name at the store, remove any temporary protections (such as a password entry present during development), and you are good to go.
  - Maintenance: the basic level of maintenance (from a developer's point of view) includes patching. From a store owner's view, they need to keep the products up to date, fulfill orders, and follow their strategy for growing the company.

#### eCommerce

#### **Search Strategies**

- Proceeding under the basis of this being site search.
- Keyword search:
  - Customers need to find things on your website. Hopefully the search bar is very visible. They will type in a query. Removing the cruft ("and," "the," etc.), you are left with likely the keywords of their search. These are the important words used to find products on your website.
- Auto-suggest:
  - Based on the keywords and phrases used, smart search engines will be able to find other keywords and phrases that are similar to the one that the customer entered.
  - This will help guide them to the answer that they are looking for.
- Guided Navigation:
  - This implies helping the customer reach the decision you want them to reach (likely resulting in a purchase).
  - This technology is still up and coming and relatively expensive to do right.

#### Upselling, cross-selling in ecommerce

- Upsell:
  - Visible on a product page.

- This tells customers of more expensive or (hopefully) alternative choices to what they are looking at. This provides awareness of other options on your website.
- Cross-selling:
  - After the customer has added the product to the cart, we do not want to show choices to what they have purchased. Doing so might lead them to reconsider their options.
  - Cross-selling involves showing the customer complementary products: ones that will make using the original product easier or more satisfying.

#### SEO in ecommerce

- Far beyond the scope of this work, but, here's the summary.
- Quality URL structure:
  - Don't use numbers or IDs in the structure. Instead, use words.
    Not too many, but 75 characters or so in the url.
- Good information architecture:
  - This describes how your website is constructed.
  - What are the paths to the categories? How do they relate to the products? Is there any correlation? What about breadcrumbs? How do you expect people to flow through your website?
  - Are there well-organized sections of content?

- Duplicate content:
  - Using rel="canonical" to avoid duplicate content flags.
  - The canonical tag tells search engines which single URL is the source for that product.
    - Common within Magento will be a product in multiple categories, resulting in the same product page accessible via several URL paths (one for each category). If you don't tell Google which URL is the "master" (vs. the duplicates), Google will pick one.
  - Ensuring that those canonical links exist.
- Sitemap
  - Helps search engines find the pages on your website.
- Other sources:
  - <u>https://blog.kissmetrics.com/seo-for-ecommerce-websites/</u>

## **1.2 SECURITY:**

- User data security standards in different markets:
  - USA is one of the most lenient in the world.
  - EU data privacy states that you cannot store most any customer data outside of the EU. Used to have safe harbor agreement in place, but that no longer exists.
  - Canada just introduced very strict spam laws.
- PCI standards and processes:

- PCI SAQ (self-assessment questionnaire): a detailed piece of information to assess whether you and your website are following best security practices.
- Cardholder data must not ever be stored or transmitted unencrypted.
- Unencrypted cardholder data must not be seen by unqualified individuals.
- Encrypted cardholder data is still subject to safety measures.
- Reference:
  - <u>https://www.pcicomplianceguide.org/faq/</u>
- PA-DSS / PCI-DSS rules and practices:
  - https://securityintelligence.com/difference-pci-dss-pa-dsspayment-application-vendor-thinkappsec/
  - Every organization that handles credit cards needs to comply with PCI DSS (Payment Card Industry Data Security Standard).
    - Build and maintain a secure network.
    - Protect cardholder data.
    - Implement strong access control measures.
    - Ensure the maintenance of information security policies.

- Vendors that make and sell payment applications need to meet PA DSS (Payment Application Data Security Standard).
- SSL Usage in ecommerce
  - SSL when transmitting cardholder data is a must.
  - Preferably use TLS 1.2 but limited due to older browsers that no longer support that.
  - Browser vendors are pretty much forcing all sites to switch to https.

### **1.3 USER EXPERIENCE:**

- Usability principles and issues in ecommerce
  - Beyond the scope of this study guide. Excellent resources:
    - https://baymard.com/research
    - <u>https://www.nngroup.com/articles/e-commerce-usability/</u>
  - Interface must be easy and quick to understand.
  - Best is that it doesn't deviate too much from other websites / industry leaders such as Amazon.
- Building a good user experience in ecommerce best practices
  - Maximum of 5 options
  - Important to give the user context of their position on the website
  - Clear header navigation (with possible drop-down menus)

- Breadcrumbs
- Good detail in footer

### **1.4 LAWS AND REGULATIONS:**

- Disability compliance issues
  - <u>http://www.employerlawreport.com/2015/12/articles/eeo/</u> website-accessibility-regulations-delayed-until-2018-butbusinesses-should-not-table-the-issue-until-then/
  - Serious issue with potential litigation.
  - Websites will need to be "handicap accessible" by April 2018.
- Privacy
  - California and Nevada require a privacy policy.
  - Pennsylvania and Nebraska say it's wrong to make false or misleading statements in a privacy policy.

## **1.5 SYSTEM DEVELOPMENT:**

- Agile, SCRUM, and Waterfall
  - Waterfall: working toward a once-in-a-long time release schedule.
  - Agile and Scrum are very similar.
    - Agile is a complete software development cycle. Usually focuses on smaller increments.

- Scrum is based around a sprint (a set period of time for work to get done). Commitments are made to ensure that the work is completed.
- <u>https://stackoverflow.com/questions/11469358/what-is-the-</u> difference-between-scrum-and-agile-development
- Basic terms and core constituents of system development life cycles:
  - <u>https://stackify.com/what-is-sdlc/</u>
  - Identify Current Problems: understanding problems.
    Customers often do this on their own, although it is good to get a second opinion.
  - Plan: developing a roadmap for getting the problem solved.
  - Design: architecting the solution: what pieces need to be built.
  - Build: writing the code to solve this problem.
  - Test: assigning to QA to ensures that everything works as expected.
  - Deploy: deploying the update.
  - Maintain: starting the cycle over again.

### **1.6 OMNICHANNEL:**

Complex inventory management:

- Means maintaining inventory in multiple locations. This could take into account warehousing, retail locations and possibly drop-shipped inventory quantities.
- Drop ship:
  - When the manufacturer or another company ships the product. This can reduce warehousing needs but will significantly eat into profits.
- Buy online / ship to store:
  - The latest trend. This can be an effective means of keeping customers in the store. While it might not save the company any money (as they still often have to ship it), they can expect more people to make purchases while in the store. Walmart has seen this enough that they have offered steep discounts on certain Site-To-Store purchases.

### **1.7 DATA ANALYTICS AND TESTING:**

- Google Universal Analytics:
  - Probably the most powerful web analytics platform on the internet (free). This platform helps track and correlate much information about visitors on the website and their purchases.
- A/B Testing:
  - Shows customers the A (original) or B (updated) version. This is good to see what users prefer more: which performs better and achieves more goal completions.

- The next step is Multivariate testing. This can pit multiple versions against each other to find a winning combination.
- Optimization:
  - The process of continually editing and working with the website to increase sales.
- Personalization:
  - Ways to make the website be unique to a user. This could be things like using the customer's name, showing them products that they are interested in (based on other purchases), or adjusting sales emails to how they have responded to previous emails.

## THIS IS A PORTION OF OUR STUDY GUIDE. IF YOU LIKE WHAT YOU'VE READ, <u>SEE THIS LINK</u> FOR THE WHOLE STUDY GUIDE.

# PRACTICE TEST



**Practice Test** 

## MAGENTO 2 CERTIFIED SOLUTION SPECIALIST PRACTICE TEST

Take a practice test for the Magento 2 Certified Solution Specialist certification. 36 questions. Free. Immediate feedback.