# Smart shopping guide

**Project description for non-ICT-technical stakeholders and general audience.**

The history of shopping malls can be traced back to ancient times, when people traded through things like bazaars, street stalls and hawkers. With the development of urbanization and industrialization, modern shopping malls came into being. A shopping mall is usually a large building with various shops, supermarkets, restaurants and entertainment facilities inside. It is a place for shopping, entertainment and socializing. The establishment of these large shopping malls has greatly facilitated people's lives.

However, with the development of the Internet, many online shopping platforms have been born, such as Amazon, Taobao and so on. Online shopping has the convenience and product diversity that traditional stores cannot match, which leads more and more people to choose online shopping. This has brought a huge impact on the traditional sales industry. As a master of traditional sales, large shopping malls have also been impacted by online shopping, but compared with online shopping, large shopping malls still have their unique advantages. First of all, customers shopping in the mall can directly see and touch the products, and can feel their texture, appearance and size better. These direct feelings cannot be obtained in online shopping. Second, when shopping in the mall, customers can pick up the goods they purchased immediately, without waiting for several days or longer for express delivery. This is very important for some customers who are in urgent need of goods. Finally, the most important thing is that shopping in the mall can bring more social experience, and customers can interact with other customers and shop assistants. These interactions can allow customers to obtain more product information and shopping suggestions, and can also increase the fun of shopping.

There are many large shopping malls with huge scale and complicated internal structure. It is difficult for a consumer to find a desired certain type of product or to find a specific location store when shopping in such a mall. And because there is no unified information release platform, consumers are easy to miss various promotional activities and preferential information of shops. In addition to these, the underground parking lot of the shopping mall occupies a large area, and consumers often spend a lot of time and energy looking for their own cars, which affects the shopping experience.

Some shopping malls have their own map navigations, but they only provide navigation and do not integrate the information of the shopping malls. If shopping malls and information technology can be combined, it can bring customers a better shopping experience. The managers of large shopping malls have also gradually realized that if they want to resist the impact of online shopping on the physical industry and survive in the current complex and changeable shopping mode, they need to bring customers a better shopping experience. And this is inseparable from the support of information technology.

The smart shopping guide system can not only provide customers with basic location and navigation, but also display the stores in the mall and the types of goods they sell, which store in the mall has discount activities, so that customers can find the products they need more easily, and improve shopping experience. In addition to facing customers, for store owners, there is a channel for distributing product discount information to attract more customers and increase turnover. For shopping mall managers, through data analysis of customer shopping information, they can better understand customers' shopping habits and determine the direction of mall development. In conclusion, the smart shopping guide system is an essential ICT solution that can improve shopping mall efficiency and consumer satisfaction. We believe this project will bring great value to the mall and is expected to become the mainstream of shopping mall navigation systems in the future.