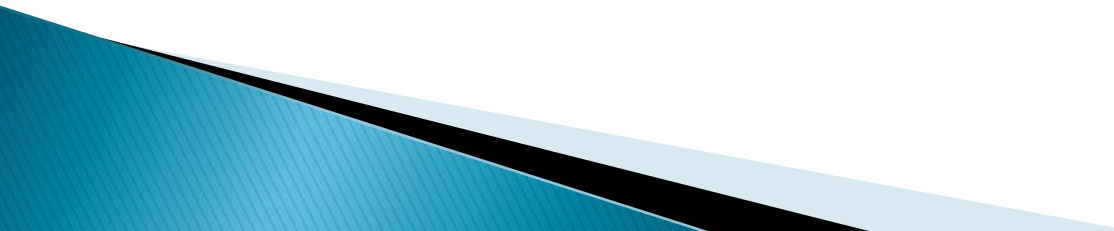# Research on Information Management System of Skywheel Corporation

Group Members: Tianhui Wu

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Company background

- **Company name: Skywheel**

- **Location: Markham**

- **Website: www.skywheel101.com**

- **Medium size automobile tire shop**

- **Twenty-one years of experience in wheel and tire service industry**

- **Service provided: installing wheels and tires**
  selling new and used tires
  selling all sizes of wheels
  wheel balancing
  wheels and tires maintaining
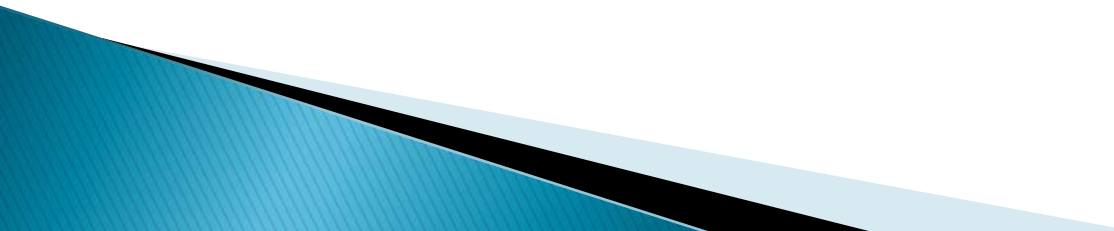
Problems of Skywheel

Generally, the problem this company has is the old-fashion garage management which is very inefficient comparing to the modern information system management.
In order to solve the problem, we can divide it into the following aspects:

- No inventory control system
- No computerized bookkeeping system
- No customer information system
- No computerized task assigning system
- No machinery and tools management system
- No employee sign-in system
- Weak security system

Proposed alternatives

During the research, we came up with several alternatives. The best one amount them is to build a comprehensive system which includes the following subsystems:

- **Inventory control system**

- *Bookkeeping system*

- *Customer information system*

- *Task assigning system*

- *Machinery and tools management system*

Proposed alternatives

--hardware

The hardware required for our alternative is very easy to satisify.

- **Computers**
  One or more are used for all the proposed systems
- **Screens**
  Several screens are designed for displaying information in task assigning system
- **Scanners**
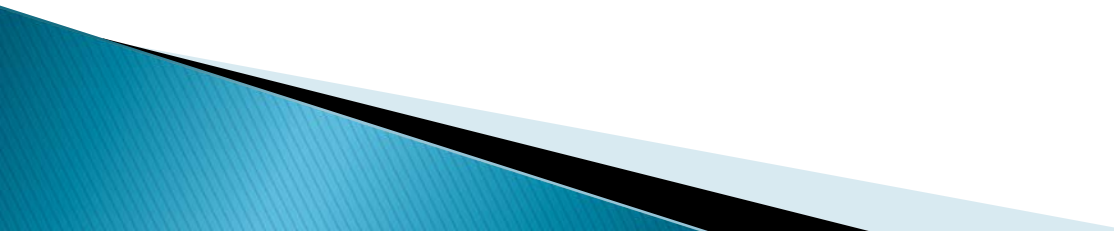 One scanner is used for barcode input in inventory system
- **Printer**
  A printer is used for printing invoice out in bookkeeping system

Functional requirements

A user must be able to:

• Search the databases according to the request by the customer and the matches to the screen will be returned to the screen

• *Obtain detailed information about every set of rim and tire through the search process*

• *Locate every set of rim and tire in the storage*

• *Add new arrival of merchandise to the system and place them in the storage according to the arrangement in the storages*

• *Remove any merchandise from the system when sales take place.*
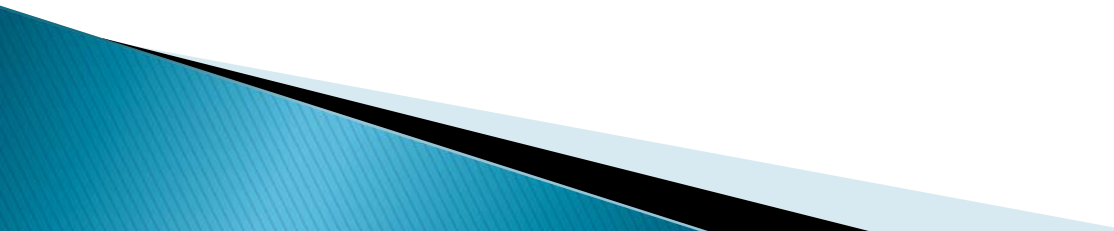
Functional requirements

A user must be able to:

- Construct a profile for every customer including their personal information

- Search the database to obtain the corresponding customer profile

- Search the database by transferring the incoming number of the telephone to the system connected to it
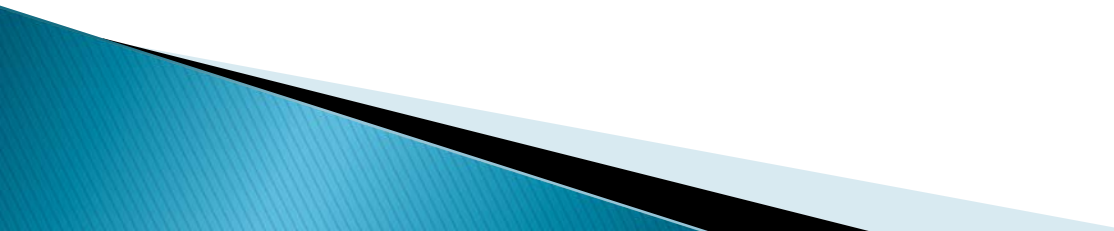
Functional requirements

A user must be able to:

• Generate copies of invoice through this system

• Store the invoices of past transaction into a designate file

• Keep track of the daily transaction by checking the copies of the invoices from past transactions

Functional requirements

A user must be able to:

- Generate a template containing the specific procedures

- Assign different jobs to a group of workers against the procedures included by the template

- Check the status of each ongoing missions
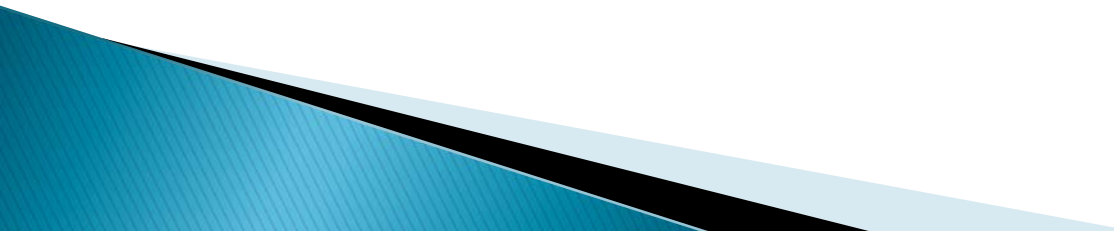
Functional requirements

A user must be able to:

- Find the working status of each machine and tool

- Be notified if there is an error happened to any machine and tool

Non-functional Requirements

The system must:

- Be user-friendly

- Be able to run at least 50 transactions in the meantime

- Have less than 30 minutes down time in 3 months

- Have backups to survive any unexpected accidents or natural disasters

- Be designed in a way that new employees are capable to learn to use it in less than 2 days

- Have been examined once every half year for maintenance purposes

- Be capable interacting with other systems

Break-even analysis

- Cost (hardware)

    1. Already have enough computers and printer in the store, need no more
    2. Need to purchase several screens
    3. Need to purchase a barcode scanner

- Cost (software)

    The only cost on the company is purchasing the software

- Benefit

    The company will gain benefit on increasing efficiency and
    better management system