

Case study analysis paper

Business



Hoosier Burger Case Analysis Michelle Lannon INF340 Business Systems Analysis Dr. Arman Kanooni November 1, 2010 Hoosier Burger Case Analysis In the journey of Business Systems Analysis, we have been examining the case of Hoosier Burger, which is proudly owned by Bob and Thelma Mellankamp. They contact our consulting firm initially due to some drastically needed changes. They purchased the business in college, were running it on a “ pen and paper” system, and have since grown and this system is not working for them anymore.

Our job is to put together a fully functioning information system that will allow them to keep track of orders, employees, inventory, growth, accounting and every aspect of their business that they need. We travel through 5 weeks of planning with them and the following are the findings and recommendations we have presented.

This course is based upon systems design and analysis. One part of systems design is systems development life cycle or SDLC for short. “ SDLC is central to the development of an efficient information system” (Valacich & Hoffer, 2009, p. 3).

SDLC has four different stages in its planning and development.

The four key parts are planning and selection, analysis, design and implementation (Valacich & Hoffer, 2009, p. 3). The steps can of course vary according to the goals of each organization. This would apply to the case of Hoosier Burger. Bob Mellankamp as noted is at this point, keeping track of everything by paper.

. He does purchasing, receiving, bookkeeping, stock, inventory, and tallies the receipts at the end of the evening. He is now noticing several errors, especially in relation to inventory control, customer ordering and management reporting systems (Valacich & Hoffer, 2009, p. 28). He has now decided he would like to have electronic access to these things as well as forecasting information, inventory usage, and basic sales information (Valacich & Hoffer, 2009, p. 28).

At this point the phases of the SDLC or is systems development life cycle, would be applied. There are four phases to this lifecycle which include systems planning, systems analysis, systems design and systems implementation and operation. Each of the four phases would include another piece to the puzzle of the information system to be built.

During the planning phase it is suggested to Bob that he would want some kind of point of sale system to capture all necessary data. This would replace his handwritten receipts and inventory logs. In the second phase, which is analysis; it is recommended that Bob and Thelma obtain a general ledger system, shipping and order entry, payroll, and a POS system for sales.

The second subphase would be the structure and correlation of how all of these systems would fit together. Then it is all generated into an output on which the system is built.

In the third phase- design, all of the recommendations are put into an actual logical and physical system specification. Finally in phase four it becomes an actual system for the business. These changes were implemented and Bob

and Thelma's business boomed. This then created an inventory and supply problem.

Stock is often out, sometimes enough is not ordered, and customers are suffering enormous wait times. The owner/managers have decided that a new information system is definitely needed and have expressed this to the development team that has been meeting. Project identification and selection consists of three primary activities: identifying potential developmental projects, classifying and ranking projects, and selecting projects for development" (Valacich & Hoffer, 2009 p. 94). In this situation, the project was identified and selected by the owner/managers and the development team.

This project is definitely identified towards particular business needs; inventory management, marketing, customer service and food preparation (Valacich & Hoffer, 2009 p. 128). The focus of this particular project is organizational.

The top management- Bob and Thelma- have identified that their weakest points are inventory, customer service, marketing, food prep, etc- all areas that require organization. We identify the projects scope, which would be getting the proper information systems in place to handle POS sales, inventory, customer tracking, marketing and employees. There should also be something in place for the food prep department, like a ticketing system that would let them know which orders are up next, what has been ordered ahead, etc.

The inventory system should be simple enough for everyone to use, flexible enough to move from system to system, yet complex enough to track what has been ordered what is needed, what costs are and all functions needed by management. We must also follow the six feasibility factors when developing this plan, which are economic, operational, technical, schedule , legal and contractual, political (Valacich & Hoffer, 2009 p. 101). Hoosier Burger will do fine as they meet each and every one of the feasibility factors with flying colors. At this point we are ready to move on in the development of the project, which is the research phase.

We decide to conduct formal interviews with both the staff and the customers.

We have decided that developing a customer satisfaction survey would be the best course of action to determining customer base. We come up with five questions for employees with things such as: How do you feel about the current organizational system at Hoosier Burger? And do you feel implementing a new organizational system would help or hurt the business? We also ask five questions of the customers with things such as How satisfied are you with the quality of the food at Hoosier Burger?

And how satisfied are you with the price of the food here at Hoosier Burger? Of course, in the research phase we do not just rely on customer and employee research but also other documentation as well. Additional documentation that could help with this process are things such as “ mission statements, business plans, organization charts, business policy manuals, job descriptions, internal and external correspondence, and reports from prior

organizational studies” (Valacich, George, Hoffer, 2009 p. 144). Written work procedures for all of the individuals are very useful.

Things such as emails could be helpful, but in reality would be very hard to obtain. Business forms would be helpful as well. During this time, Bob and Thelma are doing so well that they decide they are going to make some expansions to the business. They want to put in a drive through window, and they have purchased an adjacent lot next door in which to expand the restaurant. Their idea is to expand the seating area, add some additional items to the menu and they would like to add a delivery service to the surrounding area businesses.

As a consultant we have decided the best option at this point is to implement the changes that can be easily made to the existing building. They add the drive through and the delivery service. Of course these changes require us to make adjustments to the diagrams that were previously made for the plan. A good analyst will develop several context diagrams and data flow diagrams to illustrate how the flow of data will work. This is called process modeling and it begins with a context diagram, which then moves to a level 0 diagrams, then on to data stores. This process finally leads to conceptual data modeling.

A conceptual data model is a representation of organizational data. The purpose of a conceptual data model is to show as many rules about the meaning and interrelationships among data as possible” (Valacich, George, Hoffer, 2009 p. 206). This is important to note, because in this final phase Bob and Thelma have done so well that they have expanded the delivery service to local businesses. They allow these businesses to “ charge” large

orders to be paid once monthly. Bob and Thelma Mellankamp have asked that we develop a type of tracking system for their repeat business customers.

They have several customers that have businesses and charge large orders to be paid once monthly. Through the use of data modeling and a good database, this would indeed be a possibility. We would start this process with an E-R diagram, which is an entity-relationship diagram. “ An entity is a person, place, object, event or concept in the user environment about which the organization wishes to maintain data” (Valacich, George, Hoffer, 2009 p. 213). Some types of entities that Bob and Thelma would need are things such as Sale, Account,

Product and Invoice.

Each entity identified must also have a set of attributes as well. “ An attribute is a property or characteristic of an entity that is of interest to the organization” (Valacich, George, Hoffer, 2009 p. 215). These could be things such as order number, account number, product number, and quantity. From here, we must give each of our new entities an identifier.

“ An identifier is a candidate key that has been selected to be used as the unique characteristic for an entity type” (Valacich, George, Hoffer, 2009 p. 15). These could be things such as name, order number, product number and employee id. Finally, we would take all of this information and develop a final data diagram with it that might look like this: Sellsincludes Sells
Is_included_on Is_sold_on Is_received_for Is_ordered_on Received_on Bob
and Thelma Mellankamp bought Hoosier Burger in the 1970’s while they

were still in college. They began with basic burgers, fries and shakes in a tiny little business. They began by doing things by hand on pen and paper.

They quickly realized they could no longer do this when their business took off. Over our time with them we have watched them expand even more. Their items now include such things as grilled chicken, barbecued ribs, steak and many different side items. They have business customers now as well with billing accounts. They have expanded their business and created a drive through and delivery service. None of this could have ever been possible for them if they had not come to that initial realization that help was needed.

If they had not been open and accepting of, and actively looking for an information system improvement, they would still be back on burgers, fries and shakes. Information systems and technology, as well as good food helped them make the much needed improvements and helped their business flourish and grow.

References Valacich, J. S. , George, J.

F. , & Hoffer, J. A. (2009). Essentials of Systems Analysis And Design (4th ed.

). Saddle river, New Jersey: Pearson Education Inc. ————— Account

Account Number Item Sale Inventory item Recipe Product Employee add in
sale Invoice item