# Station business model

The business model of the station is to achieve sustainable operations through diversified revenue sources. First, stations generate direct revenue through ticket sales services, including sales at ticket Windows, ticket vending machines and online channels. In addition, the station provides advertising space inside and outside the station to provide enterprises with branding and advertising display services, from which advertising revenue is derived. Commercial rent is also an important part of the station, by renting out shops, restaurants, coffee shops and other commercial space in the station to businesses, the station can obtain rental income. Parking fees, logistics services and freight operations, digital services and application revenue also create additional economic value for the station.

Expenditures at the station mainly include maintenance of infrastructure and equipment, human resource costs, energy and water bills, real estate rentals, equipment and technology updates, safety and emergency management, cleaning and maintenance services, operating and administrative expenses, insurance costs, and debt service and financing costs. Regular maintenance of the infrastructure and the updating of equipment are important aspects to ensure safe and efficient operation of the station. Human resources costs include staff salaries and training costs, while energy and water costs relate to the electricity and water needed for the daily operation of the station. In addition, stations are required to deal with the costs of security and emergency management, ensuring preparedness and response to emergencies. Cleaning and maintenance services keep the station environment clean and in good condition. Operating and administrative expenses relate to salaries and administrative expenses of station management. Insurance premiums and debt service costs are also part of the expense.

The sustainability of the station's business model depends on its ability to maintain a balance between revenue and expenditure. By diversifying revenue sources, stations can reduce their dependence on specific sources and improve the resilience of their business models. At the same time, effective management of the cost structure is the key to ensure the sustainable operation of the station. Stations need to control costs while providing high-quality service to ensure long-term profitability. Flexibility and innovation are also elements of sustainability, and stations need to adapt their business models to market and passenger demand, introduce new revenue streams or optimize existing services when appropriate. Partnerships with governments, businesses and communities can also provide stations with additional support to drive sustainable development of their business model.

## 1. Station revenue model

The spending pattern of the station covers several key aspects, including infrastructure maintenance, human resources, operating costs, etc. First of all, in terms of infrastructure and equipment maintenance, stations need to invest funds for the maintenance and repair of infrastructure such as tracks, platforms, station buildings, and at the same time to ensure the normal operation of equipment such as ticket vending machines, screens, information display systems and safety equipment, which is crucial to ensure the safety and service quality of stations.

Secondly, the cost of human resources occupies an important part of the station expenditure. Stations are required to pay the salaries of conductors, station staff, security staff, cleaning staff, etc., and invest money in training new employees or improving the skill level of existing staff to provide more professional and efficient service.

Energy and water bills are expenses that cannot be ignored in the daily operation of the station. In order to ensure the normal operation of the station, the electricity fee is used for lighting, elevators, ticket vending machines, etc., while the water fee covers the use of sanitation facilities and fire extinguishers in the station. Real estate and rental costs relate to whether the station leases space to businesses, including shops, restaurants, etc. This includes, on the one hand, the payment of commercial rent and, on the other hand, possibly the use of land, especially if the station is built on specific land.

Equipment and technology updates are part of the spending to ensure that stations remain modern and efficient. Stations need to constantly update information systems, ticketing systems and other equipment to adapt to changes in technology and the market. In terms of security and emergency management, stations need to invest money to pay for security personnel, monitoring systems, emergency response training and equipment to ensure the safety of the station and its passengers. In terms of cleaning and maintenance services, stations need to pay for cleaning services, including platform, station facilities and toilet cleaning services, but also need to invest in maintaining the green and landscape, to keep the station surrounding environment clean and beautiful.

Operating and administrative expenses include management salaries and administrative expenses to support the day-to-day management and operational activities of the station.

Finally, in terms of insurance costs, the station needs to purchase liability insurance and property insurance to cover possible accidents and losses. Debt service and financing costs relate to paying interest on borrowings and fees for financing activities, which are financial expenses that stations may face. These expenditures form a major component of the station spending pattern, and stations need to carefully manage these costs to ensure sustainable operations and service levels.

## 2. Cost structure

The cost structure of the station covers multiple aspects and reflects the broad needs of its daily operations and maintenance. First, the maintenance of infrastructure and equipment is a key component of station expenditure. This includes the regular maintenance of infrastructure such as tracks, platforms and station buildings, as well as the repair and updating of equipment such as ticket vending machines, information display systems and safety equipment. This ensures that the facilities at the station are kept in good condition to provide a safe and efficient service.

Secondly, the cost of human resources involves the various types of staff employed by the station. This includes conductors, station staff, security staff, cleaning staff, etc. Staff salaries and training costs are part of the expenditure and are used to maintain the professionalism of staff, improve the quality of service and ensure the normal operation of the station.

Energy and water bills are indispensable expenses for the station. Electricity costs are used to maintain the normal operation of station lighting, elevators, ticket vending machines and other equipment, while water costs cover the use of water resources in the station sanitation facilities, fire extinguishers and so on. These costs are directly related to the daily operation of the station and the level of passenger service.

Real estate rents are another expense, especially if the station leases part of the space to businesses, including shops, restaurants, etc. Land use fees are fees that may be paid when a station is built on a particular piece of land. Equipment and technology updates are expenditures to keep stations modern and operating efficiently. This includes updating information systems, ticketing systems and other equipment to adapt to technological developments and changes in market demand.

Security and emergency management costs relate to ensuring the safety of the station and its passengers. This includes salaries for security personnel, operating costs for surveillance systems, and the cost of emergency response training and equipment. Cleaning and maintenance services are designed to keep the station clean and in good condition, including the cleaning of platforms, facilities and toilets, as well as the maintenance of greenery and landscaping.

Operating and administrative expenses relate to the salaries and administrative expenses of the station management to support the daily management and operational activities of the station.

Finally, the insurance premium includes liability and property insurance to cover possible accidents and losses. Debt service and financing costs are financial expenses that a station may face, including interest on borrowings and fees for financing activities.

Together, these costs form the spending model for the station, which needs to be carefully managed to ensure that its operations can be economically balanced.

## 3. Cost details

* Infrastructure and equipment maintenance:

1. Tracks and platforms: The cost of maintaining and repairing infrastructure such as tracks, platforms, station buildings, etc.
2. Equipment maintenance: maintenance of ticket vending machines, screens, information display systems, safety equipment, etc.

* Human resource cost:

1. Staff salaries: including conductors, station staff, security personnel, cleaning personnel, etc.
2. Training costs: The cost of training new employees or upgrading the skills of existing employees.

* Energy and water charges:

1. Electricity costs: Electricity consumption for station lighting, elevators, ticket vending machines, etc.
2. Water charges: for on-site sanitation facilities, fire extinguishers, etc.

* Real Estate and Rent:

1. Rent expenditure: If the station rents part of the space to businesses, including shops, restaurants, etc., it needs to pay the corresponding rent.
2. Land use Fee: If the station is built on specific land, a land use fee may be payable.

* Equipment and technology updates:

1. Update the information system: including the computer system in the station, network equipment.
2. Update ticketing system: Updates to the ticketing machine and ticketing window system.

* Safety and Emergency Management:

1. Security costs: Pay for security personnel, monitoring systems and other security measures.
2. Emergency response: The cost of emergency response training and equipment for emergency situations.

* Cleaning and maintenance services:

1. Cleaning service: including platform, station facilities and toilet cleaning service.
2. Landscaping and landscape maintenance: Maintain the vegetation and landscape around the station.

* Operating and administrative expenses:

1. Management Salaries: Salaries paid to station management and administrative staff.
2. Administrative expenses: including office supplies, office equipment, training and conference costs.

* Insurance cost:

1. Liability insurance: Purchase liability insurance for the operation of the station.
2. Property Insurance: Purchase insurance for the property and equipment of the station.

* Debt service and financing costs:

1. Loan interest: If the station has a loan, the corresponding loan interest needs to be paid.
2. Financing cost: Includes the cost of financing activities, such as the cost of issuing bonds.

The cost of these expenditures may vary depending on the size, scope of service, geographic location and facilities of the station. Stations need to take these expenditures into account to ensure that their operating costs are managed effectively and that there is a balance between revenue and expenses to achieve sustainable operations.

## 4. summarize

The sustainability of the station's business model is the cornerstone of its successful operation. First, diversified revenue sources provide stations with flexibility and resilience, reducing over-reliance on specific revenue channels. By constantly exploring new revenue streams, such as ticket sales, advertising partnerships and service expansion, stations are better able to adapt to changes in the market.

Secondly, the effective management of the cost structure is an important factor in ensuring the sustainable operation of the station. The station needs to carefully manage the costs of infrastructure maintenance, human resources, energy costs and other aspects to ensure that high-quality services are provided while maintaining a reasonable level of costs. This cost control initiative helps to improve earnings potential and increase sustainability.

Third, flexibility and innovation are key to the sustainability of the station. Stations need to constantly adapt their business models and introduce new technologies and services to adapt to the evolving market and passenger needs. Innovative solutions such as personalized service and digital experiences help to increase passenger loyalty and maintain the competitiveness of the business.

In addition, partnerships with government, business and the community are essential to support the station's sustainability. The government's financial support and regulatory guidance, the cooperation and sponsorship of enterprises, and the integration of the community all help the station to better meet the challenges and promote the development of the business model.

Overall, the station needs to build a robust and flexible business model to achieve sustainable operations through diversification of revenue, careful management of costs, flexible innovation and proactive collaboration. Such a business model not only helps the station to stand out in the market competition, but also provides better service experience and promotes the sustainable development of the station in the long run.

## 5.Vensim Simulation Model

