**Video Presentation Script**

Introduction:

With modern requirements faced by utility providers to track the millions of households and businesses they serve, a large movement has been made to change the way companies store customer information. Gone are the days of high density file rooms, with their massive divisions of clerks and record keepers.

Present day customer management tactics rely on powerful databases on servers that require a fraction of the space and manpower to manage. This project offers a brief insight as to how these databases are designed to provide companies and customers with accurate data regarding services, and related accounting.

Entities

The main focus of this database is to provide the employee’s of utility providers to access and store data on their customers and the services they are provided with. These employee’s include general customer service representatives who require only a general overview of customer information; accountants who require only access to financial and billing information; and managers who require an overall view of their company’s transactions.

While the rate is set by the utility provider, a meter is used to record the utility usage over the course of a month. These meters are assigned to customers for each service they are provided via the account they are assigned. These meters all reside within a geographical region which are assigned an identifier and description.

All this information is combined to formulate invoices which are then delivered to customer’s, in addition to providing detailed information for employees.

Views and Procedures

Although there is a plethora of views that might be utilized by utility companies, it was determined that approximately five views made up the backbone of a successful utility provider database.

The first of these views are the accountant summary, which allows the accountant insight into the financial standings of a customer account. The accountant view provides the user with a brief customer description including the account number and balance, as well as information pertinent to mailing of invoices. This view also provides the accountant with a brief summary of invoices over the course of six months; an SLA that was laid out by the deign constraints. This invoice summary only provides the most pertinent information for account maintenance including invoice numbers, sub-totals, taxes, and invoice totals. This view only provides an at a glance view of each account, but the accountant can this information to dive deeper into an account.

This deeper dive into an account comes with the “Invoice View” which pools the data required to build an invoice. This information includes the invoice number, customer’s name, mailing address, line items, sub total, taxes, and totals. The line items are further broken down into the provider specified ID, a description, unit cost, quantity, and total line costs. This view will not only allow for employees of the appropriate company and position to view invoices, but will also allow for an automated system to generate and print invoices to be mailed to the customer.

An alternative view dubbed the “Customer Summary”, provides employees such as customer service representatives the ability to quickly access important information for a customer in events such as a customer calling in to settle a dispute. This view provides important customer data including the customers name, address, account balance, and contact information. This data is used as a header for the customers utility information including the meters tied to their accounts and the monthly usage recorded by these meters. This view also provides the invoice summaries for each month including the invoice number, sub total, tax, and total. All of the data in this view is organized to take into account the six month data retention laid out by the design SLA. While this view is a useful tool to employees, it can also be used to prepare a customer portal, in which customers will be able to confirm the validity of their own information, as well as view their monthly usage and invoice summaries.

This view can also be modified further, to remove the invoice information in an almost identical view called the “Customer Service Summary”. This view is for low level service employees such as technicians, who do not require any invoice information. This view allows the user to be able to find and service customers by providing a list of meters, the address they can be located at, and their usage for the most recent month. This information is integrated with the account number, customer name, and customer contact information. The decision was also made to provide the account balance in this view as well so that the user can determine if the customer is in good standing and meet their SLA for unpaid accounts.

The final view prepared, is the “Manager’s View” which provides a brief outlook on the big picture of the company’s operation. This view can be broken down into two portions; the first of which is the region performance. This region performance organizes data under the region name, to show the number of meters, average usage, total usage, average income, and total income for each region. The second portion of this view is outstanding balances, which allows for the quick overview of customers with outstanding payments. This section includes the customer name, account number, amount outstanding, the last payment amount, and the date of their last payment. This view will allow the manager to make appropriate decisions on things such as new infrastructure and customer cancellations.

Summary and Next Steps:

The design of a utility service provider’s database will vary between companies; however it is our opinion that a general backbone of data has been laid out within this assignment. Next steps for this project would be the general automation of data such as the pulling of usage from meters to generate financial data, the automatic halting of services to overdue accounts, and automatic conducting of invoices. Furthermore, further views can be constructed to allow a further tiered access to employees, and the meeting of any government reporting requirements.