Talha Vawda

IT PAT

Phase 1

Grade 12 (2017)

Adventure Land

Amusement Park

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Problem Statement

Adventure Land is an Amusement Park situated in the Durban area. They have approached me to research, design and develop a software application that will efficiently manage ticketing, information, and administration activities at Adventure Land.

The current manual paper-based system is inefficient. It is time consuming, difficult to work with and prone to human error. There are no backup facilities available in case of theft or loss of data.

The software application that I propose to develop for Adventure Land will provide relevant information, process ticket admissions, and manage Rides and Staff Information.

My proposed electronic system will not only be more efficient and secure than the paper-based system but it will also be user-friendly, easy to edit, and will save time. It will minimise user input, display up-to-date data, and incorporate proper documentation and backup facilities.

There will be three types of users: visitors, employees and the manager (administrator). The visitor will only be able view the ride and park information and provide feedback. The employees can process tickets and view the ride and park information whilst the manager will have full access to the system where he can view, add, update or delete staff and rides information. The employees and management will have password-controlled accounts as a security measure.

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Word Count: 202

Report

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Introduction

I have been approached by Adventure Land, an amusement park situated in Durban, to develop a software application to efficiently manage ticketing, information, and administration activities at the park.

This report contains the findings of the research that I have conducted. My research has allowed me to identify the major problems in the current system and has provided me with insight and ideas of how I should go about developing my software application for Adventure Land to address the problems in the most efficient manner.

I first interviewed Peter Smith, the manager of Adventure Land, to get an insight into how the current management system operates and what is required of the new electronic system. The different types of users for the application and their roles were discussed.

Upon investigation, I found the current manual paper-based system to be inefficient. It is time consuming, difficult to work with, and prone to human error and theft. There are no backup facilities available in case of theft or loss of data.

I then conducted a survey with 25 staff members of Adventure Land who are potential users of the proposed electronic system to find out their opinions on the current system and what they would like from the new electronic system that will be implemented.

Lastly, I did some Internet Research to get some ideas for the application that I will develop. I found similar theme-park management systems and database structures.

I will use the findings of my research to design and develop a software application for Adventure Land that will provide relevant information, process ticket admissions, and manage Rides and Staff Information and Times.

My proposed electronic system will not only be more efficient and secure than the paper-based system but it will also be user-friendly, easy to edit, and will save time. It will minimise user input, display up-to-date data, and incorporate proper documentation and backup facilities.

Summary of Report

Extensive research was conducted by me using the following 3 methods: Internet, Interview and Survey.

My findings are summarized below.

Research Method 1: Interview

On the 11 February 2017, I interviewed Peter Smith, the manager of Adventure Land Amusement Park, to get an insight into how the amusement park operates and what he requires for the proposed computerised system. The different types of users for the application and their roles were discussed. This interview shed light on the inefficiency of the current paper-based system and it also helped me deduce the user-requirements for each type of user.

The current system is not very organised in the manner in which it stores information. All information is stored in a filing cabinet and no backups are made. The Ticket Admissions process is time consuming, prone to error and susceptible to theft.

There are different types of users for the electronic system who will have access to certain functions of the application and will be restricted from using others. This will be achieved by having password-controlled accounts.
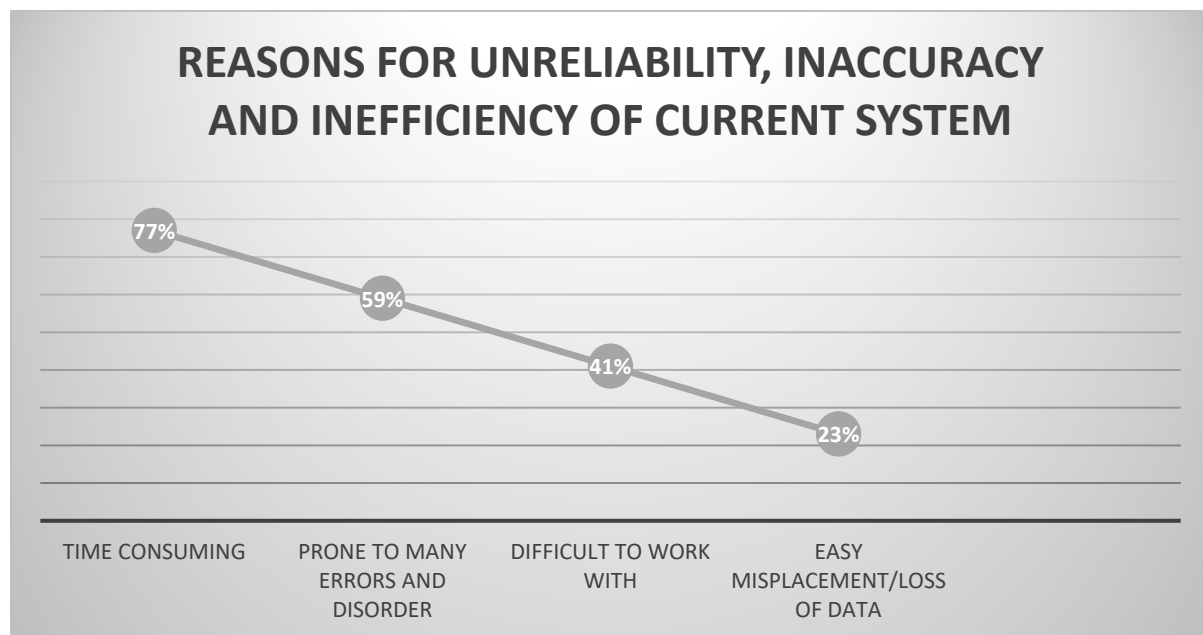
Mr Smith wants an application that will rectify all the issues faced with the current system and has requested that the proposed software application should be able to generate statistics and reports, and allow visitors to view information about the park and provide feedback.
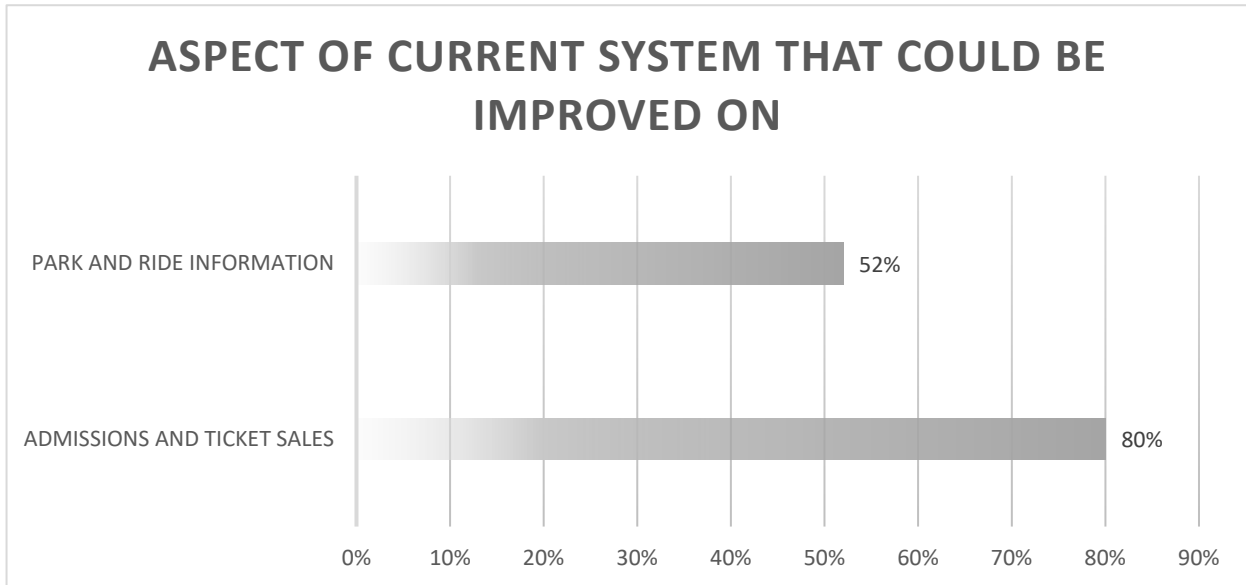
Research Method 2: Survey

I conducted a survey with 25 members of Adventure Land who will be potential users of the proposed electronic system. I was able to gather useful facts about what the users liked and disliked about the current system and what they wanted the new system to be like so that I can design and implement a system that all the users shall be happy with.

The information that I gained from the survey will help me to determine the type and complexity of the application that I should develop and the key areas that I should focus on for improvement so that the application is reliable, efficient and accurate.
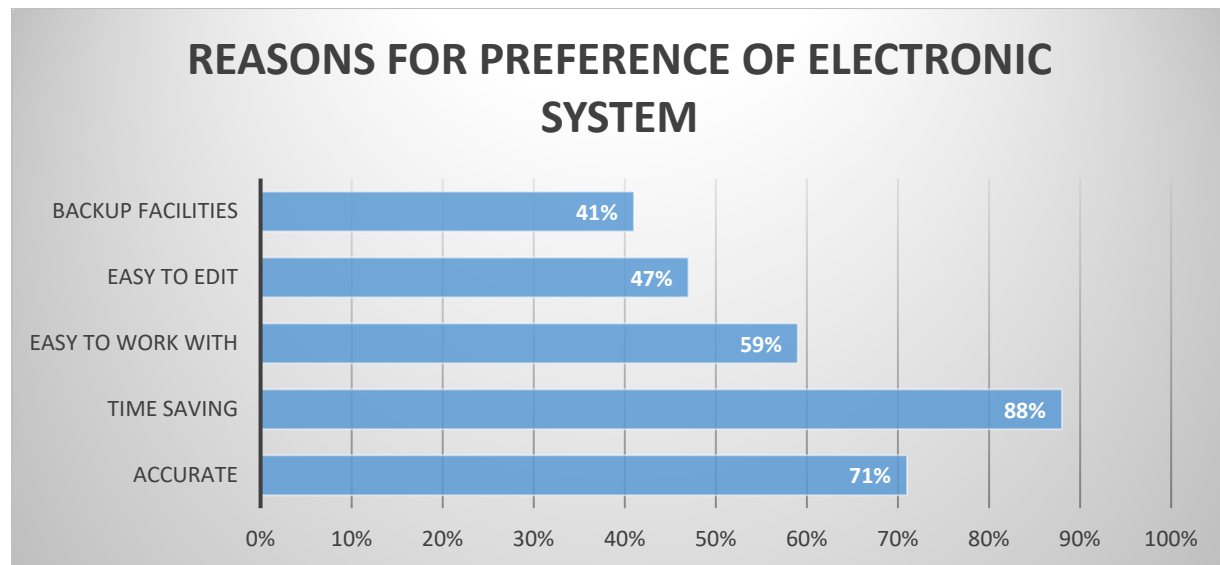
Majority of the staff use the current system on a daily basis. 72% of staff said that the current system is inefficient; mainly because it is time consuming and prone to errors.

REASONS FOR UNRELIABILITY, INACCURACY AND INEFFICIENCY OF CURRENT SYSTEM

77%

59%

41%

23%

| TIME CONSUMING | PRONE TO MANY ERRORS AND DISORDER | DIFFICULT TO WORK WITH | EASY MISPLACEMENT/LOSS OF DATA |

The aspect of the current system that need the most improvement is Admissions and Ticket Sales. 80% of staff who are involved with Admissions and Ticket Sales say that it can be improved because the current method of processing tickets is time consuming and leads to many errors.

ASPECT OF CURRENT SYSTEM THAT COULD BE IMPROVED ON

PARK AND RIDE INFORMATION	52%
ADMISSIONS AND TICKET SALES	80%

0%　10%　20%　30%　40%　50%　60%　70%　80%　90%

As a result of the majority of the staff being computer literate, 68% of them support the idea of an electronic, computerised system. The main reason why they would prefer the electronic system is because it is time saving. However, according to the staff, an electronic system is also be accurate, easy to work with and edit, and incorporates backups.

REASONS FOR PREFERENCE OF ELECTRONIC SYSTEM

BACKUP FACILITIES	41%
EASY TO EDIT	47%
EASY TO WORK WITH	59%
TIME SAVING	88%
ACCURATE	71%

0%　10%　20%　30%　40%　50%　60%　70%　80%　90%　100%

Due to most of the staff members being computer literate but not computer experts, they have opted for a more basic application over having many features. They also prefer a practical and functional design over an attractive design.

GRAPHICAL USER INTERFACE DESIGN
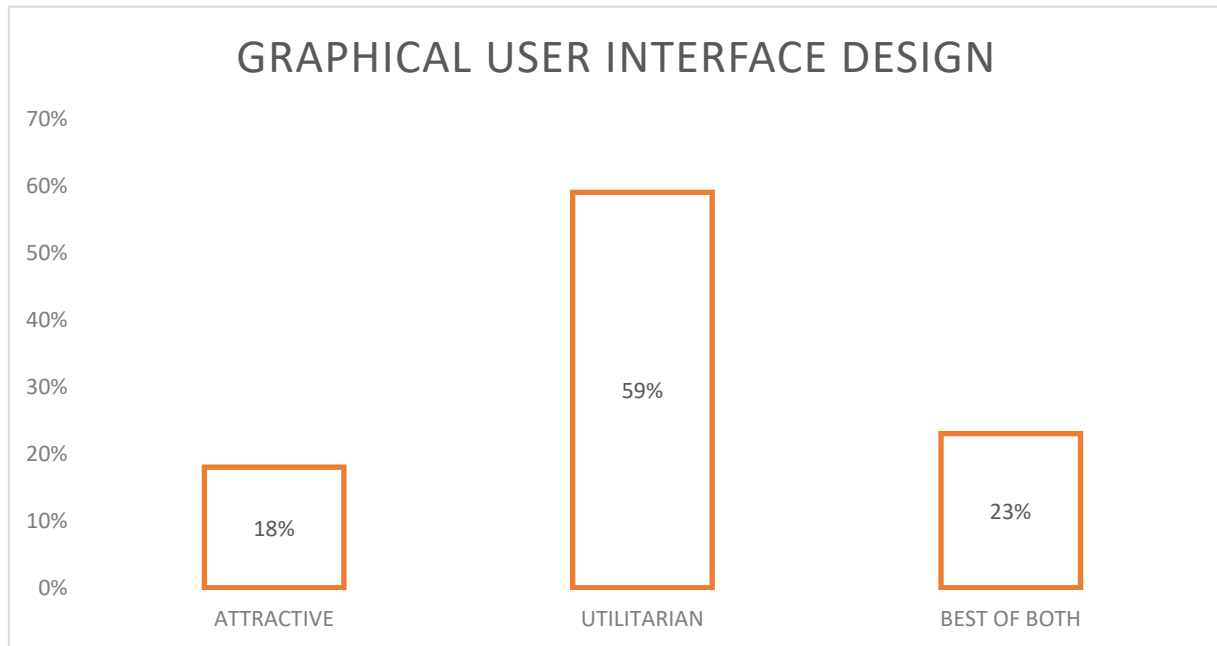
Research Method 3: Internet Research

For my Internet Research, I looked up other amusement parks and database structures for amusement parks.

Adventure Land is an amusement park and, from my interview, it incorporates a Pay-As-You-Go Admission System

<u>Pay-as-you-go Admission type -</u> In amusement parks using the pay-as-you-go scheme, a guest enters the park at little or no charge. The guest must then purchase rides individually, either at the attraction's entrance or by purchasing ride tickets (or a similar exchange method, like a token). The cost of the attraction is often based on its complexity or popularity. For example, a guest might pay one ticket to ride a carousel but four tickets to ride a roller coaster.

I found an example of Staff Information. Light colours are used in the design. It is a good design. All the personal info of a staff member is there. I will be using a similar design in my layout. It is easy to convert data from this screen into a database as data is atomic


This is an example of Staff Records. It can be used by any company.

The screen is uncluttered and simple. Light colours have been used that is pleasing to the eye

This is a very good example of a database structure for an amusement park. The relationships between the tables are shown.
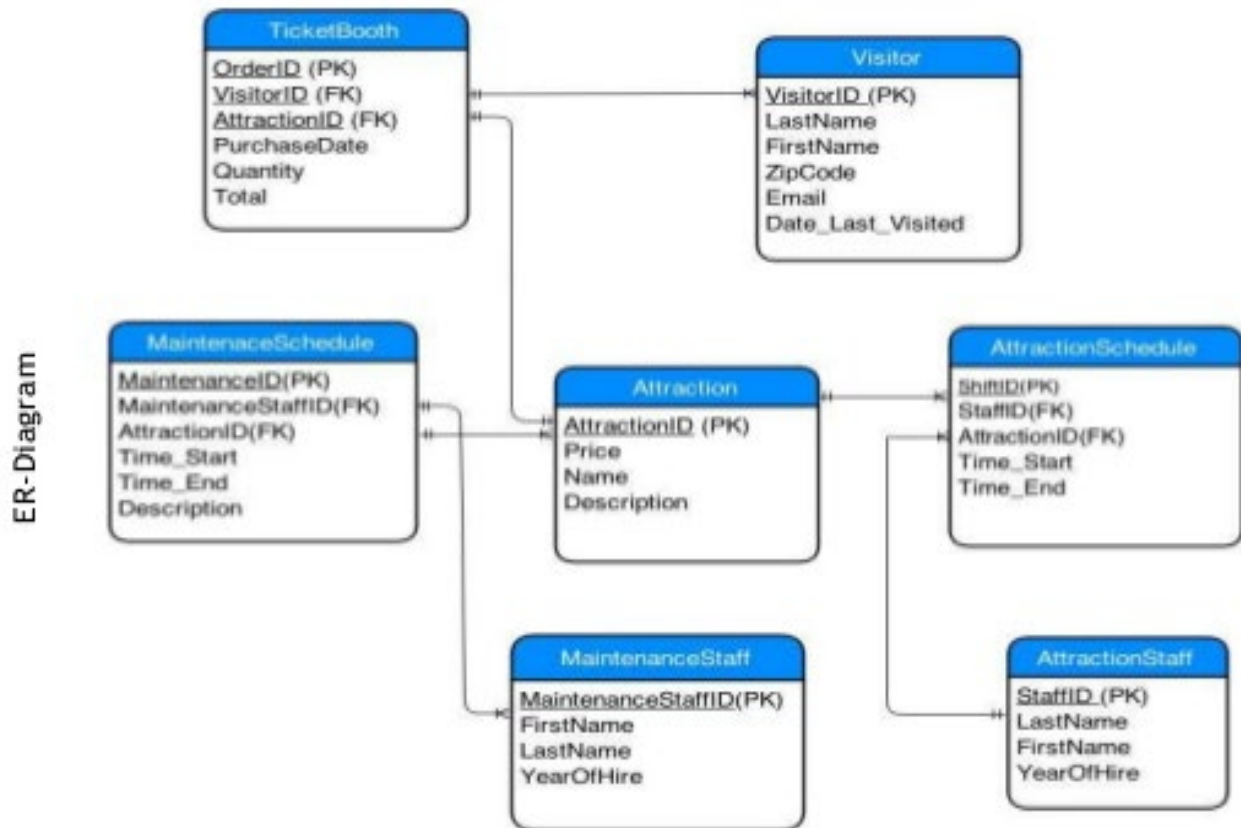
This is The Theme Park Guide for Gold Reef City. All the rides and points of interest are indicated and there is a key on the right hand side. This map is colourful and appealing. The colours stand out. Different sections of the park have been colour-coded.
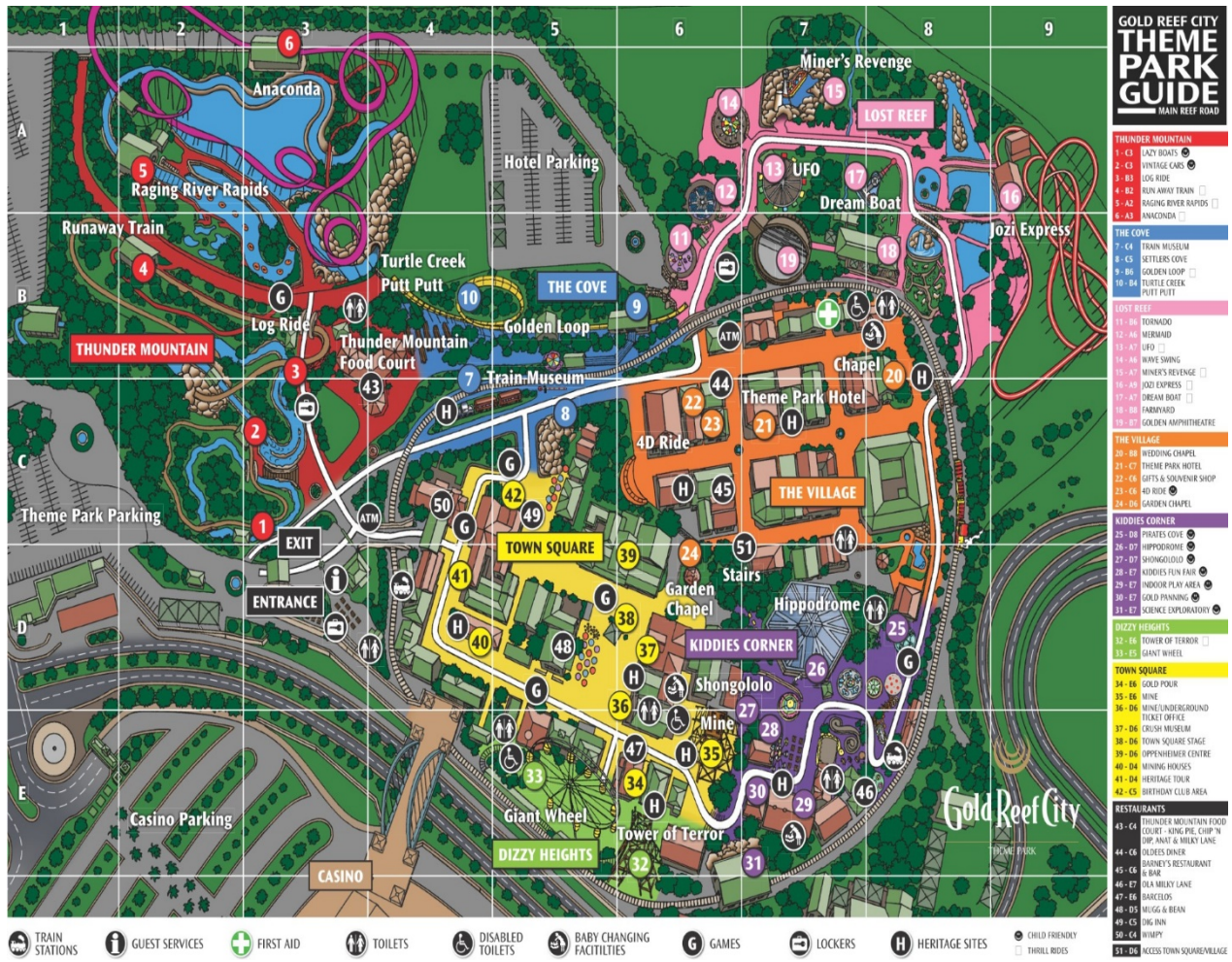
This is the information screen for Gold Reef City. Besides giving a brief description and the height restriction of the ride, it even gives a Fear Factor – a rating about how thrilling the ride is. The screen has a simplistic design and is easy to read.

The information screen is simplistic and easy to read.

There is even a ratings for the rides – called the 'Fear Factor'

This is the Information Screen for Ushaka Marine World showing the Rates and Times. It has been designed very well. The screen looks attractive and appealing to a visitor. Bright colours were used to make the screen stand out.

The bright colours will look attractive and appealing to those looking at it.

User Requirements

Role, Activity, Requirements and Limitations

<u>Administrator</u>

ROLE	Manage the park, staff and rides
ACTIVITY	• Login • Manage Staff (Admin + Employee) Information ➢ View staff information ➢ Update staff information ➢ Add staff ➢ Remove Staff • Manage Ride Information ➢ View ride information ➢ Update Ride Information ➢ Add Rides ➢ Delete Rides • View Report and Analysis ➢ View Sales ➢ View statistics (revenue etc.) ➢ View Feedback/Ratings ➢ View graphs • View and edit amusement park details ➢ Update Ticket Prices ➢ Update Park Information ➢ Update Park Times
REQUIREMENTS	• Password-controlled account • Full access to all staff and ride details • Administrative tools to view Report and Analysis
LIMITATIONS	• Doesn't have the ability to generate tickets • Cannot provide park feedback

Employee

ROLE	Generate tickets and view park details
ACTIVITY	- Login - Generate entrance tickets - Generate rides tickets - View Ride Information - View amusement park details
REQUIREMENTS	Password-controlled account
LIMITATIONS	Limited access - Cannot view and edit other - Staff Information - Cannot edit Ride Information - Cannot access reports and analysis - Cannot provide park feedback - Cannot edit park information

Visitor

ROLE	View information about the amusement park and provide feedback about the park
ACTIVITY	- View information Screen - View Amusement Park details - View Ride Information - Provide feedback about the park - Rate the rides
REQUIREMENTS	Ticket number
LIMITATIONS	Limited access - Cannot view and edit staff information - Cannot edit Ride Information - Cannot access reports and analysis - Cannot Generate Tickets - Cannot edit park information

Use Case Diagram

Visitor

Employee

Administrator

Login

View Ride and Park Details

Provide Visitor Feedback

Generate Tickets

View Staff Information

Update Staff Information

Add staff members

Delete staff members

Update Ride Information

Add Rides

Delete Rides

Update Park Details

View Visitor Feedback

View Reports on Admissions and Ticket Sales
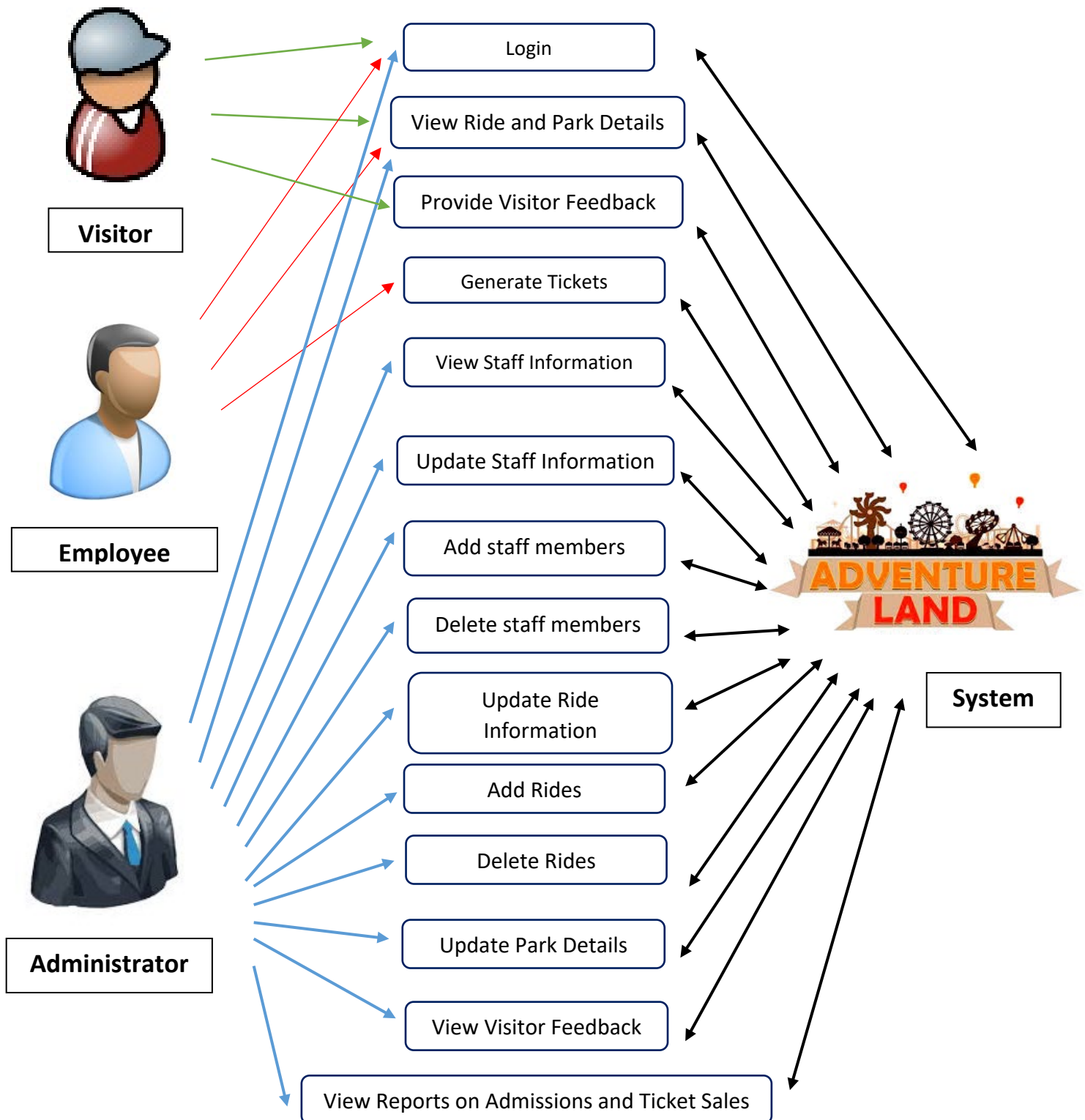
System

Conclusion

After doing research for an electronic amusement-park management system, I have produced this report. My report analyses the research I conducted in order to gain valuable information so that I can develop a suitable software application for managing Adventure Land. This report also includes my plans and User Requirements for the proposed electronic system.

I used three research methods: an Interview, a Survey and Internet Research. The interview was conducted with Peter Smith, the manager of Adventure Land and the survey was conducted amongst 25 staff members of Adventure Land who will be potential users of the proposed electronic system. My research has exposed the problems with the current system and I will develop a software application to rectify them.

The current manual paper-based system is inefficient. It is time consuming, difficult to work with, and prone to human error and theft. There are no backup facilities available in case of theft or loss of data.

I will use the findings of my research to design and develop a software application for Adventure Land that will provide relevant information, process ticket admissions, and manage Rides and Staff Information.

My proposed electronic system will not only be more efficient and secure than the paper-based system but it will also be user-friendly, easy to edit, and will save time. It will minimise user input, display up-to-date data, and incorporate proper documentation and backup facilities.

There will be three types of users: visitors, employees and the manager (administrator). The visitor will only be able view the ride and park information and provide feedback. The employees can process tickets and view the ride and park information whilst the manager will have full access to the system where he can view, add, update or delete staff and rides information. The employees and management will have password-controlled accounts as a security measure.

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    http://www.ushakamarineworld.co.za/wet-n-wild. Last accessed 16 February
    2017.

Appendix

Evidence of the research that I have conducted:

Research Method 1: Interview

Interviewer: Talha Vawda (TV)

Interviewee: Peter Smith (PS)

Occupation: Manager at Adventure Land

Date: 11 February 2016

Time: 11:00

Venue: Adventure Land Amusement Park

Contact Details of Interviewee:

Name: Peter Smith

Address: 31 Smith Street

                   Durban

                   4001

Telephone: (031) 206 3522

Cellphone: (075) 563 5235

E-mail: manager@adventureland.co.za

TV	Good morning Mr Smith. How are you today?
PS	I'm well, thank you.
TV	Thank you for taking time out to chat to me today.
PS	No problem. It's a pleasure.
TV	I would like to speak to you about the current management system in place at Adventure Land and how it operates so that I know how I should develop the electronic system that you requested for the amusement park
PS	Where would you like to start?
TV	Can you mention to me all aspects of the current management system in place at Adventure Land?
PS	There are two aspects in the current system. They are Staff Applications and Management, and Ticket Admissions.
TV	How do you manage staff applications?
	Job seekers who wish to join Adventure Land will have to fill out an application form containing all their details. I then interview them and, if they are employed, I will store their application form in a filing cabinet. If there are any changes to be made, I make the changes on the form.
TV	Are backups of staff details made in case of any accident or theft?
PS	Err…no.
TV	How does the Ticket Admissions aspect work?
PS	Adventure Land incorporates a pay-as-you-go admission system where the visitor pays an entrance fee to enter the amusement park. The visitor then has to purchase ride tickets to go on rides or watch shows.
TV	Can you explain this further?
PS	The visitor will first go to the Ticket Office at the entrance of the park. The visitor will pay the cashier for their entrance ticket. The visitor will then proceed towards the entrance gate. If visitors are in a group, the head of the group will tell the cashier how many people are in the group and their age-categories. The cashier will then manually calculate the total cost for the group

	and will then tear out entrance tickets from the ticket roll and will hand it to the visitors.
	The ride tickets are like tokens and are used to go on rides or watch shows. The admission fee for a ride will cost a certain amount of tickets. Visitors can purchase ride tickets at the Ticket Offices either at the entrance or inside the park. The cashier will then have to manually calculate the cost for the tickets.
TV	How are the tickets made?
PS	A ticket template was created out on the computer and a batch is printed out. When the tickets run out, another batch of tickets is printed.
TV	So I take it that all the tickets are the same? There is no unique identification?
PS	Yes.
TV	I will be conducting a survey amongst the staff members but I want to know from you if you have any issues with the current system.
PS	Yes, I do experience problems. That is why the Park Directors approached you to replace our current system with a computerised one.
	Firstly, I feel that the current manual paper-based is outdated. We are living in the twenty-first century and everything has become computerised. We need to move with the times.
	Secondly, the current system is time consuming, error prone and has become difficult to work with, especially with Ticket Admissions. It is time consuming for ticket staff to calculate the entrance fee when there are many people in a group with different age categories and errors are bound to be made. If ticket prices change or if there are specials on, the ticket staff may forget and use the old prices.
	Lastly, I feel that some ticket staff are stealing money. The ticket staff refuse to record the number of tickets sold because, according to them, it is too difficult and time wasting to record each time a visitor buys tickets. Therefore, the only

	way to find out how many visitors entered the park and number of ride tickets issued is to count the number of tickets printed out and the number remaining. However, the staff can print out one batch of tickets and photocopy them to make more batches instead of printing out the batches too make it seem as if fewer tickets were printed out.
TV	The software that I will develop will allow the ticket staff to enter the number of visitors and their age category. The application will calculate the cost of the tickets and will print out unique tickets for the guests. It will save time, minimise errors and will curb theft.
PS	That's good news!
TV	Do you want the same aspects that are part of the current system to be included in the computerised system?
PS	Yes. The manager should be able to add staff and update staff information. The ticket staff should be able to process tickets. I would also like some additional functions of the computerised system. All staff members must have access to the system to view ride and park information. Also, information about the number of people that visit the park and the number of tickets sold will also be useful.
TV	Yes, statistics and reports are vitally important to future planning. How about if visitors can also access the application to view information about ticket prices, rides and shows. Maybe they can even provide feedback and rate the rides.
PS	Yes, that's a great idea!
TV	You've already told me about the potential users of the proposed system and what they should be able to do. I was just going to ask you that! Anyways, I was thinking about implementing User Access Rights and Restrictions. That means there will be different types of user accounts and they will be password controlled.
PS	I agree with you. Anyone can't have access to all parts of the application as this will result in problems. Users should only have access to what they need to do.
TV	Thank you Mr Smith for your time and the valuable information that you have shared with me today. I'll try my best to rectify all the problems in the current

	system when I develop the new computer system and I'll make it as efficient as possible. I apologise for the inconvenience. Have a nice day.
PS	It was a pleasure chatting with you. I have faith in you that you will be able to develop the computerised system for Adventure Land. Goodbye.

_____   _____

Talha Vawda (Interviewer)   Peter Smith (Interviewee)

Research Method 2: Survey

As part of the research and analysis for the proposed system, and with information about the current system that I obtained from the Interview, I conducted a survey with 25 staff members who are potential users of the electronic system to find out their opinions on the current paper-based management system at Adventure Land and what they would like from the new electronic system if it is implemented. A few pertinent questions were posed. I requested them to answer the questions as honestly as possible and these are the questions that I posed:

Question 1: How often do you interact with the current system?

- □ Always (All the time)
- □ Regularly (Multiple times a day)
- □ Occasionally (Once or few times a day)
- □ Rarely (Not on a daily basis)

|	
5	20%
7	28%
11	44%
2	8%
25	100%
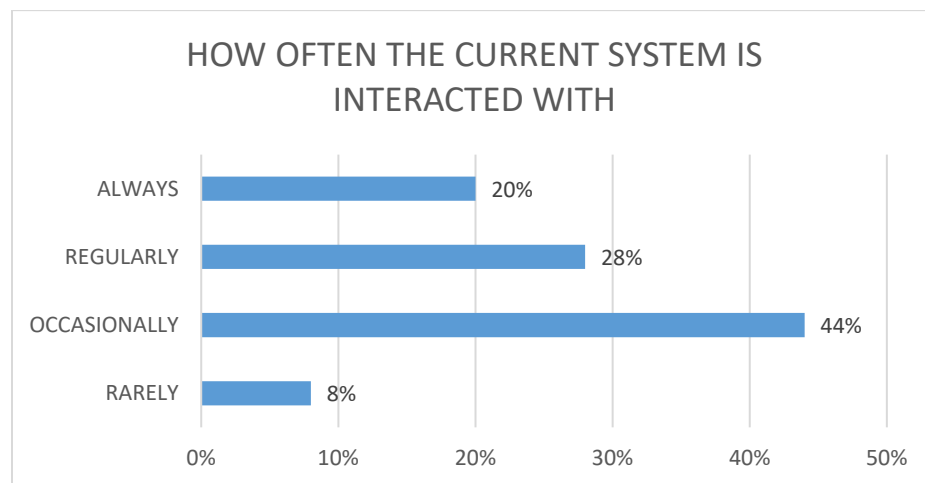
92% of all staff members at Adventure Land use the current system on a daily basis whilst only 8 % don't use the current system on a daily basis. The 92% is comprised of 20% who are constantly engaged with the current system, 28% who use it frequently during the day and 44% who use it a few times during the day.

Question 2: Is the current system reliable, accurate and efficient?

□ Yes
□ To some extent, Yes
□ No

If Yes, skip to Question 4

3	12%
4	16%
18	72%
25	100%

RELIABILITY, ACCURACY AND EFFICIENCY OF CURRENT SYSTEM

|	YES	TO SOME EXTENT, YES	NO
	12%	16%	72%
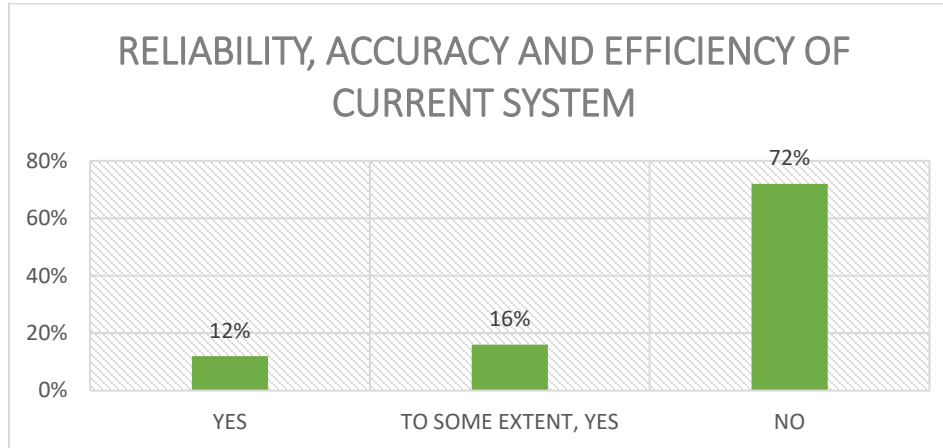
72% of staff are of the opinion that the current system is definitely unreliable, inaccurate and inefficient. 12% believe that the current system is reliable, accurate and inefficient. 16% say that it is not completely reliable, accurate and efficient.

Question 3: Why is the current system unreliable, inaccurate or inefficient?

- ☐ Time consuming
- ☐ Prone to many errors and disorder
- ☐ Difficult to work with
- ☐ Easy misplacement or loss of data and information

17	77%
13	59%
10	45%
5	23%
22	100%

REASONS FOR UNRELIABILITY, INACCURACY AND INEFFICIENCY OF CURRENT SYSTEM
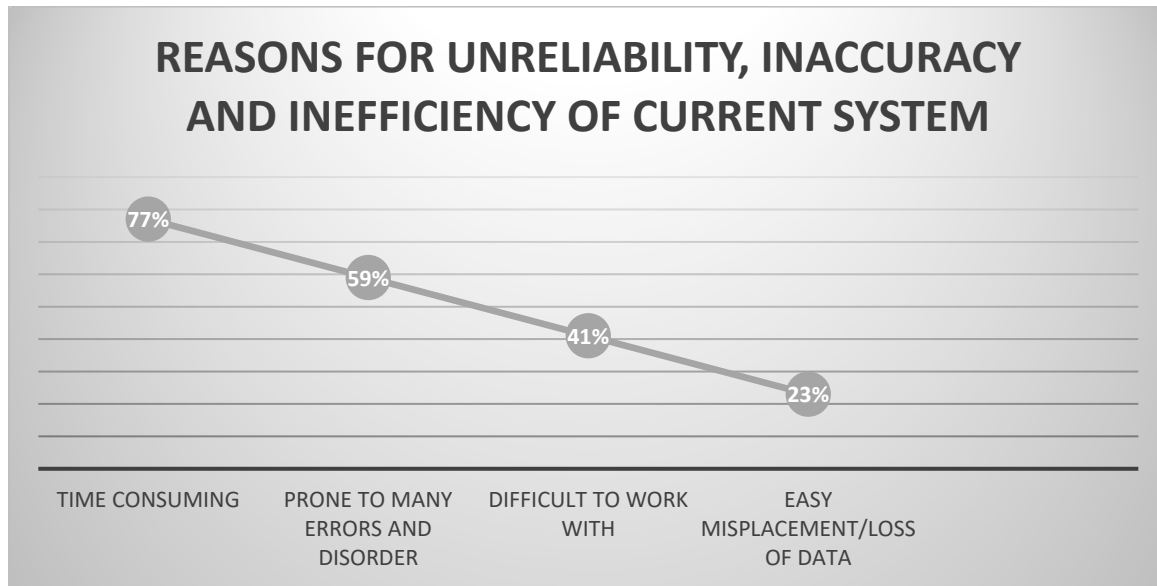
The biggest problem with the current system is that it is time consuming as 77% of the staff members who said that the current system is inefficient mentioned this point. 59% say that the current system is prone to many errors, 45% say that it is difficult to work with whilst only 23% say that it is easy for data to be lost.

Question 4: Which aspects of the current system have you used previously?

[Multiple answers may be selected]

□ Ticket sales
□ Viewing Park and Ride Information

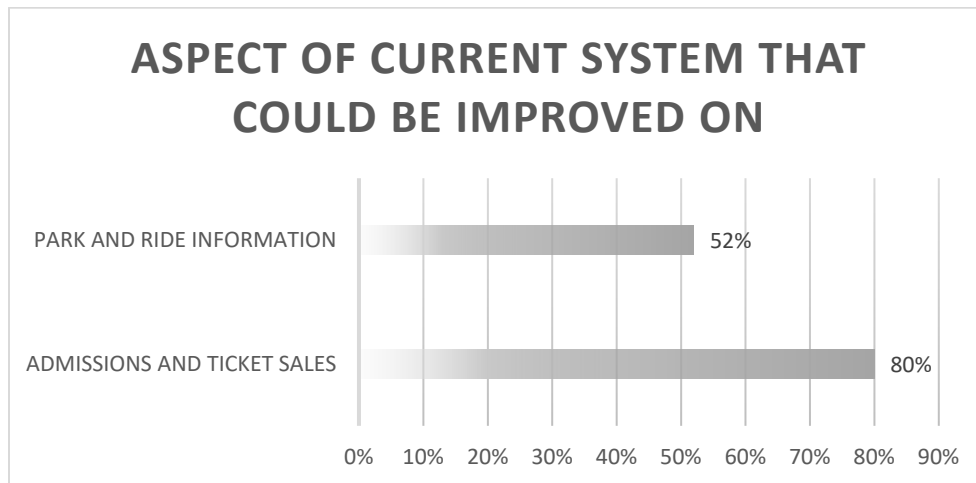|	
15	60%
23	92%
25	100%

ASPECTS OF CURRENT SYSTEM USED

```
         92%
100%
 80%      60%
 60%
 40%
 20%
  0%
      TICKET SALES        PARK AND RIDE INFORMATION
```
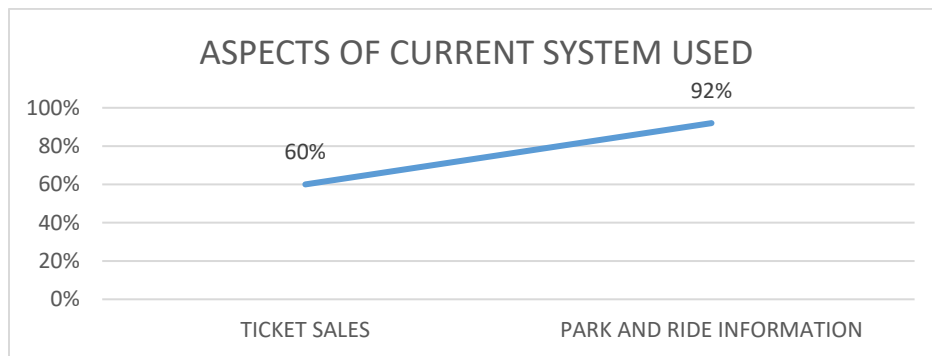
92% of employees have viewed Park and Ride Information whilst 60% are involved with Admissions and Ticket Sales.

Question 5: Which aspects of the current system could be improved on?

[Multiple answers may be selected]

	Staff that vote for improvement	Aspect used by staff (Q4)	% that vote for improvement
□ Admissions and Ticket sales	12	15	80%
□ Viewing Park and Ride Information	12	23	52%
	25	25	100%

ASPECT OF CURRENT SYSTEM THAT COULD BE IMPROVED ON

PARK AND RIDE INFORMATION ─────── 52%

ADMISSIONS AND TICKET SALES ─────────── 80%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90%

80% of the staff that that are involved with Admissions and Ticket Sales say that the process can be improved. Only 52% say that an improvement is needed when viewing information about the park and rides.

Question 6: How would you rate your Computer Literacy Level?

□ Computer Illiterate
□ Novice
□ Intermediate
□ Advanced

2	8%
13	52%
8	32%
2	8%
25	100%

COMPUTER LITERACY LEVEL

■ILLITERATE ■NOVICE ■INTERMEDIATE ■ADVANCED

8% 8%

32%

52%
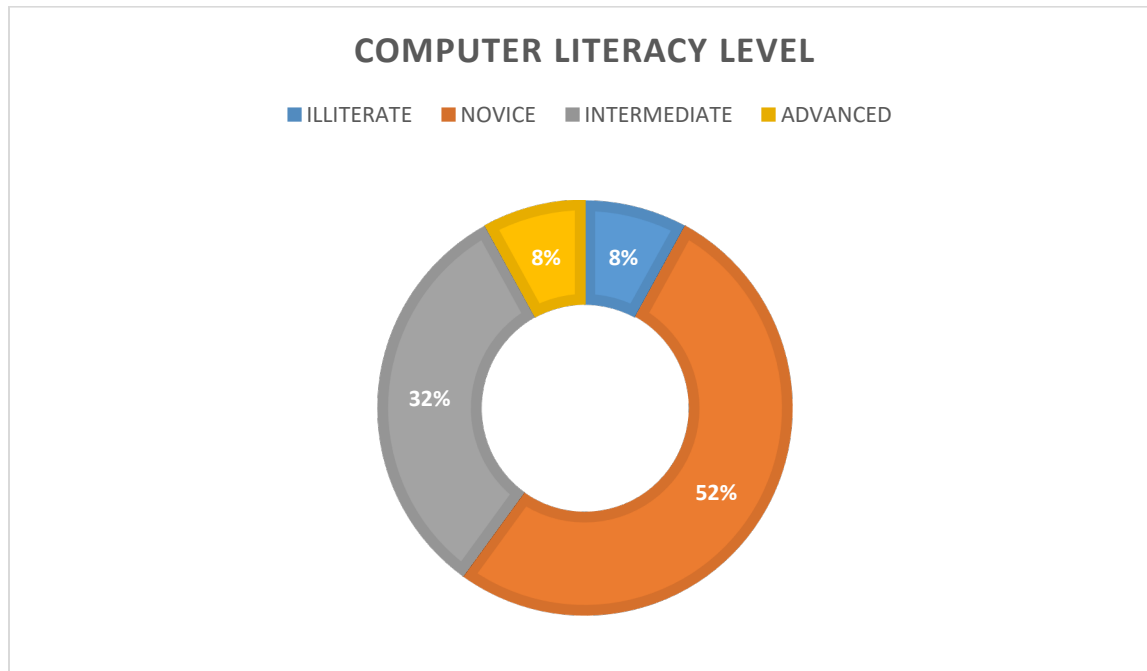
8% of staff don't know how to use computers. 52% know the basic aspects of using a computer. 32% of staff are proficient at using computers whilst only 8% of staff are computer experts.

Question 7: Have you worked with a computerised theme-park management system before?

□ Yes
□ No

4	16%
21	84%
25	100%

STAFF WHO HAVE USED A COMPUTERISED AMUSEMENT-PARK SYSTEM IN THE PAST

	HAVE USED LECTRONIC SYSTEM	HAVE NOT USED ELECTRONIC SYSTEM
	16%	84%
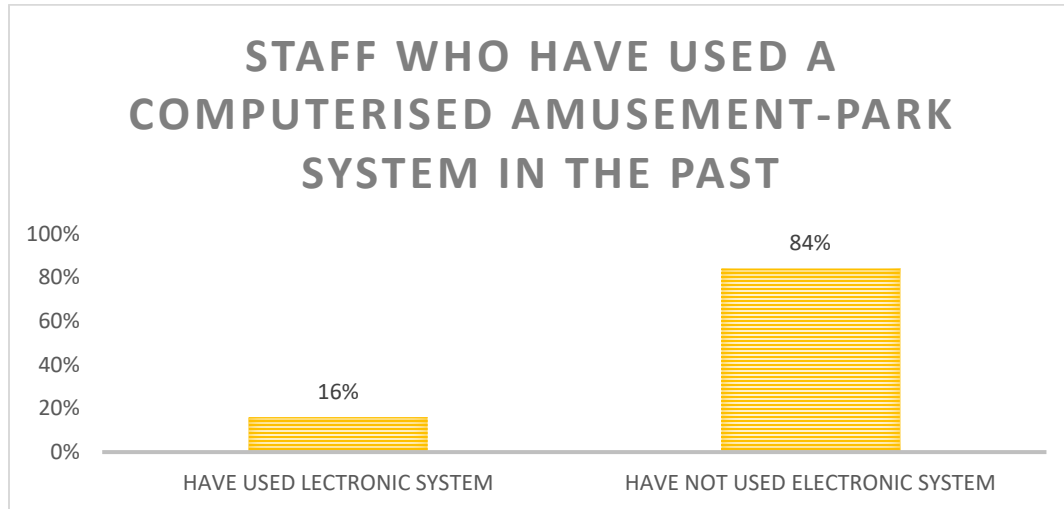
16% of staff have used a computerised amusement-park management system previously at other amusement parks whilst 84% have not used such software before.

Question 8: Would you prefer using an electronic system or a paper-based system?

- □ Electronic system
- □ Paper-based system
- □ I don't mind using either one

17	68%
3	12%
5	20%
25	100%

If 'Electronic system', skip to Question 10

If 'I don't mind using either one', skip to Question 11

PREFERENCE OF ELECTRONIC SYSTEM OR PAPER-BASED SYSTEM
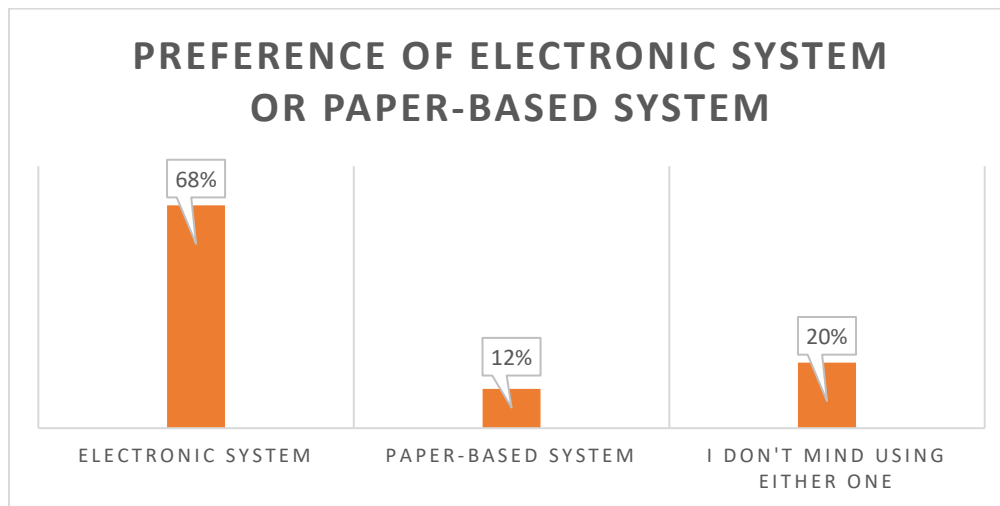
Most of the staff prefer using an electronic (computerised) system (68%). Only 12% of staff prefer the current paper-based system whilst 20% of staff don't mind using either one.

Question 9: Why would you prefer a paper-based system over an electronic system?

[Multiple answers may be selected]

- □ Poor or No Computer Skills
- □ Content (happy/satisfied) with paper-based system
- □ Possible high complexity level of an electronic system

2	67%
3	100%
1	33%
3	100%

End survey

REASONS FOR PREFERENCE OF PAPER-BASED SYSTEM
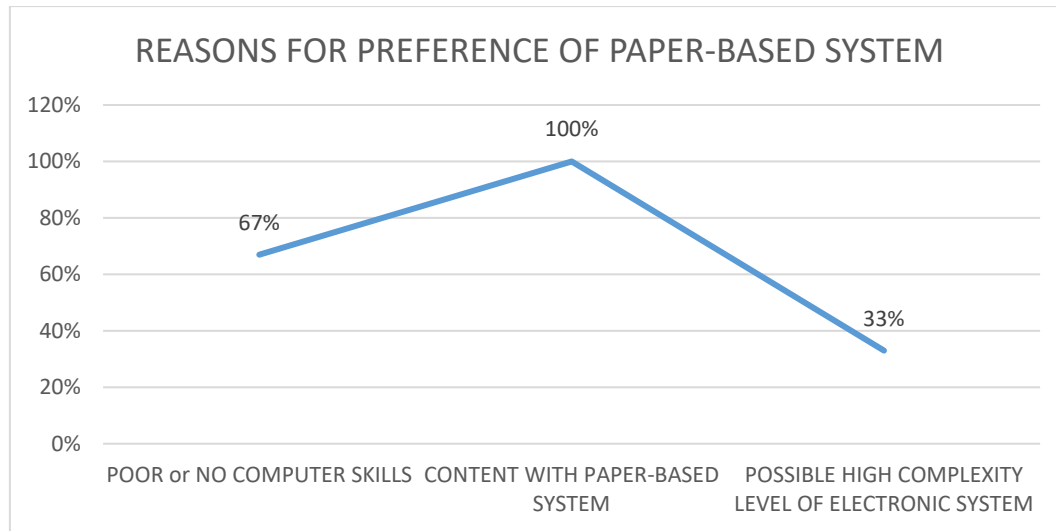
All the staff members who prefer the paper-based system said that they are happy with it. 67% of them said that they are computer illiterate whist 33% think that the proposed electronic system will be too complex.

Question 10: Why would you prefer an electronic system over a paper-based system?

[Multiple answers may be selected]

□   Accurate
□   Time Saving
□   Easy to work with
□   Easy to edit
□   Backup facilities

12	71%
15	88%
10	59%
8	47%
7	41%
17	100%

REASONS FOR PREFERENCE OF ELECTRONIC SYSTEM

Category	Percentage
BACKUP FACILITIES	41%
EASY TO EDIT	47%
EASY TO WORK WITH	59%
TIME SAVING	88%
ACCURATE	71%
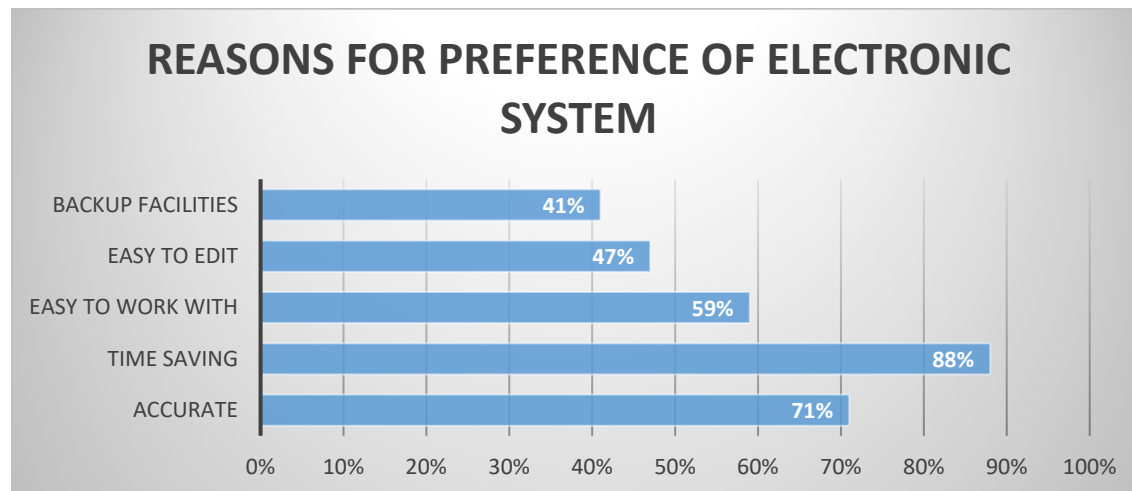
The main reasons why staff members prefer the electronic system is because it will be accurate and save time. 88% of staff said that an electronic system will be time saving whilst 71% said that it will be accurate. 59% of staff said that the electronic system will be easier to work with than the current system whilst 47% said that it will be easier to edit and 41% of staff prefer the electronic system because it will incorporate backup facilities.

Question 11: Would you prefer an attractive or utilitarian Graphical User Interface design for the proposed electronic system?

□   Attractive (Aesthetically pleasing)
□   Utilitarian (practical and efficient)
□   Best of both

4	18%
13	59%
5	23%
22	100%

GRAPHICAL USER INTERFACE DESIGN

70%	
60%	
50%	
40%	
30%	
20%	
10%	
0%	

ATTRACTIVE	UTILITARIAN	BEST OF BOTH
18%	59%	23%
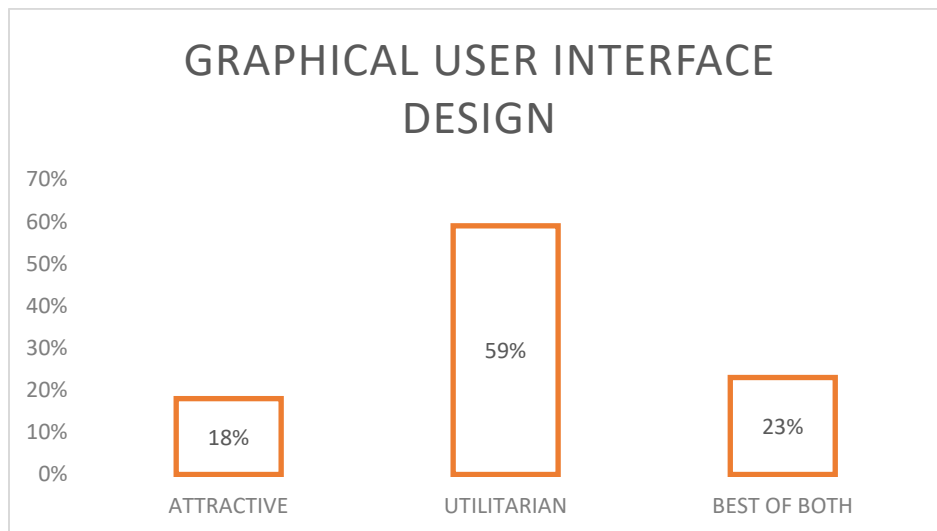
59% of staff prefer a practical and functional design over the 18% who opt for an attractive design. 23% of staff say that the design must be balanced between attractiveness and functionality.

Question 12: Would you want the electronic system to be simple, standard or complex?

☐ Simple – same features as current system
☐ Standard - some new beneficial features
☐ Complex – multiple new, cool features

8	36%
10	46%
4	18%
22	100%

COMPLEXITY OF ELECTRONIC SYSTEM
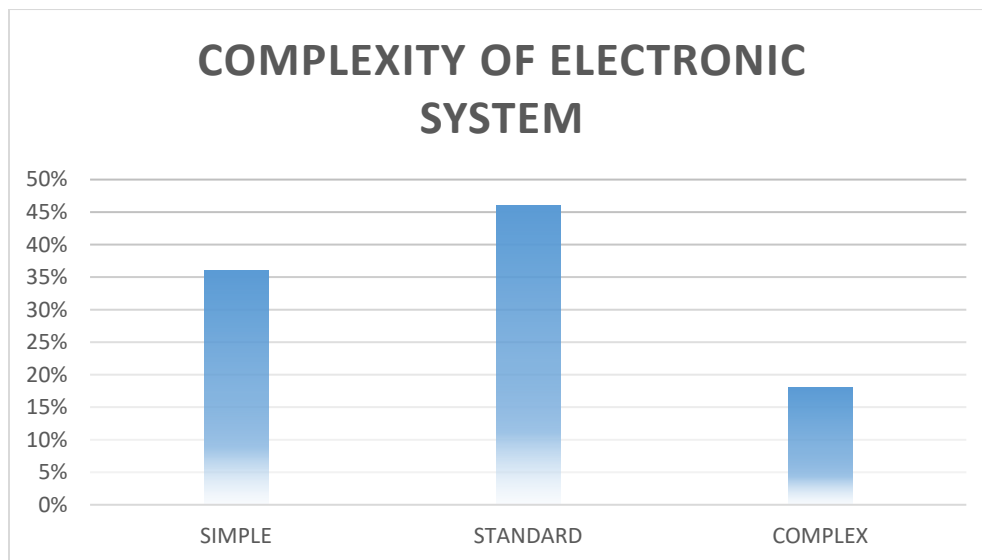
As most of the staff members are computer literate but not computer experts, they have opted for a more basic application over having many features. 36% of staff said that the new system must have the same features of the current system, 46% say that new features may be added if it's beneficial whilst only 18% opt for a complex application that contains a multitude of new features.

Research Method 3: Internet Research

Amusement Park - An amusement park or theme park is a group of entertainment attractions, rides, and other events in a location for the enjoyment of large numbers of people.

Pay-as-you-go Admission type - In amusement parks using the pay-as-you-go scheme, a guest enters the park at little or no charge. The guest must then purchase rides individually, either at the attraction's entrance or by purchasing ride tickets (or a similar exchange method, like a token). The cost of the attraction is often based on its complexity or popularity. For example, a guest might pay one ticket to ride a carousel but four tickets to ride a roller coaster.

The park may allow guests to purchase a pass providing unlimited admissions to all attractions within the park for a specified duration of time. A wristband or pass is then shown at the attraction entrance to gain admission.

The advantages of pay-as-you-go include the following:

- guests pay for only what they choose to experience, allowed them to visit the park for a short periods of time (whereas guests who get day passes in "Pay-one-price" are generally compelled to spend hours to make the most of the cost)
- attraction costs can be changed easily to encourage use or capitalize on popularity

Examples of Staff Details Screen

Staff Files

File Edit View Define Reports Tools Help

Add   Delete   Find | Filter and Sort | Calendar   Calculator | VSS PRO

Employees
Adele Plambeck
Andrew Simonson
Anica Smebly
Ben Olson
Brad Smith
Charlene Lockwood
Charles Valenti
Chris O'Keefe
Dan Miller
Dana Sandberg
Edward Tougaf
Gene Schneider
Howard Anbel
James Olney
John Anqwest
Jon Pier
Jon Wilson
Karen Runcorn
Kimberly Peterson
Kristie VanBeek
Laura Olson
LeAnne Esh
Leisel McMahon
Leonard Hansen
Marvin Reick
Mary Hansen
Matthew Hullett
Mike Maasjo
Sally Johnson
Samantha LaNeil
Sarah Collier
Shawn O'Neil
Soni Kirklad
Steven Farmer
Tianna Dahlberg
Tom Acosta
Tom Allan

General Information

General Emergency Wages Benefits Accruals Training Incidents Evaluations Reminders Notes User Documents Separation

Checklist Photo Print

| First Name: | M.I. | Last Name: | | Status: | | Employee Number: |
| Tianna | | Dahlberg | | Active | | 15367 |

Birthdate: 01/05/1970   SSN: 634-95-8613   Hire Date: 12/03/2002   I-9 Renewal Date: 12/03/2010

Address: RR 7 Box 6A

Location: Minneapolis

Position: Nat'l Sales Mgr

City: Eagan   St.: MN   Zip: 55121

Department: Sales

Country: United States

Manager: Mike Maasjo

Home Phone: 612-468-5985   Work Phone: 612-555-3626

W-4 Status: Married   Exemptions: 4

Cell Phone: 612-698-7892   Fax: 612-555-5326

Gender: Female   EEO Code: Hispanic

E-mail Address: tdahlberg@abc.com

EEO Category: Sales Workers

> This is an example of Staff Records. It can be

> The screen is uncluttered and simple. Light colours have been

Examples of Amusement Park Databases

ER-Diagram

TicketBooth
OrderID (PK)
VisitorID (FK)
AttractionID (FK)
PurchaseDate
Quantity
Total

Visitor
VisitorID (PK)
LastName
FirstName
ZipCode
Email
Date_Last_Visited

MaintenanceSchedule
MaintenanceID(PK)
MaintenanceStaffID(FK)
AttractionID(FK)
Time_Start
Time_End
Description

Attraction
AttractionID (PK)
Price
Name
Description

AttractionSchedule
ShiftID(PK)
StaffID(FK)
AttractionID(FK)
Time_Start
Time_End

MaintenanceStaff
MaintenanceStaffID(PK)
FirstName
LastName
YearOfHire

AttractionStaff
StaffID (PK)
LastName
FirstName
YearOfHire

Ref_Calendar

PK **day_date_trime**
day_number

Data Mart for Amusement Parks
Barry Williams
DatabaseAnswers.org
December 2nd. 2012

Credit_Debit_Cards

PK **Card_Number**
FK *Customer_ID*
Card_Details

Data_Mart

PK **Fact_ID**
FK *Card_Number*
FK *Customer_ID*
FK *Date_From*
FK *Ride_Date_Time*
FK *Ride_ID*
FK *Schedule_Activity_ID*
FK *Staff_ID*
FK *Ticket_ID*
Total_Price
Other_Details

Staff_

PK **Staff_ID**
Staff_Details

Staff_on_Maintenance

PF **Schedule_Activity_ID**
PF **Staff_ID**

Customers_

PK **Customer_ID**
Customer_Details

Staff_on_Rides_

PK **Staff_ID**
PK **Ride_ID**
PK **Date_From**
Date_To

Maintenance_Schedules_

PK **Schedule_Activity_ID**
Ride_ID
Date_Time_Start
Date_Time_End
Other_Details

Rides

PK **Ride_ID**
Ride_Name
Ride_Description
Ticket_Price
Other_Details

Tickets_to_Ride_

PK **Ticket_ID**
Ticket_Details

Examples of Amusement Park Maps

Examples of Information Screens

The information screen is simplistic and easy to read.

There is even a ratings for the rides – called the 'Fear Factor'

The bright colours will look attractive and appealing to those looking at it.

This design for purchasing tickets is simple. Staff who will be processing tickets don't want a fancy design.