Improving Process Flow in The Oasis and Integrating A New Deli

Introduction

The Oasis, an entertainment complex in Funton, is facing flow problems at the ticketing and concession areas. You believe that customers wait too long in lines, creating displeasure, and that these lines of customers cause congestion at the entrance to the complex, making the complex unattractive to entering customers. Also, a new water park will soon be opened across town, and you believe that it may draw some customers away from The Oasis. Hence, you decided to acquire the delicatessen adjacent to The Oasis to expand the business, and you now need to efficiently integrate it into the complex. Therefore, you wanted to know how to change the indoor layout, improve services and customer flow, and efficiently integrate the deli, so that your customers may relax and have fun without spending time waiting in lines.

Our team at EnginPlans will gather available information to examine the current operations, flow, and layout in The Oasis and in the deli. We will analyze them, develop two recommended layouts for The Oasis, and propose changes in signage, employee reallocation and operating structure to improve services and customer flow. We will also develop an integrated plan detailing how the deli will be efficiently merged into the current operations, including two proposed layouts for the deli. This proposal presents our plan for this project, including a detailed action plan and timeline.

Background

The Oasis is an entertainment complex in Funton, owned by you, under the title of Oasis Properties. To stay above upcoming competition from a new water park to be opened soon across town, you decided to purchase Lunch-in, a deli adjacent to the complex. However, both of these facilities are currently facing process flow problems. Tickets for all attractions in the complex are only available at the entrance, and there are no clear directions where to go. Thus customers to the Oasis face long queue wait times, congestion and confusion at the entrance. At the deli, there are no directions about forming lines, the seating layout is disorganized, while the ice cream and sandwiches are sold at a separate counters. Thus, customers to the deli face several inconveniences such as disorderly lines, a lack of clear walkways, and having to pay at multiple payment booths.

The Oasis is intended to be a place offering exciting entertainment options and a place to spend the afternoon or evening. Customers should be relaxing and having fun rather than spending their time in lines. Thus, operations in the complex must be efficient and customer-friendly. To do so, you want to solve the current flow problems, integrate the deli into The Oasis, and make the new integrated complex efficient.

Goals and Objectives

The primary goals of this project are to reduce congestion, confusion and wait times at ticketing counters and the deli, and to integrate the new deli into The Oasis in an efficient and appealing manner. This is to allow customers to relax and have fun without spending

time waiting in lines. To achieve these goals, our team will first determine the current state of congestion, wait times, and customer satisfaction, examine the flow and layout at The Oasis and the deli. With this information, we will develop recommendations, which may include:

- Decentralizing the centers of activity in the complex
- Establishing a simple, comprehensible flow for customers, with signage
- Reassigning employees to different tasks
- Designing two efficient layouts for The Oasis
- Designing two efficient layouts for the deli, with added seating capacity
- Developing and regulating an efficient customer flow system in the deli
- Simulating these changes on Pro Model to estimate the reduction in customer wait times

Project Scope

The scope of this project will include analyzing and making recommendations on how to operationally alter the flow of the customers in entrance and ticketing areas inside the complex. This project will not include improving the processes outside the complex, or in the game room within the complex. It will include practical concerns, but not strictly aesthetic considerations, in redesigning the layout. It will also not include ideas to bring in more revenue or create more attractions in the complex. Also, this project will not include developing a business plan for the deli in terms of making it an attraction in the complex.

Methods

To determine the areas for improvement in the current flow of operations, and identify the confusing or inefficient areas, we will collect and analyze quantitative and qualitative data by observation, and interview the deli owners. We will also require your assistance to provide us with customer volume, ticketing wait times and customer satisfaction data. We will later analyze the data, develop at least two possible layouts, and develop recommendations for the project.

Data Collection

Observing current state at The Oasis

We will send a survey team to The Oasis seven days a week for a two-week surveying timeframe to visually observe operations, to note the sources of confusion at the ticketing area, the reasons for long wait times, the severity of congestion and possible alternatives to the current system. The survey team will also conduct time studies on operations.

Observing current state at the deli

During the two-week timeframe, we will also send our survey team to conduct time studies in the deli. This will include manually timing how long customers wait to be served and subsequently, wait for their food, for different parts of the day. We will also personally make trips to the deli to observe the current layout, the flow of customers through the deli, and the patterns of demand at each counter and the seating area.

Interviewing deli owners

We will make an appointment with the deli owners to obtain their opinion on the roots of existing problems and possible solutions. Also, we will need to ask them about the current patterns of customer patronization and the current flow of customers through the deli.

Obtaining wait time and customer satisfaction data

We will need to obtain from you data that you have previously collected on The Oasis. Specifically, we need the Excel spreadsheets with the number of customers per day, the time customers spend in line for each type of ticket, and the time customers spend waiting for food at the concessions, for January 2005 to July 2005. We would also like to have a ratings and qualitative summary of the customers' written surveys you have previously collected.

Analysis and Recommendation

Methods of wait time analysis

We will analyze the results from a Six-sigma perspective, where the maximum acceptable customer wait time in any line is three minutes. We will model the data according to a normal distribution, find the expected percentage of defects, where a defect is a case where wait time is longer than three minutes. We will then use process capability tools and stratification methods to identify the more significant causes of the problem that should be targeted. Following that, we will recommend changes to improve and control the process, and calculate a potential defect percentage if the recommended changes are implemented.

Methods of layout analysis

Also, we will use collected data to run a simulation in Pro Model, on the interaction between layout and process flow, in the deli and the complex. This will help us identify the root problems for the congestion. Following that, we will develop two new layouts, make recommendations, and assimilate the recommended changes into the simulation model to predict the new state of operations. This predictive model will be presented to you upon completion.

Deliverables

Upon project completion, we will provide The Oasis with the following tools to reduce congestion and customer wait time, and integrate the deli efficiently, thus allowing customers to relax and have fun.

- Two alternative floor plans for The Oasis and our recommendations for one
- Two alternative floor plans for the adjacent deli, including the arrangement of additional seating in the deli, and our recommendations for one
- A path of customer flow through the complex, including the locations of signage
- Written procedures for the ticketing and concession sales process
- Written procedures for the structure of operations at the deli
- A plan for integrating the concessions and deli menu
- A written report detailing current process flow times, explaining recommended changes, and presenting potential expected customer wait times.
- A predictive simulation model on Pro Model, predicting the potential process flow if the recommendations were implemented.

Proposed Action Plan and Timeline

If this proposal is approved as is, we will complete this project by December 24, 2005, and perform the following key steps during the time frames listed below.

Task	***Timeframe***
Receive project approval	By October 25
Observe current operations, survey customers	October 26- November 4
Obtain data, interview deli owners	November 5- November 11
Analyze data collected	November 12- November 24
Develop recommendations, layout and plans	November 25- December 8
Perform simulations of recommended changes	December 9- December 15
Deliver final project report, procedures, plans and layouts	By December 24

Investment Considerations

We will perform the project described in this proposal for $39,000 payable according to the following schedule:

$9,000 due on project approval
$5,000 due on survey approval
$15,000 due on completion of on-site data collection and surveying
$10,000 due on project completion

The sum of $39,000 will be allocated as follows:

Cost components	***Amount***
150 hours of surveying at $20/hour	$3,000
30 hours of time studies at $100/hour	$3,000
Six-sigma and simulation modeling costs	$15,000
Executive consultation fees	$8,000
Other project fees	$10,000
Total	**$39,000**

Should Oasis Developers at anytime during the project, request changes to the project scope or deliverables, Oasis Developers and EnginPlans will discuss how these changes should impact project fees. The changes will then be documented and sent to Oasis Developers for approval.

Project Team and Experience

Our team at EnginPlans has experience in process flows, queuing systems, facility planning and simulation. We work regularly on improvement projects for medium and large scale companies in the entertainment and food and beverage industries, bringing about greater customer satisfaction and improving revenues by $20 million to $200 million per year. For example, we recently completed a similar project with Disney's "Wet and Wild" water park management division, where we solved congestion and wait time problems at the ticketing entrance and food establishment areas. Upon implementation of our recommendations, Disney observed increased revenues of $180 million per year, cost reductions of $150 million per year from fewer customer complaints and lost sales, and vastly improved customer satisfaction feedback. We are thus advantaged by the experience we have gained from working on such past projects, and we hope to lead your project to similar or better success.

Conclusion

You would like to make the process flow at The Oasis more efficient, and reduce ticketing wait times. Therefore, our team at EnginPlans will collect and analyze data from the complex, and develop recommendations for reducing congestion and confusion. We will also analyze the current state of operations at the deli you are acquiring, and suggest a way to integrate it efficiently into the complex. Upon project completion, we will produce two proposed layouts for the new integrated complex, and detailed recommendations on the process flow to be implemented. Successful implementation will decrease ticketing wait times, improve efficiency, make the complex attractive, and allow greater customer satisfaction from relaxing and having fun.