Bridal Chain Interactive Distributed System

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Abstract

Jenny's Brides is a chain of retail bridal stores in the northern California area. Each store operates independently. In each store, brides make appointments to see gowns. These appointments are scheduled on an appointment calendar, and each bride's contact information is recorded. Polaroid photos are taken of customers in dresses they like. Sales information is kept on a separate sheet of paper. Unfortunately, none of the sales or bride's information is recorded into a database for future reference, and the photos are not easily copied or distributed. Another problem is the lack of a centralized automated scheduling system. The appointment calendar cannot be accessed on line, since the only copy is in the store. And it cannot be used to check other local stores for appointment availability. In addition, all direct-mail marketing is generated manually from paper records, making it difficult to customize mailings based on each customer's buying history.

Because of the lack of a centralized computer system among the stores, it is not possible for stores to search the inventories of other local stores or perform sales and marketing analysis for the entire chain. Each store manager must compile its data manually, and the area manager must combine the results. If the stores' data were centralized, it could be used more effectively in sales and marketing.

Today's department stores must provide convenience and simplicity for time-starved customers. It must also keep existing customers and attract new ones by improving their experience relative to other stores. To remain competitive, it must control costs by narrowing the product offering to a specific targeted customer base. To remain profitable, it must wisely allocate marketing expenditures by focusing on more qualified customer leads.

For these reasons, a wedding retail store automation system is proposed. The major objectives of the system are to accelerate sales growth and profitability. These goals will be achieved by improving customer experience and generating referral business.

The system would include a local computer system in each branch store as well as a centralized computer system in the main branch. The system would be web-accessible, providing sales, scheduling, inventory information for each of the local stores and the chain as a whole, and an interface for customers to view their "wish lists" and their photos. Additionally, the system would auto-generate direct mailings based on previous customers' buying history. The main branch's central computer would serve as the global information repository; however, each branch would be able to operate independently of the main branch. The system will provide a web user interface for employees to access local and global inventory, appointment scheduling information, and current and historical sales information.

Domain Description

The bridal store chain domain includes the portion of the wedding industry related to the sale of bridal gowns, bride's maids' dresses, and other accessories. In particular, a bridal store chain must be able to help brides find the dress they are looking for and sell it to them. Ultimately, new sales must be generated from sales and marketing efforts, from new and repeat business. This is why the proposed system will allow its users to effectively globally search for inventory, manage appointments, and generate direct mailings based on previous buying patterns.
of customers. Also, the chain hopes to provide a superior service over their competitors by providing a web interface for their customers.

There are five major issues the chain is concerned with:

1) Sales information recording
   - Customer contact and demographic information
   - Items, price, and date purchased
   - Employee "Consultant" who made the sale and type of sale

2) Appointment Scheduling
   - Date and time of appointment
   - Scheduling of future sessions
   - Consultant assigned to the appointment
   - Possible alternative branch store for appointment

3) Direct-marketing automation
   - Frequency of mailings
   - Sales data mining criteria
   - Cost of direct-mail

4) Customer interface
   - Pictures of customers in their dresses
   - Logon information for each customer
   - Items customer is considering buying

5) Manager interface
   - Provide tools to managers for resource management.
   - Help managers to forecast sales, do inventory checks, sales margins etc.

Block Diagrams: Figure 1 -- Client-server view of the system
Description of the program that is wanted

The goals of the proposed computer system are to record sales and bridal information, search for inventory, manage appointments, and provide a mechanism for automatically generating direct mailings. In addition, Jenny's would like to have a web interface for customers to access pictures of themselves in dresses they have tried on as well as a "wish list" feature -- a list of items with pictures that the customer would like to buy. The system should provide these functions for individual stores as well as provide a chain-wide service of the same functions. Employees and managers should be able to access these services via a web user interface.

Detailed Requirements
The system shall meet the following requirements:

- Sales and bridal information recording
- Inventory searches
- Appointment management
- Customer interface
- Direct marketing
- Web-accessible
- Chain-wide and branch store access
**Sales and bridal information recording**

The system will record each bride's contact information and, optionally, demographic information from an exit survey. Information about each sale, including the items bought, prices, the sales consultant, sizes, and dates of consulting sessions will be recorded in such a manner that it may be searched and reconstructed at future dates. This information may be used for sales and marketing to generate repeat and new business. The system will provide a user interface for searching and querying historical sales and bridal information data.

**Inventory searches**

The system will provide a function for searching a particular store's inventory of searching for inventory chain-wide. The search criteria may be descriptive or by the inventory number of the item.

**Appointment management**

The system will provide an appointment management function which is used to schedule initial appointments as well as follow-up consulting sessions. If no appointments are available at a local store, availability may be queried for appointments at other stores in the chain. The employee entering the appointment will be able to enter the bride's information, date, time, and store location for new appointments, and edit existing appointments.

**Customer interface**

The system will provide web access to customers. Customers will be able to view up to three photos of themselves in dresses they like and create a "wish list" of items they would like to buy.

**Direct marketing**

The system will provide a direct marketing feature. This function will accept parameters such as frequency, location, price-point, etc. and generate a complete direct mailing. The generated mailing uses information from the sales and bridal information recording function.

**Web-accessible**

The system will be web-accessible from any store location on the chain's intranet. Optionally, a secure server may be utilized to provide access from outside the intranet. This feature provides the possibility of working from home and possibly expanding the chain by single-person "micro branches". These micro branches could be used for testing markets in other cities and countries before opening stores in those locations.

**Chain-wide and branch store access**

All functions of the system will be operable on a branch store (or for a particular branch store) or n the entire chain.

**Use Cases and User Context**

**Appointment Management**

**Make New Appointment**
Create an appointment. Specify Bride's information and time of appointment

**Cancel an Appointment**
Cancel an appointment by specifying the bride's name or date/time/location
Modify Appointment  
Change any part of an appointment, including date, time, contact information, assigned consultant etc.

Inventory Searches  

Search for Item  
Search for an item by specifying inventory number or a description.

Sales and bridal information recording  

Record Bride's Information  
Record information about a bride such as contact information and demographic information if available

Modify Bride's Information  
Modify information about a bride

Delete Bride's Information  
Delete information about a bride

Record Sales Information  
Record information associated with a, including the sales consultant, the items sold, the prices, the type of sale, the bride, and the appointment information

Customer Interface  

Create a Gift Registry  
Create a gift registry for the bride so that friends and family can buy gift items for the bride.

Add to the Gift Registry  
Add an item to the bride’s gift registry. Items may be selected from search results from the "Search for Item" use case.

Delete from Gift Registry  
Delete an item from a bride’s gift registry.

Upload Picture  
Upload a photo of a customer in the dress she likes

Delete Picture  
Delete a photo of the customer

Direct Marketing  

Generate Direct Mailing  
Generate a direct mailing using inputs such as frequency, location, price-point, etc.

Manager’s Interface
**Generate resource report**
Create a calendar listing booked and available consultants for storewide or inter-store resource management to help manage last minute changes to the appointment schedules by the customer.

**Generate Sales Forecast**
Create sales forecasting reports for managers.