Future of Amusement Parks: Transforming Visitor Experience

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01

Problem

AMUSEMENT PARKS MARKET?

REGIONAL STATISTICS

The Asia-Pacific Amusement Parks Market CAGR (2024-2029) over

3.34%

GLOBAL STATISTICS

Market Value (2022)

$63.9 BN

Market Value (2032)

$109.3 BN

CAGR (2023 - 2032)

> 5.5%

SEGMENT STATISTICS

Mechanical Rides Segment Market share in 2022

65%

Tickets Segment Market Share in 2022

52%

Source: gminsights, Mordor Intelligence

MARKET NEEDS AND ISSUES

60–90 minutes

Tolerance for big crowds and long waits seems to have gone down

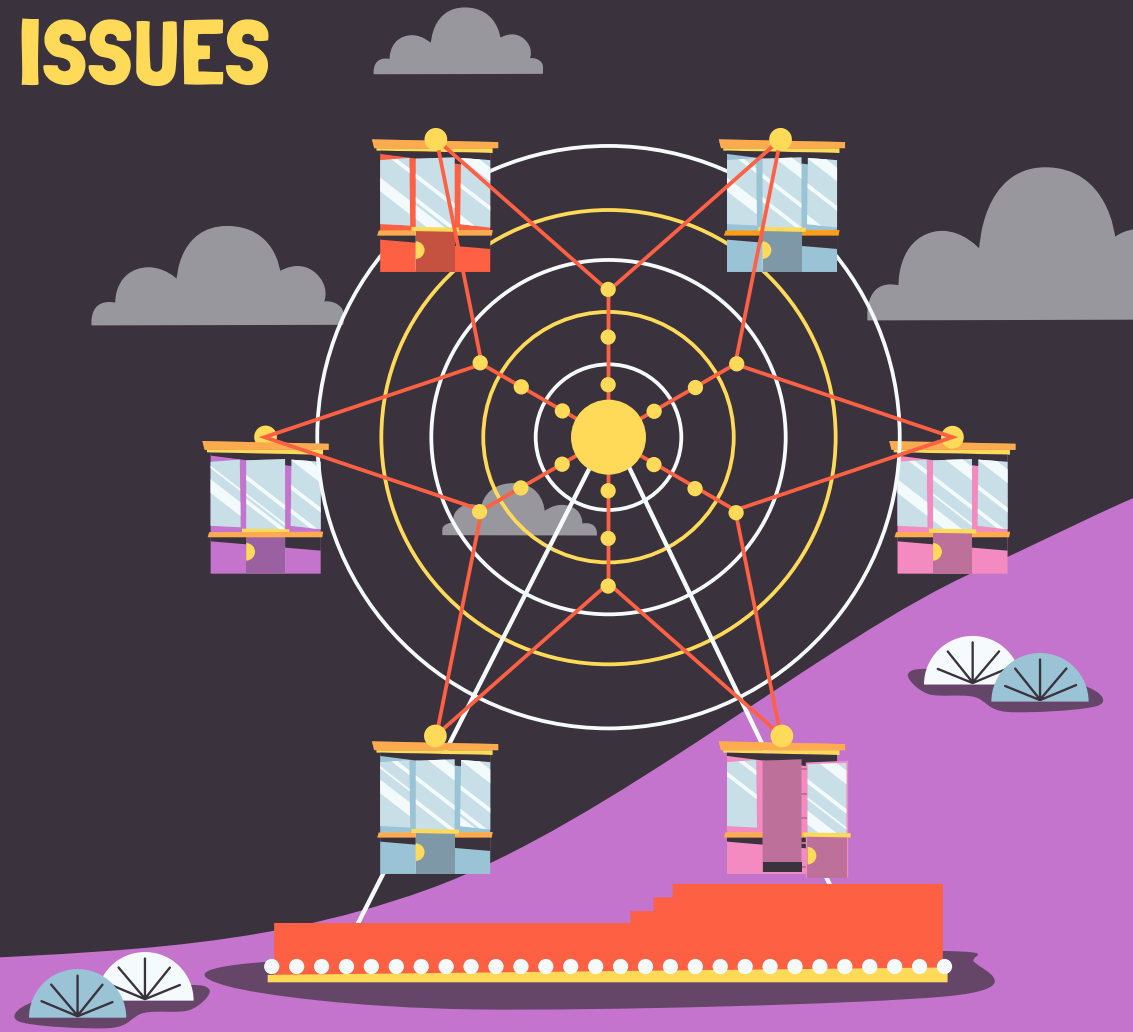
30,000

Roughly 30,000 amusement park-related injuries each year

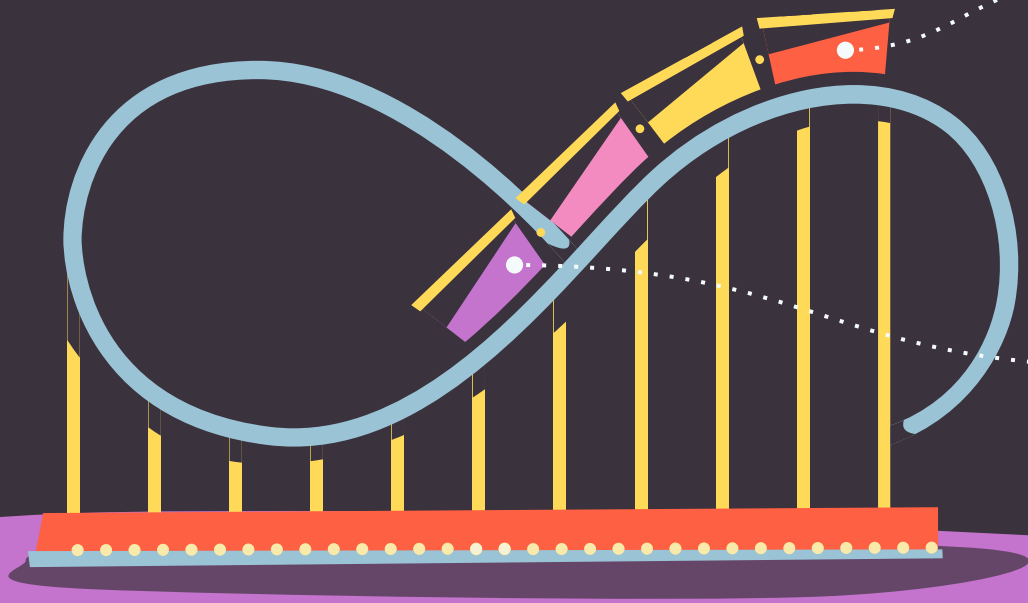
82%

82% of amusement park accidents occur on amusement park rides

Source: AECOM, CNN, GITNUX



MARKET NEEDS AND ISSUES



Navigation Difficulties and Information Shortage

Environmental Management

EXISTING MAEKETING SOLUTIONS

ALTERNATIVES

wearable device

Disney's MagicBand

Fast Pass

virtual queuing systems

Navigation Tools

Mars is full of iron oxide dust

KEY MESSAGES

quickly enter parks, unlock hotel room doors, and purchase.

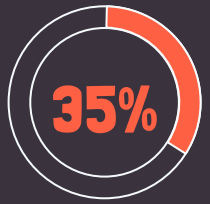
Schedule rides and reduce actual waiting times.

offer map navigation and real-time information services through their own apps

GOALS

GOAL 1

Reduce purchasing time



GOAL 2

Reduce waiting time

GOAL 3

plan visit and view wait times for facilities.

LIMITATIONS OF EXISTING SOLUTIONS

Limited to Predefined Experiences and Reactive Information Utilization

Insufficient Technology Integration

Reactive Rather Than Preventive Maintenance Strategy

Inefficient Environmental Management

02

Business idea and market analysis

Our Services

Smart Amusement Park, aims to leverage AI technology for the intelligent revitalization and enhancement of amusement parks, thereby enriching the visitor experience.

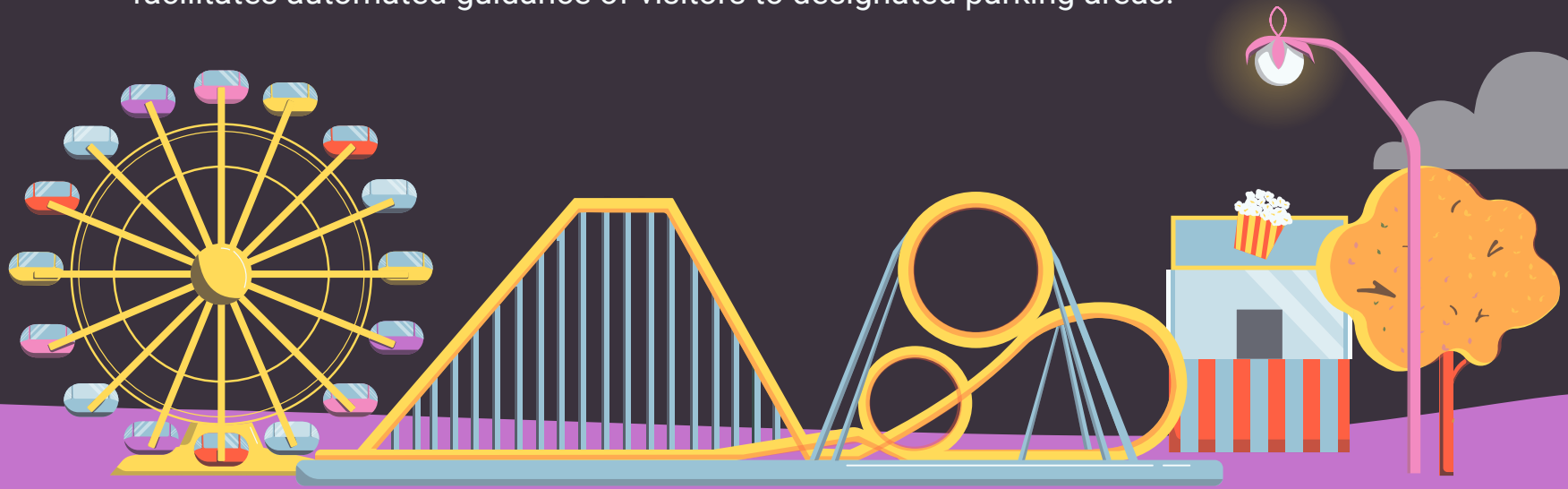
01 Pre-Tour

02 In-Tour

03 After-Tour

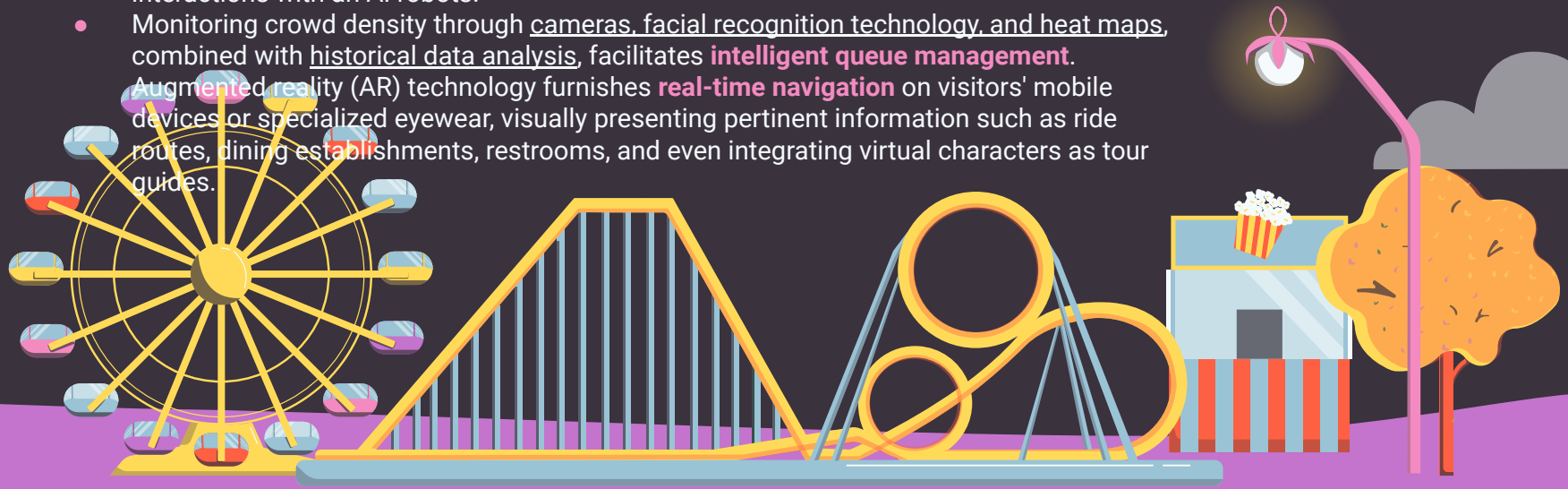
Pre-Tour: Smart Parking Service

- Utilizing **infrared and pressure sensors(红外传感器和压力传感器),** monitors parking space occupancy and disseminates real-time information to visitors via mobile Apps.
- **Integrated license plate recognition technology(集成车牌识别技术)** facilitates automated guidance of visitors to designated parking areas.



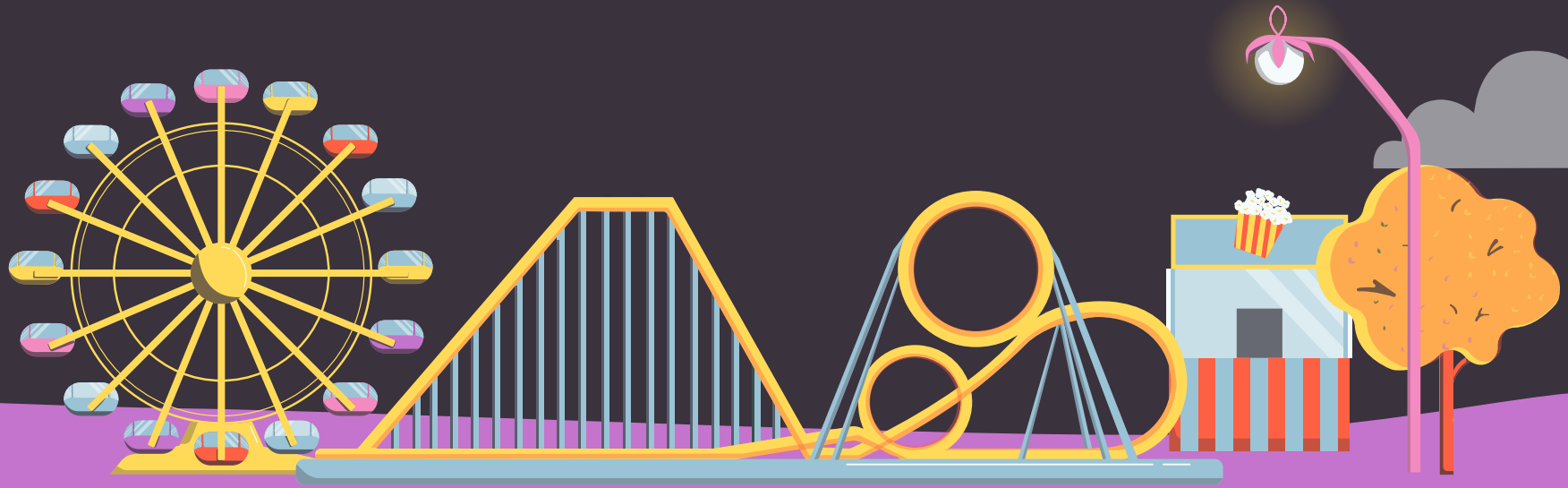
In-Tour: Customized Tour Route Service

- Prior to entering the amusement park, visitors should complete a questionnaire within the park's App, specifying their preferences across various facets of the park experience. Leveraging this information, including visitors' ride preferences, culinary inclinations, accessibility needs, and real-time queue data for each attraction, the park's App **tailors personalized amusement itineraries.**
- AI Q&A system allows visitors to dynamically **modify their routes** through voice interactions with an AI robots.
- Monitoring crowd density through cameras, facial recognition technology, and heat maps, combined with historical data analysis, facilitates **intelligent queue management**.
- Augmented reality (AR) technology furnishes **real-time navigation** on visitors' mobile devices or specialized eyewear, visually presenting pertinent information such as ride routes, dining establishments, restrooms, and even integrating virtual characters as tour guides.



After-Tour: Routine Maintenance of Equipment

- Employing **image recognition technology(图像识别技术)** to analyze photographs or videos of the park's attractions alongside historical maintenance data, AI predicts potential maintenance requirements or replacement part needs for various facilities.



Our Competitive Advantages

AI Services Covering Entire Process of the Tour

comprehensive technological upgrade covering pre-tour, in-tour, and After-Tour stages. Throughout the entire process, visitors will enjoy our services, enhancing all-round tour efficiency and experience

Personalized Itinerary Customization

Our service, through questionnaire, can personalize recommendations for various attractions based on visitor preferences before the tour, tailor exclusive tour routes, save planning time, and improve visitor satisfaction

Safety Assurance

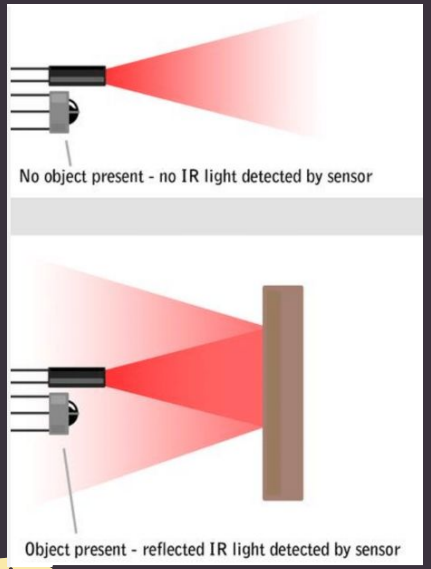
While safeguarding visitor personal information, we also regularly inspect the aging degree of equipments, accurately identifying items in need of maintenance, assisting amusement parks in better risk mitigation

03

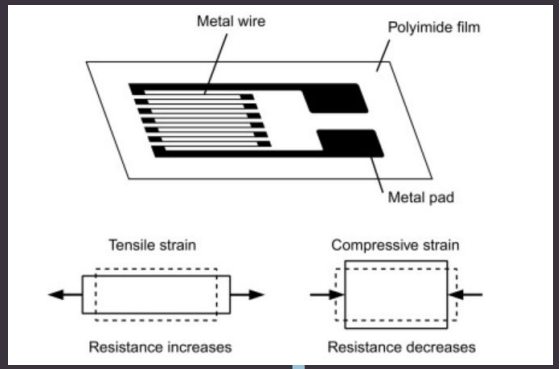
Technology Roadmap and Schedule Strategy

Intelligent Parking System

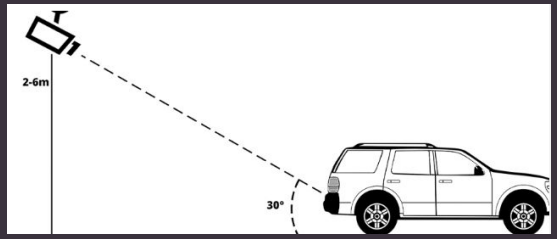
Aim: Reduce time spent searching for parking and enhance the visitor's arrival experience.



IR sensors

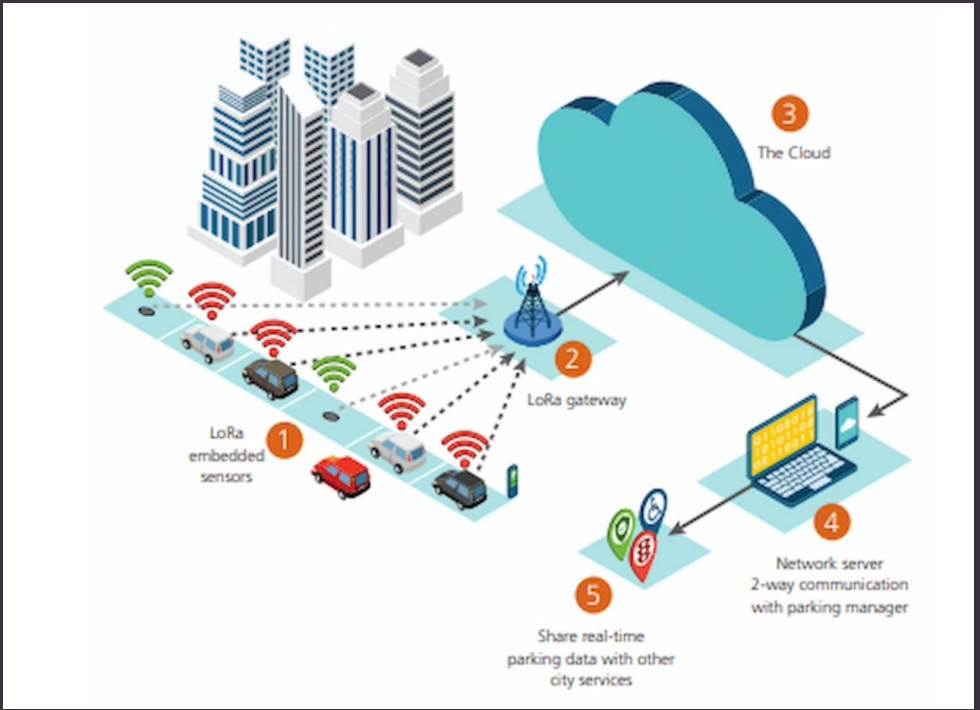


Pressure sensors

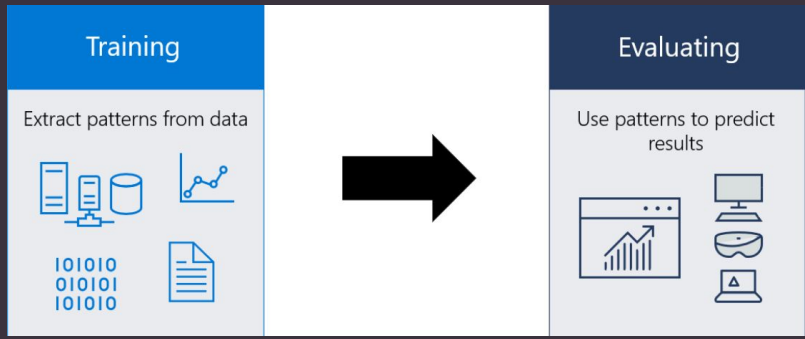


License Plate Recognition Camera

Intelligent Parking System



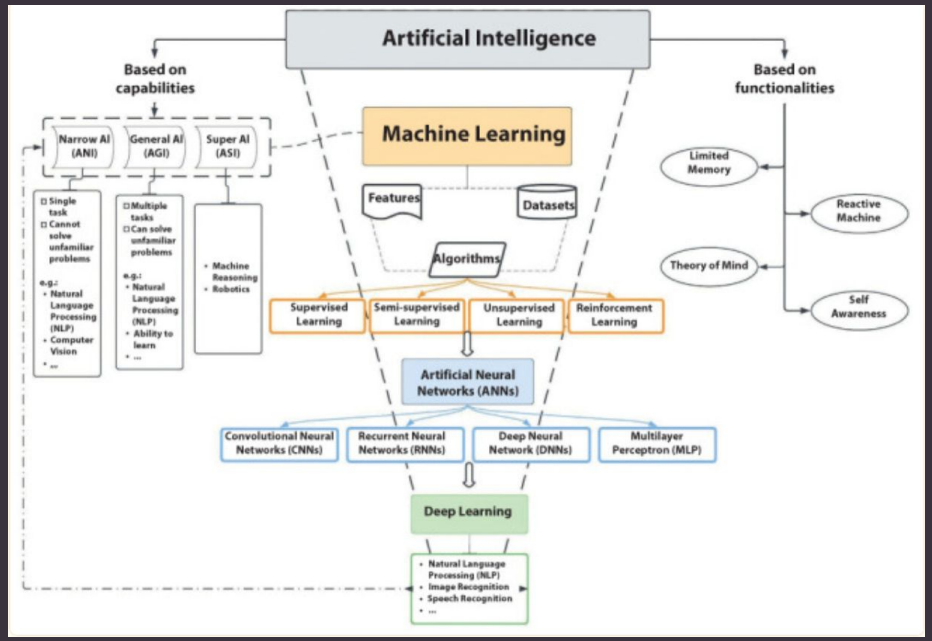
Personalized Amusement Itineraries



Questionnaire

Training Model

Training Model



- Pre-processing.
- Exploratory Data Analysis (EDA)
- Model selection.
- Model processing and evaluation.

```
Confusion Matrix and Statistics

          Reference
Prediction   0   1
         0 160  20
         1  32  88

               Accuracy : 0.8267
                 95% CI : (0.779, 0.8678)
    No Information Rate : 0.64
    P-Value [Acc > NIR] : 8.361e-13

                  Kappa : 0.6328

 Mcnemar's Test P-Value : 0.1272

            Sensitivity : 0.8333
            Specificity : 0.8148
         Pos Pred Value : 0.8889
         Neg Pred Value : 0.7333
             Prevalence : 0.6400
         Detection Rate : 0.5333
   Detection Prevalence : 0.6000
      Balanced Accuracy : 0.8241

       'Positive' Class : 0
```

Image Recognition Technology

Image Acquisition

This is the first step in the image recognition process and involves capturing an image via a camera or other digital device. The captured image may be static or dynamic

Pre-processing

Before an image can be analyzed, a number of preprocessing steps are usually required to improve the accuracy of image recognition.This includes resizing the image, converting the color space, normalization, denoising, etc., with the aim of reducing unnecessary interference during processing.

Feature extraction

Feature extraction is the process of extracting useful information from the original image. This may involve recognizing edges, corner points, textures, etc. in the image or automatically learning and extracting features through more advanced methods such as deep learning models.

Classification Recognition

This is the core step in image recognition and is usually implemented using machine learning algorithms (e.g., support vector machines, random forests) or deep learning models (e.g., convolutional neural networks, CNNs). These models are trained to recognize and classify objects or scenes in images

TIMELINE


1 month
2 months
6 months
Requirements analysis
System Design
Development and Testing

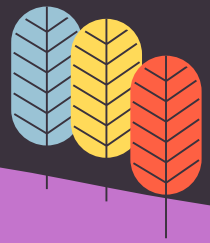
TIMELINE

1 month

Deployment & Go-live

ongoing

Upkeep & Improvement



Cost Analysis and Requirements Overview

04

Business model and financial plan

Revenue

01 Modular Service Packages

02 Annual Subscription and Maintenance

03 Hardware Sales

04 Installation Services

05 Consulting and Custom Services

1. Modular Service Packages

Basic Package: Includes smart parking and AR navigation, priced at $20,000/year, assumed to be sold to 50% of customers.

Advanced Package: Adds facility aging monitoring features, priced at $35,000/year, with an estimated 30% customer uptake.

Premium Package: Contains full services, especially adding customized play route customization, priced at $50,000/year, targeting the high-end market, with an estimated 20% customer interest.

2. Annual Subscription and Maintenance

The annual subscription includes system upgrades and technical support to ensure amusement parks receive the latest software updates and technical support for ongoing optimal service.
Charged according to the package level: Basic Package $5,000, Advanced Package $8,000, Premium Package $12,000.

Maintenance services include hardware maintenance and software troubleshooting to ensure the system's long-term stable operation. The average cost is $3,000/year/amusement park.

3. Hardware Sales

Sensors: Sold to amusement parks for monitoring parking space occupancy and visitor traffic hotspots. These devices typically include infrared sensors and pressure sensors that provide real-time data to help park management optimize parking resources and pedestrian flow.

AR Glasses: Advanced augmented reality glasses offer visitors interactive navigation and gaming experiences. These glasses can synchronize real-time information and path guidance to enhance the visitor experience.

Other Hardware Devices: Include any necessary auxiliary equipment for installing and operating the above technologies, such as relays, servers, and user interface devices.

4. Custom Installation Services

Provide professional on-site installation and setup services, with service fees priced according to project size and complexity, generally ranging from $5,000 to $15,000.

5. Professional Consulting and Custom Services

Offer customized consulting services for special needs, such as specific holiday event planning (Halloween or Christmas), charged by the project, typically ranging from $10,000 to $50,000.

Pricing Strategy

- Considering that we are a startup needing a higher initial return on investment, we have set a profit margin of 50% to 60%.
  Our pricing includes all direct costs (hardware and software) and indirect costs (R&D and operational support), plus a predetermined profit margin.

- In addition, we will conduct market competition analysis to maintain competitive pricing and avoid losing potential customers due to high prices. Especially for the premium package, we will provide additional value-added services, such as limited technical support, to justify its higher price point.

Financial Viability Analysis

01 costs

02 Revenue

03 Profit

04 conclusion

Costs

1. Research and Development Costs

Software development: $300,000, covering engineer salaries, software testing, and iterations.

AI algorithm and database construction: $100,000, including algorithm design and big data processing platforms.

Hardware prototype and testing: $100,000, covering prototype design, testing, and feedback iterations.

2. Hardware Costs

Sensors, AR glasses, etc., assuming initial sales to 10 amusement parks at a cost of $10,000 each.

3. Installation Costs

Based on the average installation fee for 10 amusement parks, totaling $100,000 (including engineer travel expenses and material costs).

4. Operational Costs

Server hosting: $30,000/year to support online service operations.

Data analysis and processing: $20,000/year, required to provide customized services.

Customer support: $50,000/year, includes a dedicated customer service team and technical support.

5. Marketing Costs

Advertising and promotion: $30,000/year, covering online and offline advertisements and promotional materials.

Sales and distribution: $20,000/year, includes sales commissions and travel expenses.

Costs

Initial R&D costs: $500,000

Hardware costs: $100,000

Installation costs: $100,000

Operational costs: $100,000

Marketing costs: $50,000

The total expected cost for the first year is $850,000.

Revenue

1. First-Year Sales Forecast
   - Basic package: 10 sets, total revenue $200,000.
   - Advanced package: 5 sets, total revenue $175,000.
   - Premium package: 3 sets, total revenue $150,000.

The total sales revenue for service packages in the first year is **$525,000.**

2. Renewal and Maintenance Service Income Forecast
   - Basic package annual subscription $5,000 * 10 = $50,000
   - Advanced package annual subscription $8,000 * 5 = $40,000
   - Premium package annual subscription $12,000 * 3 = $36,000
   - Average maintenance service $3,000 * 18 = $54,000

The total additional income for the first year is **$180,000.**

Total revenue (including service package sales and annual subscriptions): $525,000 + $180,000 = **$705,000**

Profit

First Year

Total revenue (including service package sales and annual subscriptions): $525,000 + $180,000 = $705,000

Total costs: $850,000

Net loss: $850,000 - $705,000 = -$145,000

Profit

Second Year

Increase sales to 15 basic packages, 10 advanced packages, and 5 premium packages

- Total sales revenue: $795,000
- Maintenance and subscription income: $270,000
- Total revenue: $1,065,000
- Total costs reduced by 5% to $807,500 (cost optimization)
- Net profit: $1,065,000 - $807,500 = $257,500

Third Year

- Sales growth to 20 basic packages, 15 advanced packages, and 10 premium packages.
- Total sales revenue: $1,175,000
- Maintenance and subscription income: $390,000
- Total revenue: $1,565,000
- Total costs further reduced by 5% to $767,125
- Net profit: $1,565,000 - $767,125 = $797,875

Conclusion

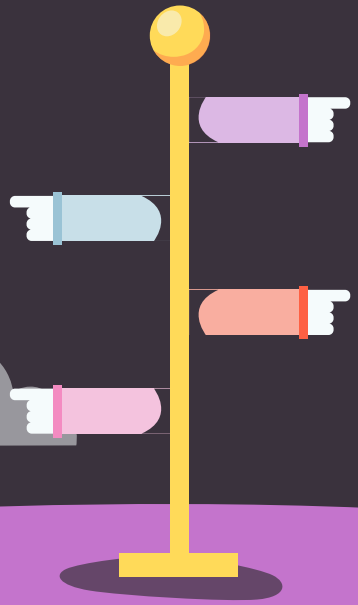
Based on the above forecasts, the project is expected to reach a profitability turning point in the second year and then enter a state of continuous profitability. This forecast considers a gradual increase in market acceptance and operational efficiency improvement. The second year becomes a critical turning point, after which profitability is significantly enhanced as economies of scale are realized.

05

Marketing and Sales strategy

Market position

Customised amusement parks is high-end, personalised and intelligent.



- **Oriented to the high-end consumer groups** who pursue personalised and high-quality entertainment experience, and who are willing to pay a higher price for unique entertainment items and services.
- **Personalised experience:** tailor a personalised itinerary based on visitors' interests, physical conditions and real-time footfall data. Visitors can better enjoy the amusement park and enhance their satisfaction with the park.
- **Intelligence**: the application of AI technology makes the operation of amusement parks smarter and more efficient.

Value Proposition

Enhance visitor experience

Personalised play routes and live navigation make it easier for visitors to explore rides, restaurants and other facilities, reducing queuing time and enhancing the play experience.

Optimise operational efficiency

AI technology monitors the ageing of rides and predicts maintenance in advance, helping to plan and schedule maintenance work to ensure facilities are in good condition.

Enhance safety

Carry out timely maintenance and replacement of components, and improve the safety and reliability of the facilities. Through real-time data analysis and monitoring, the amusement park can better identify and deal with potential safety hazards in a timely manner, and ensure the safety of visitors.

Marketing and sales strategy

Advertising

Sales promotion

Direct marketing

Public relations

Marketing Channels

01

Online marketing

Use social media platforms and online advertisements to promote the concept of customisation and integration of AI technologies into the amusement park. Attractive content such as video introductions, user cases and experience sharing can be posted.

02

Online advertising

Increase brand exposure and promote the concept of customised amusement parks by placing advertisements on search engines, such as Google AdWords, as well as banner ads and display ads on gaming, entertainment and travel related websites.

03

Co-promotion

Establish partnerships with travel agents to jointly promote the concept of customised amusement parks. partnering with amusement park facility suppliers and maintenance service providers to integrate the technology as a value-added service into their products or services.

Marketing Channels

04

Exhibitions and events

Participate in exhibitions and events in the tourism and entertainment industry to showcase the concept of customised amusement parks and the application of AI technologies. This can be done by showcasing new technologies, organising presentations and seminars to attract industry attention and media coverage.

05

Traditional media

Use traditional media channels such as TV, radio and newspapers to promote the concept of customised amusement parks. The features and advantages of customised amusement parks can be introduced to the public through advertisements, press releases and exclusive interviews.

06

ETHICAL ETHICAL ISSUES

SOCIAL AND ETHICAL ISSUES

01

Privacy Concerns

Ensure transparency and user consent. Clearly inform visitors about what data will be collected, the purposes of the collection, and how the data will be protected and used. Provide clear opt-out options, allowing visitors to choose not to participate in certain data collections.

02

Data Security

Use state-of-the-art encryption technologies and security measures to protect data. Conduct regular security audits and system updates to prevent potential security threats.

03

Technological Acceptance

Design systems with strong inclusivity, easy for visitors of all ages to use. Provide various interaction modes and user interfaces to ensure the technological solutions meet diverse visitor needs.

THANKS!

Do you have any questions?