CONNECTING THE CLASSROOM TO THE RETAIL SHOWROOM

Michael P. Bradley, Augusta State University
mpbradle@aug.edu

ABSTRACT

In teaching information systems, we know that we can tell the students, we can show the students, but it is better to let the students experience designing and running a system themselves. If the students design a system, it will, by necessity, be relatively basic. If the students run a system by putting data into a typical off-the-self package, the exercise may be more about data entry, than understanding information design and usage.

This paper discusses one approach that alleviates some of the above obstacles in teaching an accounting information systems course. This approach uses an almost exclusive hands-on project development that takes advantage of today's ability to link systems together in the classroom and link the classroom to business systems in the workplace.

INTRODUCTION

Today, most small or medium size retail operations use industry specific software from vendors that have developed systems on *Unix* platforms using a database like *Oracle* and now are producing *Windows* versions. Even before the *Windows* versions, generally the systems used a standard interface, (ODBC), to transfer data from a database like *Oracle* to an application such as *Excel* or *Access*. Most of the new versions have a direct link to *Microsoft's Office 97 or 2000*. Most of the "back office" analysis by managers and accountants are done on PC's connected to the server database and manipulating the data with *Excel*, *Access* or similar software.

The project reported on here lets the students have a hands-on experience of both designing a small version of a complex system and then actually seeing the real system, running it and linking data from the system to *Excel* or *Access*. The approach discussed in the paper uses a classroom assignment of designing a sales and inventory system for a retail furniture store. The students design their system using Microsoft's *Access* database. They use actual SKU numbers from the retail store and receive hypothetical but realistic sales and inventory data. The assignment emphasizes the importance of getting effective management operating reports from their system.

THE RETAIL INDUSTRY

Retailing provides a rich environment to use as an example of an information system for students. The students have all had extensive experience shopping for various consumer goods in a variety of retail stores. Many students have worked in retail stores and are familiar with some of the retail systems or at least with the point-of-sale register systems. The retail industry has lagged behind in some areas of information systems because of the many very small operations, but now even the small operations are computerizing their systems and using some of the larger retailers as guides in the development of these systems.

The retail industry provides virtually thousands of examples of actual systems to use as a classroom observation as each city has many retailers but may have only a few manufacturers. The retail systems must also provide detailed information on sales and inventories, expressed in familiar terms that students can understand and relate to.

THE FURNITURE INDUSTRY

The retail furniture industry was chosen for this project because the high ticket sales requires limited transactions to see how a real system works, yet there is a diversity in transactions that offer examples of the many intricacies required in designing a simple but effective system. For example, the writing of the sale on one day and the delivery on another complicates the recognition of the sale in accounting and requires a system that can distinguish a "marketing" sale from an "accounting" sale. This has the same effect on the valuation of inventory and complicates the tracking of inventory on-hand and available for sale.

The furniture industry is also undergoing a dramatic change in the available information systems with a variety of vendors now marketing their products to furniture retailers of all sizes. And each city probably has at least a few local furniture retail operations as well as some national chains as there are over 20,000 independent furniture dealers nationwide.

THE PROJECT

The students are given data in the same format as that used by a local retail furniture dealer. The structure of the data is important so that the students can see the importance of working the design around the client's existing data and reporting system. The assignment emphasizes the need to produce a system that will provide for the point-of-sale data entry and use that data to allow for an analysis of sales and control of inventory. The actual debit and credit of accounting data is ignored, as this an output from the system, not a function of the design. The reports from the system that will be used my management in running the business are used as a blueprint in determining the requirements for the system design.

The students design their system using Microsoft's *Access* database. They use the near actual data to test their system and to produce reports relating to one month's operations.

THE LINK

Typically, most server systems today allow for data exporting to PC spreadsheets or databases. It is this aspect of systems that are the most useful to operations managers as it allows for flexibility in the reports that they actually use in running the business. Linking data from one system created by the students to another application that they are familiar with allows the students to see how the input data can be manipulated to produce reports for specific decisions even though their design did not anticipate this use of the data. It also forces the students to change their design to include much more detail in their data as the attempt to produce reports in the desired format mat fail because their system collects the data at too high a level. This exercise shows the flaw of designing a system that follows the general ledger rather than the “business ledger”.

Another possible connection between the classroom systems and the actual systems in the industry is also possible. The classroom can be linked to the actual system in a retail store and the students may experience running the large system and getting standard reports from the system as well as designing their own reports using data transferred to *Excel* or *Access*. This is made possible because a typical system used in the retail industry has one "live" database that the company is actually using, and another training database that has virtually "actual data" but is used only to train new employees. Many companies may cooperate with an accounting program by allowing specified access to this training database by simply dialing into it through the classroom computer modem.

CONCLUSION

The paper discusses one industry specific retail program and how it can be used in adding realism to the accounting systems course. Other similar programs are on the market and contacts with the vendors can lead to various ways that will connect the students and the classroom to the actual stores and their systems.