



ISSN(Online): 2320-9801
ISSN (Print): 2320-9798

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijircce.com

Vol. 5, Issue 9, September 2017

An Exploratory Study of Magento and its Features

Rushi Durge, Trupti Kulkarni, Urmila Kadam, Vandana Nemane , Rahul Gavhne

Assistant Professor ,Department of Computer Science, Dr. D.Y.Patil ACS College, Pimpri, SPPU Pune, India

Assistant Professor ,Department of Computer Science, Dr. D.Y.Patil ACS College,Pimpri,SPPU Pune, India

Assistant Professor ,Department of Computer Science, Dr. D.Y.Patil ACS College,Pimpri,SPPU Pune, India

Assistant Professor ,Department of Computer Science, Dr. D.Y.Patil ACS College,Pimpri,SPPU Pune, India

MSc(CS) Student, Department of Computer Science, Dr. D.Y.Patil ACS College,Akurdi,,SPPU Pune, India

ABSTRACT: Magento is an open-source e-commerce platform written in PHP. The software was originally developed by Varien, Inc, a US private company headquartered in Culver City, Clifornia, with assistance from volunteers. Varien published the first general-availability release of the software on March 31, 2008. Roy Rubin, former CEO of Varien, later sold a substantial share of the company to eBay, which eventually completely acquired and then spun off the company. Magento is an eCommerce platform that provides online merchants with various modules that are flexible and that has dynamic contents that the merchant can change to suite his or her needs depending on the required features. In addition, it is an open source technology that has a powerful online marketing capacity with easy to search tool optimized to suit each business' needs. It is completely scalable and widely used platform because of its stability and its customizable nature.

KEYWORDS: Magento, Online Shopping, order, easy checkout, Catalog Management.

I. INTRODUCTION

Magento is used in E-commerce. E-commerce (Electronic Commerce) is a type of business that involves the commercial transaction or purchasing or selling of goods and services through electronic channels known as internet. It was first introduced in the year 1960 through EDI (Electronic Data Interchange) on VAN (Value-added network). Using E-commerce, you can sell physical products or services (where the payment is made online). The world's biggest brands love Magento for its flexibility, because today's consumers and their buying patterns are changing by the minute. Only Magento—open source and agile—can help you adapt and thrive. With a global ecosystem of 150,000 developers and a network of 300+ highly-trained solution partners, Magento boosts your online sales while maximizing gross margins. Magento businesses sell more at a lower TCO than merchants on competitive commerce platforms. Here's how the Magento Advantage can work for you...

Following are the categories of E-commerce –

B2B (Business to Business) – This transaction is between businesses. It is between the wholesaler and the retailer or between the manufacturer and the wholesaler. B2C (Business to Consumer) – This transaction is between businesses and consumers. In this type of transaction, merchants sell products to consumers through shopping cart software. C2C (Consumer to Consumer) – In this type of transaction, one consumer or customer interacts with other consumers through internet. C2B (Consumer to Business) – This transaction is between the consumer or the customer and businesses or organizations where the consumer makes a product that the organization uses it to complete the business.

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijircce.com

Vol. 5, Issue 9, September 2017

II. LITERATURE SURVEY

Varien has developed Magento because this company recognized many limitations of the e-commerce platform OSCommerce. The platform lacks stability, unique features, and flexibility so they wanted to develop a better e-commerce platform. In 2007, they started developing Magento beginning with a release of the first beta community version at 31st August 2007.

At the beginning, the version would be called Bento but it was trademarked the name by another company. Hence, they unify it with Mage to launch Magento which is the famous name still used till today. Magento Community Edition has been developed and customized in order to provide a basic ecommerce platform.

Magento became more and more popular after 2009. It was even more popular than eCommerce itself. On April 15, 2009, Magento Enterprise Edition, which is derived from the Magento Community Edition, was released.

In the following year, 2010, Magento for Mobile was developed.

In February 2011, it was announced that eBay had invested in Magento and owned 49% ownership share of the company. Later in the same year, eBay bought Magento, with plans to merge it with new things.

On November 17, 2015, Magento 2.0 was released, with an aim to provide new ways to heighten user engagement, smooth navigation, conversion rates.

III. METHODOLOGY AND DISCUSSION

Architecture

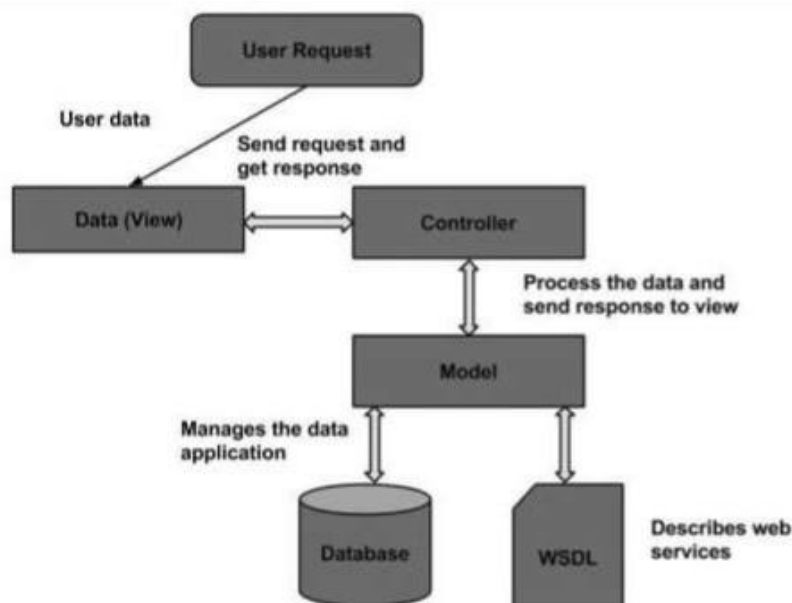


Fig.1 architecture

The Magento architecture comes with Models, Views and Controllers.

- **User Request** – The user sends a request to a server in the form of request message where web browsers, search engines, etc. act like clients.



International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijircce.com

Vol. 5, Issue 9, September 2017

- **View** – View represents the data in particular format. It is the user interface which is responsible for displaying the response for user request. It specifies an idea behind the presentation of the model's data to the user. Views are used to reflect "how your data should look like".
- **Controller** – The controller is responsible for responding to user input and perform interactions on the data model objects. It uses models to process the data and send responses back to the view.
- **Model** – The model is responsible for managing the data of the application. It contains logic of the data and represents basic data object in the framework. It responds to request from the view and to the instructions from the controller to update itself.
- **Database** – Database contains the information which is requested from the user. When the user requests data, view sends requests to the controller, the controller requests from the model and the model fetches the required information from the database and responds to the user.
- **WSDL** – WSDL stands for Web Services Description Language. It is used for describing web services and how to access them.

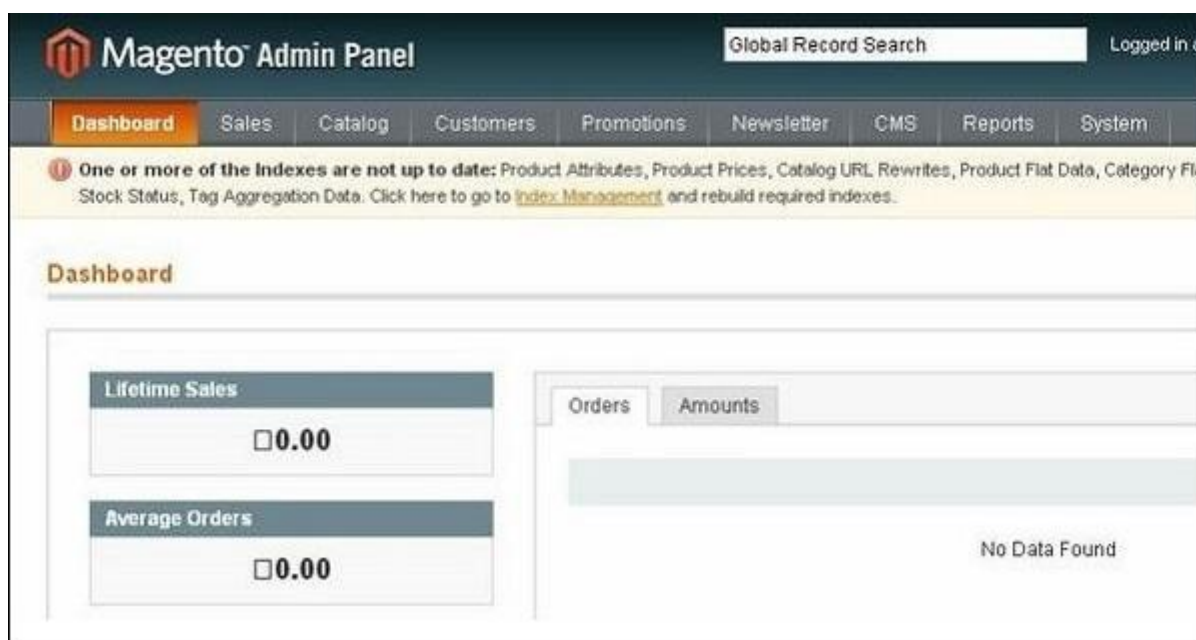


Fig 2. Magento Admin Panel

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijirccce.com

Vol. 5, Issue 9, September 2017

Payment Gateway

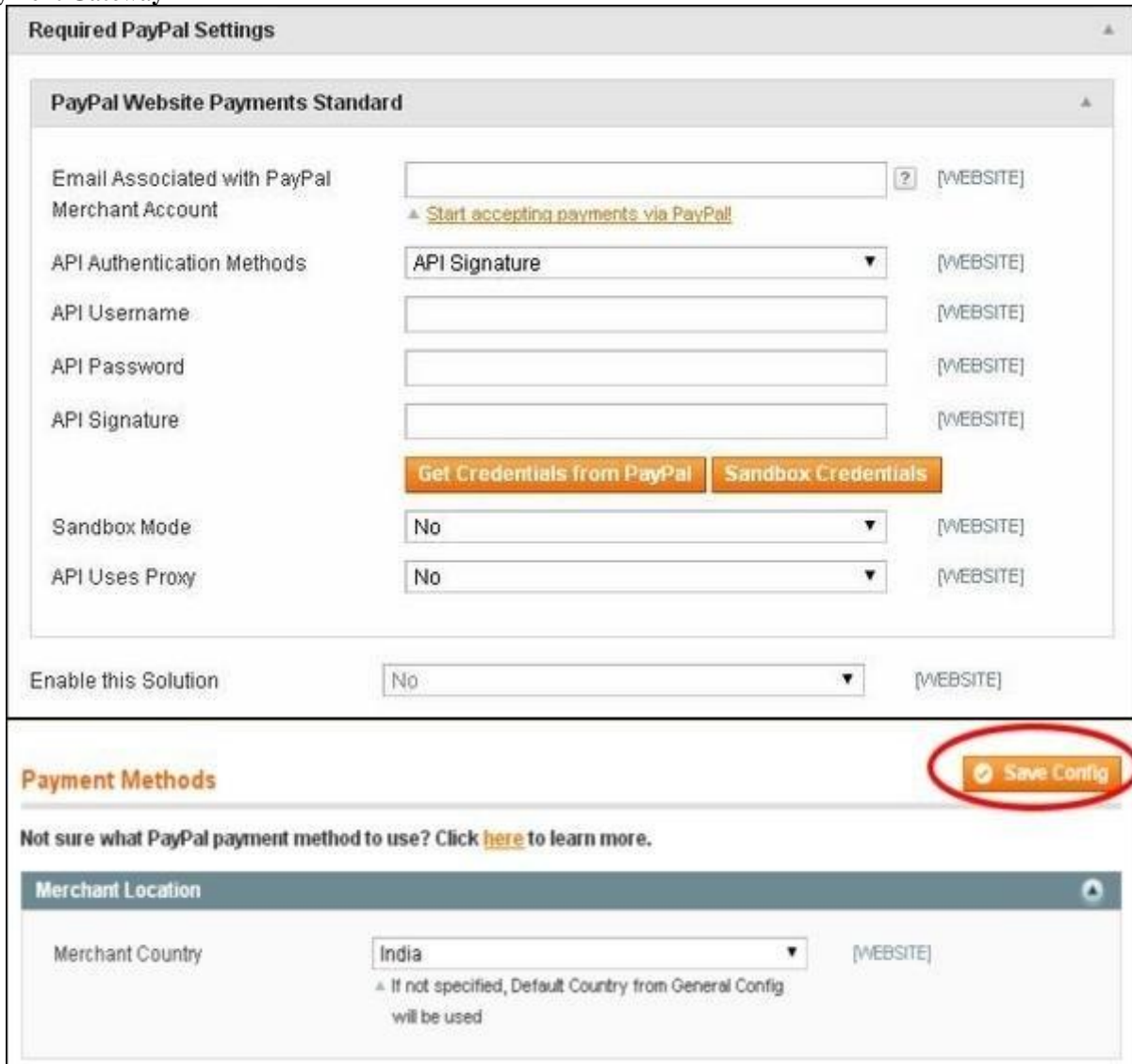


Fig.3 Payment Gateway

Simple Products

These are general product type, which are the most used products. In this section, there are no options for selecting size or color of the product.

Example – Coffee cup, DVD's, Camera lens, etc.

Grouped Products

This is a group of simple products. In this type, you cannot specify a specific price for a product; you can just specify the discount.

Example – Cell phone + Memory card + Ear phone



ISSN(Online): 2320-9801
ISSN (Print): 2320-9798

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijircce.com

Vol. 5, Issue 9, September 2017

Configurable Products

In this type, customer can select products according to their color and size before purchasing.
Example – Cell phones obtained in different colors and sizes.

Short-term impacts

There will be a disruption in the current liquidity situation as households are likely to get affected by the note exchange terms laid by the government. Though clarity is unfolding on this, commodity transactions and general cash market transactions are likely to feel an immediate impact. Unorganised sector proceedings, including small trade market activities, will remain volatile in the short-term. Roadside vendors, cab drivers, kirana stores, etc., have already stopped accepting Rs 500 and Rs 1,000 notes. It is important to note that a significant percentage of the Indian workforce is employed in this sector, which is likely to be affected by immediate liquidity issues. Overall, negative impact on disposable income is expected along with likely disruption in the consumption patterns of the general populace.

IV.FEATURES

Marketing, Promotions and Conversion Tools

- Related products, up-sells and cross-sells
- Catalog promotional pricing with the ability to restrict to stores, categories or products
- Flexible coupons with ability to restrict to stores, customer groups, time period, products, and categories
- Generate a set of unique coupon codes for each promotion and export the list of codes for offline distribution, email, newsletters and more. Easily manage and monitor coupon usage and generate detailed reports
- Multi-tier pricing for quantity discounts
- Minimum Advertised Price (MAP)
- Landing page for categories
- Customer groups
- Product bundles
- Recently viewed and compared products
- New items promotional tool
- Persistent shopping cart
- Free shipping options
- Polls
- Newsletter management
- Send to a friend for all visitors or registered users only
- Send wish lists by email

Search Engine Optimization

- 100% search engine friendly
- Google Site Map
- Search engine friendly URL's
- URL rewrites give full control of URL's
- Meta-information for products, categories and content pages
- Auto-generated site map for display on site
- Auto-generated popular search terms page
- Google Content API for shopping

Site Management

- Control multiple websites and stores from one Administration Panel with the ability to share as much or as little information as needed
- Administration permission system roles and users



ISSN(Online): 2320-9801
ISSN (Print): 2320-9798

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijirccce.com

Vol. 5, Issue 9, September 2017

- Fully 100% customizable design using templates
- Support for multiple languages and currencies. Web Services API for easy integration between Magento and third-party applications
- Batch import and export of catalog and customer information
- Content Management System for informational and landing pages
- Tax rates per location, product type or customer group (i.e. wholesale vs. retailer)
- CAPTCHA functionality to help prevent automated software from attempting fake logins. This auto-generated test ensures that the login is being attempted by a person and can be enabled in both the admin and customer

Catalog Management

- Simple, configurable (e.g. size, color, etc.), bundled and grouped products
- Create different price points for different customer groups, such as wholesalers and retailers
- Virtual products
- Downloadable/digital products with samples
- Unlimited product attributes
- Attribute sets for quick product creation of different item types
- Inventory management with backordered items, minimum and maximum quantities
- Batch updates to products in admin panel
- Automatic image resizing and watermarking
- Advanced pricing rules and support for special prices
- Search results rewrites and redirects
- Moderated product tags and reviews
- Customer personalized products – ability to upload images and text (i.e. for embroidery, monogramming, etc.)
- Customer sorting – define attributes for customer sorting on category (price, brand, etc.)
- RSS feed for low inventory alerts

Catalog Browsing

Product Browsing

Order Management

Customer Accounts

International Support

Analytics and Reporting

V.CONCLUSIONS

This paper proposed that Magento is a content management system for websites. Especially with E-Commerce companies, Magento is used by many successful websites such as Samsung, Louboutin, Olympus, Nestle, Fox Connect, Lenovo, Nike, and so do millions of small and mid-sized e-commerce companies around the globe.

By detail information about Magento and its rapid rise, users realize the importance of Magento. In the future, Magento will still play its role in a better way and we can have high expectations of this.

REFERENCES

1. <https://www.tutorialspoint.com/magento/>
2. https://www.tutorialspoint.com/magento/magento_setup_paypal_payment.htm
3. <https://www.siteground.com/tutorials/magento/>
4. <http://info2.magento.com/rs/magentosoftware>
5. Magento PHP Developer's Guide by Allan MacGregor
6. Magento: Beginner's Guide – Second Edition by Robbert Ravensbergen
7. Mastering Magentoby Bret Williams
8. eBay Commerce Cookbook: Using eBay APIs: PayPal, Magento and More by Chuck Hudson
9. <http://devdocs.magento.com/guides/v2.1/extension-dev-guide/bk-extension-dev-guide.html>
10. <https://en.wikipedia.org/wiki/Magento>



ISSN(Online): 2320-9801
ISSN (Print): 2320-9798

International Journal of Innovative Research in Computer and Communication Engineering

(An ISO 3297: 2007 Certified Organization)

Website: www.ijircce.com

Vol. 5, Issue 9, September 2017

11. <https://magento.com/tech-resources/download>
12. <https://magento.com/blog/magento-news/letter-ceo-magento-community-magento>

BIOGRAPHY

Rushi Durgeis working as a Assistant Professor in Computer science department,at Dr.D.Y Patil ACS college Pimpri,Pune.His research interest includes Ecommerce technique, web services, Magento

Trupti Kulkarniis working as a Assistant Professor in Computer science department,at Dr.D.Y Patil ACS college Pimpri,Pune.His research interest includes Ecommerce technique, Magento, Data Mining & Warehouse

Urmila Kadam is working as a Assistant Professor in Computer science department,at Dr.D.Y Patil ACS college Pimpri,Pune.Her research interest includes Ecommerce technique, Magento, Smart phone&Big Data

Vandana Nemaneis working as a Assistant Professor in Computer science department,at Dr.D.Y Patil ACS college Pimpri,Pune.Her research interest includes Ecommerce technique, Magento, Software Project Mangment

Rahul Gavhneis a final year MSc(CS) student of Computer science department,at Dr.D.Y Patil ACS college Pimpri,PuneHis interest includes Ecommerce technique, web services, Magento