



# **iJRASET**

International Journal For Research in  
Applied Science and Engineering Technology



---

# **INTERNATIONAL JOURNAL FOR RESEARCH**

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume: 8**

**Issue: IV**

**Month of publication: April 2020**

**DOI:**

**[www.ijraset.com](http://www.ijraset.com)**

**Call:  08813907089**

**E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)**

# Survey on Automatic Approach for E-Billing System for Online Application

Vishe Vaibhavi A<sup>1</sup>, Randhe Rutuja A<sup>2</sup>, Jadhav Aparna R<sup>3</sup>, Prof. Gholap P. S<sup>4</sup>

<sup>1, 2, 3</sup>BE Student, <sup>4</sup>Guide, Department of Computer Engineering, Sharadchandra Pawar College of Engineering, Dumburwadi, Otur, Maharashtra, India

**Abstract:** The hassle of queues in shops, human errors in manually generated bills and the wastage of time in the packaging of products after shopping creates inconvenience to shoppers and eventually leads to lower customer satisfaction levels. With the development of digital technology online payments can be made for various purposes. This paper discusses the design of an online shopping system where the generate automatic E-billing system including all taxes. After completion of shopping, customers can exit the shop with their bills deducted automatically from their e-Wallet. A Web Application is hosted on an AWS EC2 instance to allow customers to keep track of their transactions. The system is connected to inbuilt Wi-Fi to communicate with MySQL instance which stores the inventory of the retail store along with the prices of the products. It also stores the current items in the cart and the history of previous transactions of every customer.

**Keywords:** Data Security, E-shopping, E-Billing, Maintaince.

## I. INTRODUCTION

This paper proposes an E-Billing system on the basis of an E-Invoice Framework. The E-Invoice Framework is an e-invoice solution concentrating on automatically issuing e-invoices, centralized managing e-invoices and providing taxation services. Thus, the efficiency of taxation could be great improved and the labor of taxation could be obviously reduced. Compared with taxpayer-oriented taxation systems, the E- Billing Framework can firmly support data-oriented taxation systems, which are especially tailored for online shopping environment.

### A. Problem Statement

The waiting times in billing counters of shops and malls have been increasing, given the growth in human population and personal needs. To build and implement Automated Billing System web application for online shopping.

### B. Objectives

- 1) To provide automatic billing system
- 2) To implement for online shopping system
- 3) To provide security using encryption algorithm

## II. LITERATURE SURVEY

Electronic Invoicing has been defined as the sending or making available of an invoice and its subsequent processing and storage, wholly by electronic means [4]. In e-commerce, invoice is one of the business documents that are most often exchanged electronically between transaction parties[5]. At present, e-invoice is at the stage of applying and spreading in EU, South America and some nations of North America[6]. For example,

Kaliontzoglou proposed an open invoice system named invoke in 2006, based on XML, XML cryptography and Web Services. The system was established on the basis of trusted third party-provided PKI to seek security and authentication supports[7]. Spanic proposed an invoice system providing multi-services to different users in 2011.

The system can transfer e-invoices among large enterprises through EDI of their ERPs, and provide related web services to SMEs(Small and Medium Enterprises) [8].

Humski proposed an FER e-invoice system in 2012, which owes an extensible and open architecture of e-invoice implementation [9]. The above-mentioned and other e-invoice solutions pay attention to technical details, such as information security, consumer service and system expansibility. This paper, aims at the improvement of taxation systems to focuses more on direct tax-related data (e-invoice data) than taxpayers. In order to achieve this target, the E-Invoice Framework is introduced.

### A. Existing Approach

The users use MS Excel, and maintain their product list, customer list, and print the invoice, however it is not possible for them to share the data from multiple systems in a multi-user environment, there is a lot of duplicate work, and a chance of mistake. When the product price is changed, they need to update each and every Excel file. There is no option to find and print previous saved invoice.

### B. Proposed Approach

This project is made for one of the shopping systems, presently they issue their client handwritten invoice and they enter details in a manual register. And maintain MS Excel file for product rate. They want computerization of their manual invoice and bill generation process.

There is no security; anybody can access any report and sensitive data, also no reports to find out the sales volume, stock list, and summary report. This E-Billing and invoicing system is used to overcome the entire problem which they are facing currently, and making complete automation of manual billing including all taxes and invoicing system.

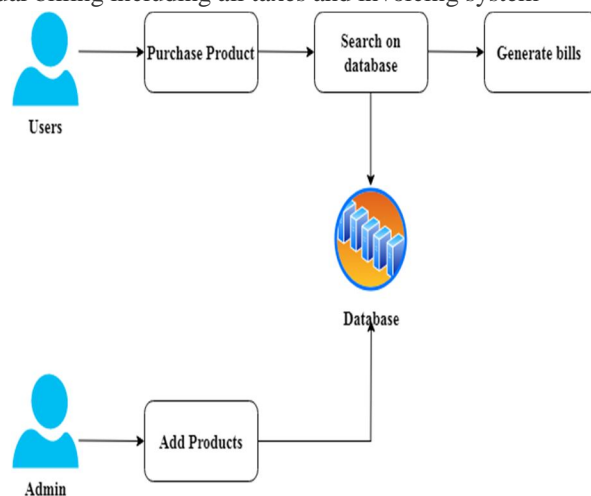


Fig. System Architecture

## III. CONCLUSION

This paper proposes an E-billing Framework towards data-oriented taxation systems. Compared with current systems, the proposed data-oriented taxation system has the following advantages:

- A. Through automated generation and transmission of invoices.
- B. Tax authorities could now directly acquire related transaction details from e-invoices instead of communicating with taxpayers. The efficiency of taxation is promoted and the cost is reduced.

## REFERENCES

- [1] H. Richard, and I. Walden. "The draft UNCITRAL model law for electronic commerce: issues and solutions." *Computer Lawyer* 13, 1996, pp.18-22.
- [2] Y. Zeng, X. Guo, and H. Huang. "E-commerce tax collection and administration in China." *Information Management, Innovation Management and Industrial Engineering (ICIII), 2012 International Conference on*. Vol. 3. IEEE, 2012, pp.424-427.
- [3] S. Yang, and G. Liu. "Research on E-commerce taxation from an angle of China." *E-Business and E-Government (ICEE), 2011 International Conference on*. IEEE, 2011, pp.1-5.
- [4] European Commission. "European Electronic Invoicing (EEI) Final Report." *European Commission Informal Task Force on e-Invoicing*, 2007.
- [5] C. Tanner, R. Wölfl, P. Schubert, and M. Quade. "Current trends and challenges in electronic procurement: an empirical study." *Electronic Markets*, 2008, pp.6-18.
- [6] B. Koch. "E-Invoicing/E-Billing in Europe. Taking the next step towards automated and optimised processes." *Billentis*, Wil (2009).
- [7] A. Kaliontzoglou, P. Boutsis, and D. Polemi. "eInvoice: Secure eInvoicing based on web services." *Electronic Commerce Research*, 2006, 6(3-4), pp.337-353.
- [8] D. Spanic, D. Ristic, and B. Vrdoljak. "An electronic invoicing system." *Telecommunications (ConTEL), Proceedings of the 2011 11th International Conference on*. IEEE, 2011, pp.149-156.
- [9] L. Humski, B. Vrdoljak, and Z. Skocir. "Concept, development and implementation of FER e-invoice system." *Software, Telecommunications and Computer Networks (SoftCOM), 2012 20th International Conference on*. IEEE, 2012, pp.1-5.





10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)