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E-serve at Shell Lubricants: A Global Customer Website

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Abstract
Shell eServe is a new global customer website. Customers can use eServe to place orders, review their ordering history, view products and access account information. Shell eServe offers customers an efficient way to interact with Shell at a time that is convenient for them. PHP language is used for the developing of this web application. MySQL is used as backend tool. The main reason behind the use of MySQL is to make the data secure. It provides greater compatibility with PHP language. The server I have used is XAMP Server.

Introduction

The development in the field of science and technology has improved the efficiency of the data processing mechanisms. These mechanisms allow one man to do what previously required the time and efforts of dozens. These mechanisms are not for specific fields or purpose. They are beneficial for men in many different ways. They impact every aspect of life. Now a days every company or organization wants to deal with their users or customers on web site. The topic of the communication may different but the main purpose of all is to save time, money, and to give quick response to the user. The same situation is here so it is decided to make an online order system of Shell Lubricants. All difficulties faced by the existing system work are considered during the development of this project.

With the increasing number of websites and considerable investment in them, website quality evaluation has become an important activity (Naik and Tripathy, 2008). Organisations invest time and money to develop and maintain their website's quality. These websites should establish an effective information and communication channel between organisations and their clients. In some cases they are part of the offered product, since they make useful services available to clients (Grigoroudis et al., 2008). A website should clearly reflect the quality efforts made by the organisation, because it establishes an important connection with clients. Modern websites show a significant range of aspects, complexity of structure and diversity of offered services (Kappel et al., 2006). As in all information systems, website evaluation is an important development and operational factor that may lead to the improvement of their users' satisfaction (Grigoroudis et al., 2008) and to the optimisation of invested resources (Cheung and Lee, 2008).

Literature review

Software quality

People look for quality in each object they create, and software is no exception. Software is one of the strategic assets in the information society. With the internet boom, and the following exponential increase in contents and services made available through websites, a quality revolution quickly spread throughout the whole world (Naik and Tripathy, 2008). Aspects related to the quality of websites have, therefore, become relevant to many sectors of activity. Several contributions to the field of website quality and different schools of thought have primarily focused on the definition of quality, its structure and how it can be measured (e.g. Jung et al., 2004; Mich et al., 2003). In this paper we adopt the definition of quality published in the most recent International Organisation for Standardisation (ISO) standard for software quality, because it agrees with our purposes, because of its breadth and completeness and because of the prestige of that organisation. We, therefore, understand quality as the "capability of a software product to satisfy stated and implied needs when used under specified conditions" (ISO/IEC, 2005, p. 4).

Dimensions of website quality Content and services are the reasons for the existence of a website, which is built by application of techniques and technologies. Thus, considering the results of some studies conducted and/or supervised by the author (e.g. Rocha and Victor, 2010), as well as the systematization of the knowledge available in several bibliographies. Usually employs evaluation methodologies for back-office procedures and/or users' satisfaction with services available on websites. Some studies related to this dimension are worth mentioning, such as Al-Momani and Noor (2009), Arshad et al. (2007), Cernea et al. (2009), Hamadi (2010), Li and Suomi (2007, 2009), Parasuraman et al. (2005), and Zhao (2005).

Finally the third dimension focuses on the technical quality of websites, i.e. on quality attributes that are usually found in quality standards for software, such as ISO/IEC 9126 (ISO/IEC, 2001) and its successor ISO/IEC 25010 (ISO, 2011).

System Design

System design is the most challenging job of all the phases of the system life cycle. Analyst has to plan the new system that should meet the requirements of the organization. Before developing any system, it is very important to sketch the preliminary specification and then with the help of this section and analysis, draw detail design that should consist of input detail, output reports and the layout of the database files and their relationships.

Software Design

Software design is the act of determining the user's experience with a piece of software. It has nothing to do with how the code works inside, or how big or small the code is. The designer's task is to specify unambiguous. Design serves as the foundation in software development. Without design, we risk building an unstable system. The one that will fail when small changes are made or difficult to test should not be selected. The initial and primary goal of a system design is to ensure that the structure of the system supports the right function and organizes them to let the user work efficiently. Software design is of two types.

1. Visual modeling using UML
2. Database Design

Visual Modeling Using UML

The unified modeling language (UML) is a language for specifying, visualizing, and constructing the art of facts of software system as well as for business modeling.

Visual modeling is a way of thing about problems using models organized around real world ideas. Models reduce the amount of time it takes to learn and it improves safety, performance and consistency and to reduce errors. It communicates efficient with the process, maps, charts and diagrams of all types. The UML offers standard semantic and notations for describing object structure and behavior and have emerged as design medium of choice for developing large scale distributed objects applications. Rational unified process an extensive set of software development guideline rational rose visual modeling tool, the UML, greatly facilitate.

The UML notation is useful for graphically depicting the object oriented analysis or design model. It not allows specifying system requirements and capturing design decisions, but also promotes communication among key persons involved in the development effort.

- Use case Diagram
- Collaboration Diagram

Use Case Diagram

A use case is a set of scenarios that describing an interaction between a user and a system. A use case diagram displays the relationship among actors and use cases. The two main components of a use case diagram are use cases and actors.

An actor is represents a user or another system that will interact with the system you are modeling. A use case is an external view of the system that represents some action the user might perform in order to complete a task.

When to Use: Use Cases Diagrams

Use cases are used in almost every project. They are helpful in exposing requirements and planning the project. During the initial stage of a project most use cases should be defined, but as the project continues more might become visible.

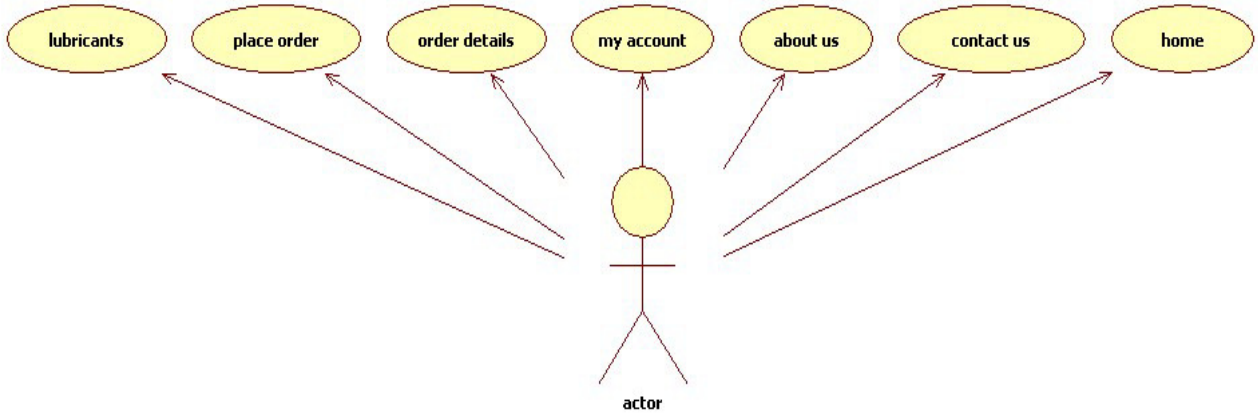


Figure 1 - Use Case Diagram of User

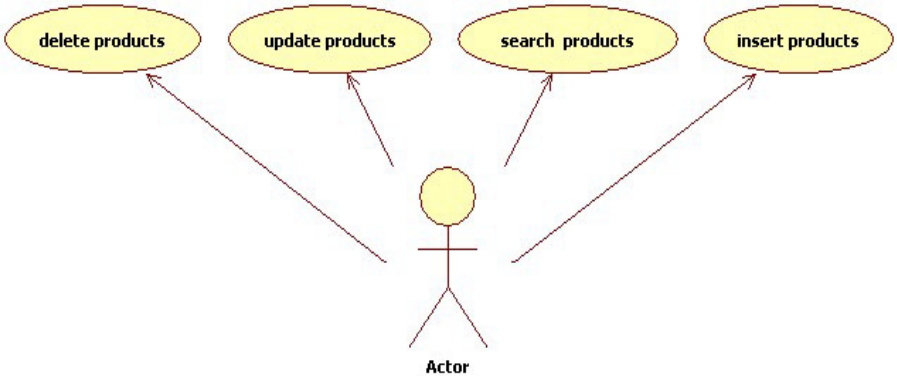


Figure 2 - Use Case Diagram of Administrator

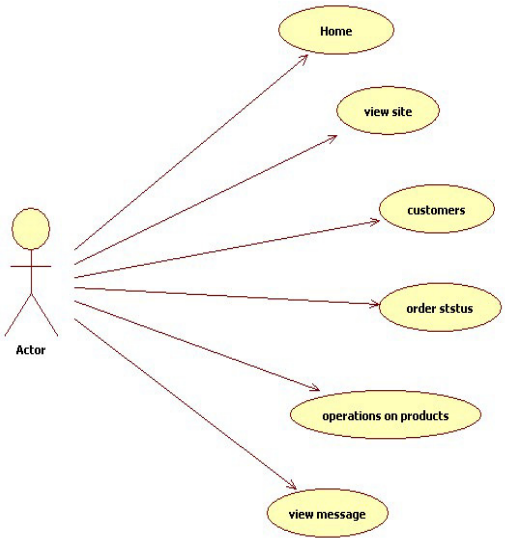


Figure 3 - Use Case Diagram

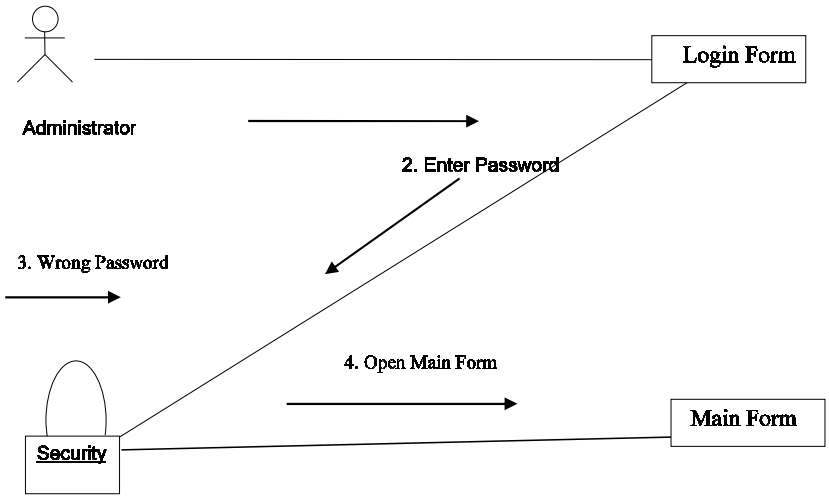


Figure 4 - Collaboration Diagram of Main Form Login

Database Tables

Table 1 - Admin Login

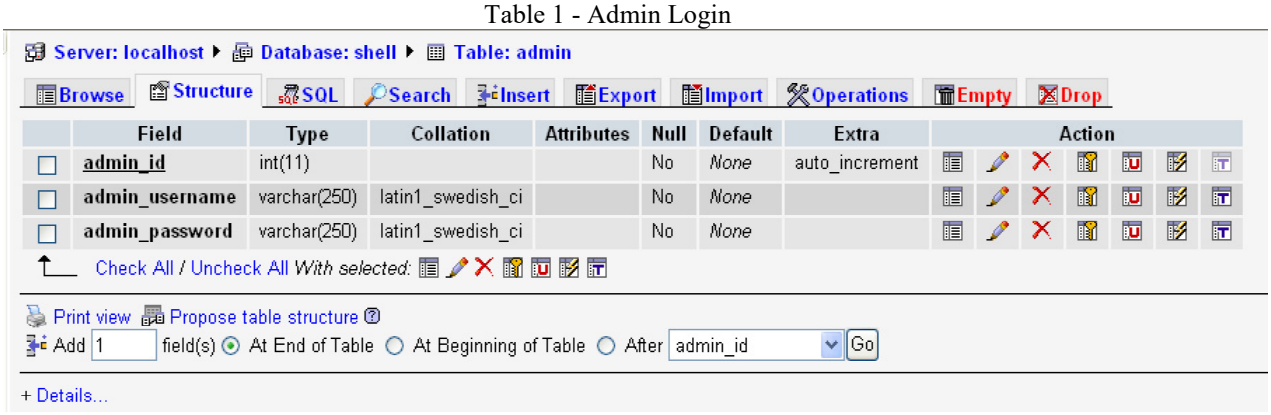


Table 2 - Contact Us

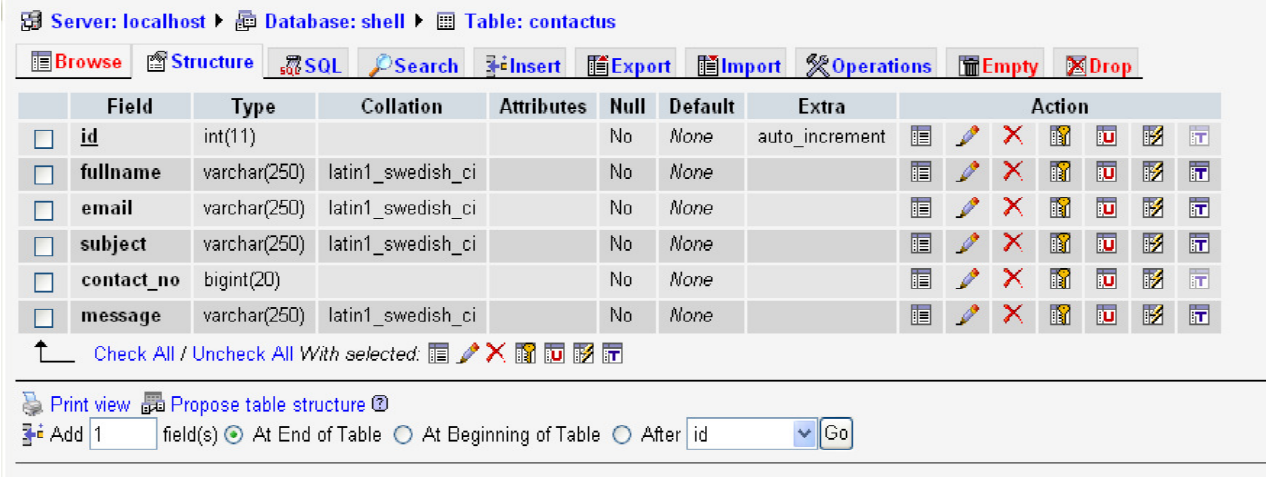


Table 3 - Lubricants

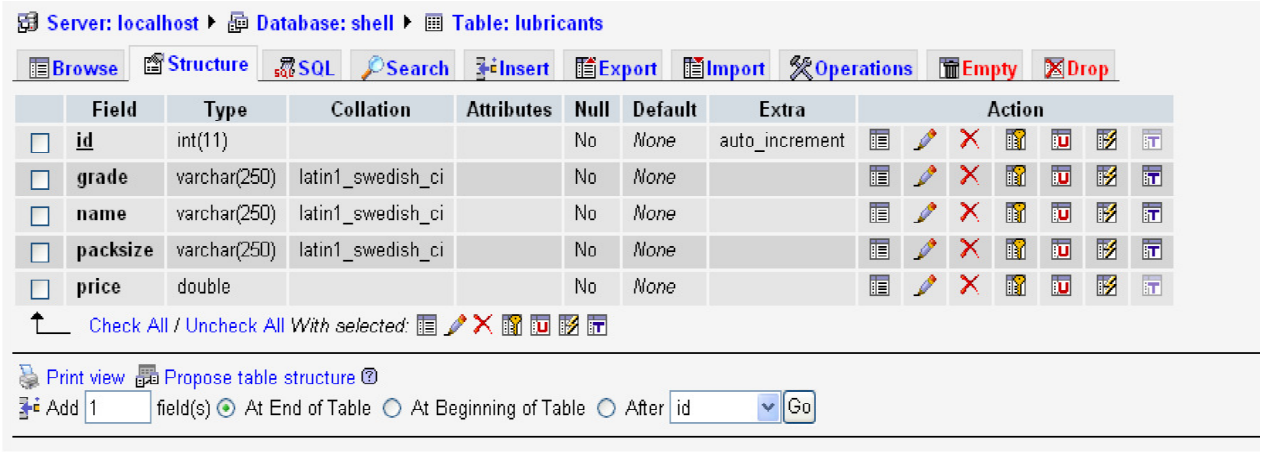


Table 4 - Order Product

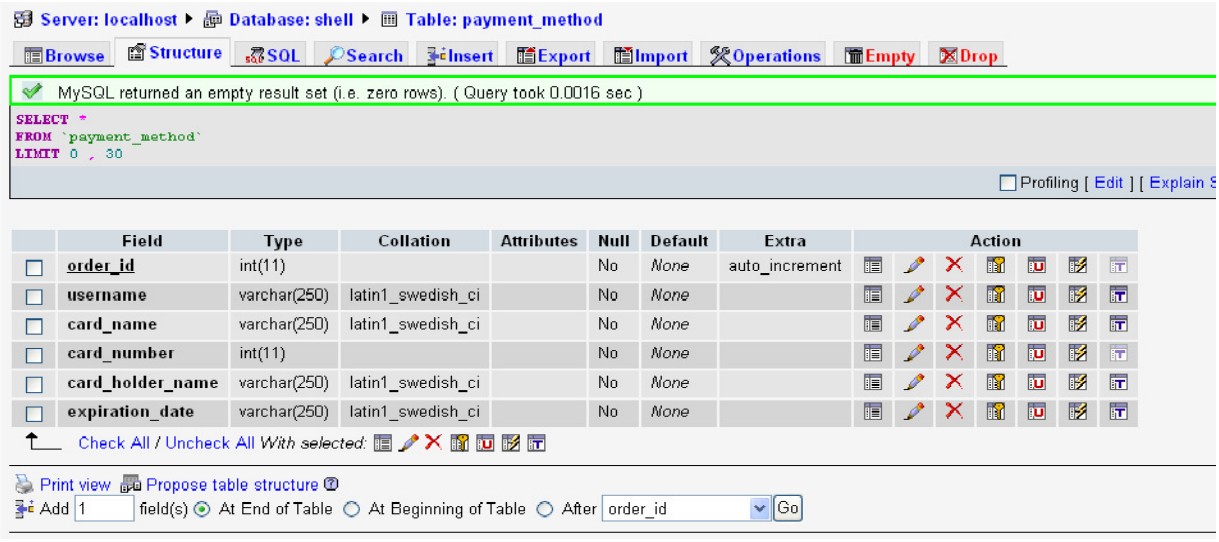


Table 5 - Payment Method

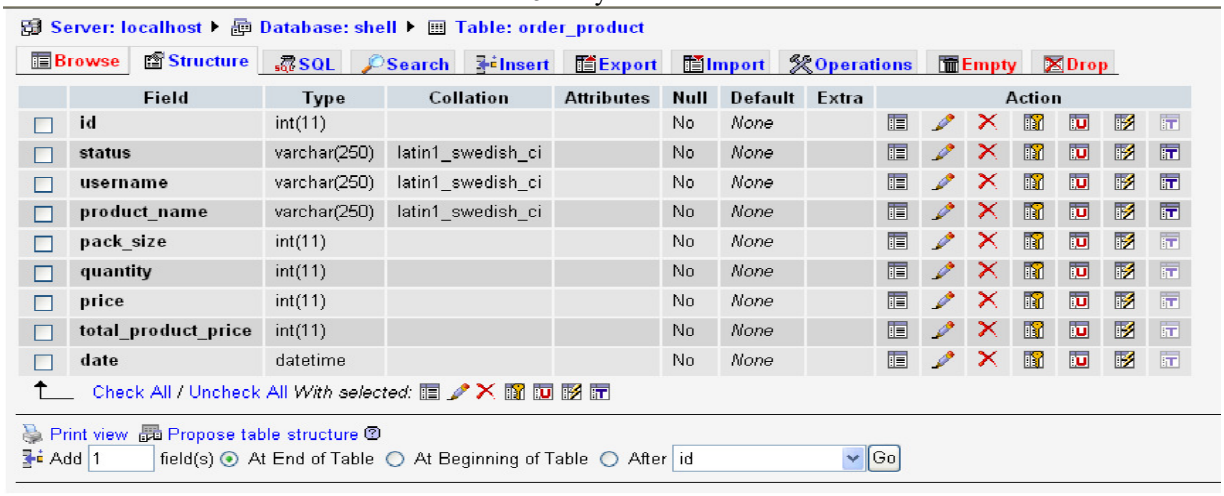
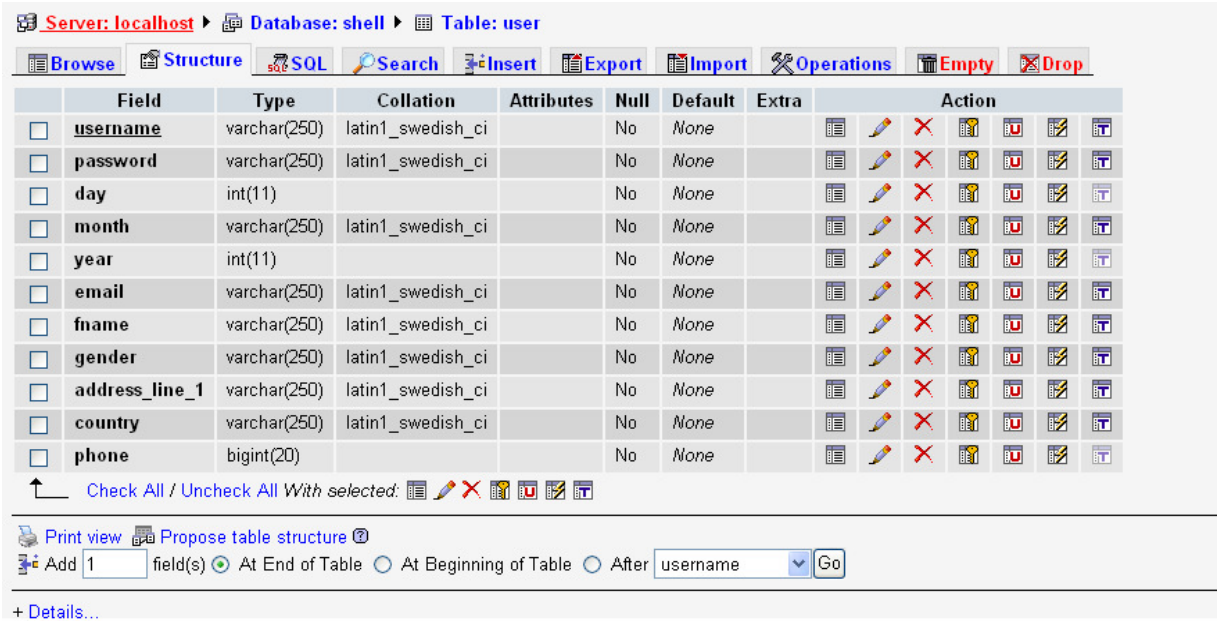


Table 6 - User



Conclusion

The development in the field of science and technology has improved the efficiency of the data processing mechanisms. These mechanisms allow one man to do what previously required the time and efforts of dozens. These mechanisms are not for specific fields or purpose. They are beneficial for men in many different ways. They impact every aspect of life. Now a day's every company or organization wants to deal with their users or customers on web site. The topic of the communication may different but the main purpose of all is to save time, money, and to give quick response to the user. The same situation is here so it is decided to make an online order system of Shell Lubricants. All difficulties faced by the existing system work are considered during the development of this project.

Shell is committed to improving our service for customer. To help us achieve this objective, we are introducing simpler, standard processes and systems for handling all aspects of our customer relationships from order to delivery. These processes are being rolled out globally to create a common approach to the way we work and make it easier for customer to do business with Shell. As part of this program of improvement, we have launched our new online business site known as Shell eServe

Allows Customers do business with us when and where it is most convenient to you flexibility that can greatly improve the efficiency of customers operations. Shell eServe is web-based tool for online transactions is free, simple to use and secure, available for you 24/7 to place orders, review them before submitting, check order status or view account information in real time. Using Shell eServe alleviates paperwork and saves you valuable time, plus it has the added advantage that you can do business at a time that is most convenient for you.

Shell eServe gives you much greater functionality and freedom including the ability to:

- Place and view orders online with real-time access to most current products, promotions & information.
- View order status and order history
- View account information
- View and download volume and financial reports
- View and download Material Safety and Product Data Sheets
- Manage documents, including certificate of analysis and billing information
- Contact Shell and track status of enquiries

We use advanced technologies to make it easier and faster for you to do business with us. Our touchless eBusiness tools provide automated methods for simpler fuel management and standardized order processing and invoicing. From placing orders to accessing account and product information, our tools are at your convenience to help you run your business. Our touch less services can save you valuable time and money by easing and optimizing your daily contacts and transactions with us. Customers can use our automated tools across your entire company.

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