

be effectively maintained. This kind of interchange occupies less land. If the upper line is in a convex position on the terrain, it is more advantageous to adopt this form. However, if this form is adopted in the city, the original underground pipeline is easy to be damaged when the lower line is excavated, and the drainage is also difficult. In the new project this year, the lizhan line K48 + 179.145 on Chengxi avenue of Guigang City intersects with the two tracks of lizhan railway. Because the passenger and material transportation of the railway line is relatively busy, the road crosses the railway in the form of tunnel. When designing the clear width of the road, due to the wide road width, there is a large difference between the width of the middle motor vehicle lane, there are green belts with a width twice that of both sides in the road, and municipal drainage pipes and other pipelines buried along the road about 2m below the non motor vehicle lanes on both sides, so there are many aspects that need to be considered in the design. In the clear height design, according to the combination form of the tunnel, the hole elevation on the top surface of the frame bottom plate on the cross section is 2.05 m lower on both sides than that in the middle, which increases the clear height of the side hole frame and meets the depth requirements of buried pipelines under the road surface of non motor vehicles.

Conclusions: In China, railway transportation is an important external transportation mode of cities. It started early and developed for a long time. With the expansion of China's urban scale in recent years, the scale of urban road construction is also expanding. In many areas, new urban roads intersect with existing or new railways. Therefore, we need to study the special node scheme of urban road and railway. The intersection of roads and railways will be an inevitable problem encountered in the national promotion of urbanization. In view of China's complex national conditions, changeable topography and various customs, when designing interchanges, we should consider not only the needs of economy and society, but also the constraints of cultural habits, so as to meet the vital needs of local people, Integrate the project construction into the people's life and take the people's interests as the ultimate starting point and foothold, so as to better benefit the people and benefit the country and the people.

Key words: behavioral psychology - road and railway - transportation

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RESEARCH AND SELECTION OF COMMUNICATION PROTOCOLS BASED ON MENTAL

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Background: Since the first implementation of ICQ in 1996, instant messaging system has developed rapidly. At present, it is not only used for text message transmission on the network, but also a composite communication tool including text, multimedia, file transmission and other functions. Instant messaging system plays a role not only in the field of user communication, but also in industrial fields, such as power, industrial manufacturing, telephone communication and other industries. Due to the development of instant messaging system in all walks of life, it often faces different network environments (LAN or WAN, different network connections such as cable, optical cable and WiFi) and different communication requirements (text, multimedia and file). The data transmission of instant messaging system is often affected by different bandwidth and delay, At the same time, the current Internet network does not provide quality of service guarantee. There are still many problems to be studied in instant messaging in such a network.

Objective: This paper focuses on the differences of instant messaging systems in different network environments, and analyzes them according to different services of instant messaging systems, such as communication, video, file transmission and so on. This paper selects different network protocols, analyzes the potential problems, and gives a feasible solution for the implementation of a real-time communication system that provides instant text communication, simple game, video and voice communication and file transmission under the Internet.

Subjects and methods: In order to transmit on the network, the instant messaging system must choose the appropriate transmission mode. According to the seven layer network model, the transport layer protocols TCP and UDP are mainly selected to transmit data on the network. TCP is the abbreviation of transmission control protocol. TCP is a connection oriented, reliable and byte stream based transport

layer (transport layer) communication protocol. TCP uses three handshakes, four waves, timeout retransmission and other mechanisms to ensure the reliability of transmission, but at the same time, the efficiency of TCP data transmission is relatively low. Moreover, in the case of network congestion, TCP will reduce its transmission rate due to the sliding window mechanism, resulting in lower transmission efficiency. UDP is user Datagram protocol, short for user packet protocol in Chinese, is a connectionless transport layer protocol in OSI reference model, which provides transaction oriented simple and unreliable information transmission service. It is a connectionless protocol. In the environment of unsatisfactory network quality, packet loss will be more serious. However, due to the characteristics of UDP: it does not belong to the connection protocol, so it has the advantages of low resource consumption, fast processing speed and higher transmission efficiency than TCP. Generally speaking, when UDP is used, authentication, timeout retransmission and other functions need to be realized in the application layer, but it is much faster than TCP. Moreover, UDP will not reduce its transmission rate in the case of network congestion. Although it has caused a certain burden on the network, it is easier to seize the bandwidth and ensure the communication of its own users. Due to the use of NAT technology, it is difficult for computers in the external network to access computers in the internal network, so it is necessary to use technical means to penetrate NAT.

As an instant messaging system, it needs to realize text chat, voice dialogue, video conference, file transmission and other functions. According to our previous analysis, different functions have different requirements for network transmission. The text chat function does not require high network bandwidth and delay, but it must ensure that chat information is never lost. Therefore, reliable connection should be preferred in the choice of protocol. The requirements of online game function for the network are similar to the text chat function, and the protocol should be connected reliably as much as possible. The voice chat function requires at least 128kbps bandwidth for the requirements of call quality. At the same time, it must ensure no packet loss. Reliability and transmission rate should be considered in the protocol. The video chat function not only sends voice information, but also sends video information. Even if the latest compression technology is used, the requirement for network bandwidth is still very high. At the same time, video information also has its characteristics, that is, it is not very sensitive to packet loss during network transmission. Even if a small amount of packet loss occurs, new video information will soon be sent to the client to refresh the packet loss information. Therefore, the selection of video chat protocol should give priority to the transmission rate and take into account the reliability. The file transfer function requires that the file be completely sent to the other party as soon as possible. Generally speaking, the file is always divided into several packets for transmission, and a complete file is formed at the receiving end. If the TCP protocol with high reliability is selected for file transmission, the transmission speed must be slow. If the UDP protocol with fast transmission speed is selected, the problem of reliability must be solved.

Results: At present, the situation of network infrastructure in China is not satisfactory. Relevant reports pointed out that the actual broadband download rate of more than half of domestic users is lower than the nominal broadband rate provided by operators. Therefore, in the instant messaging system, how to effectively use the bandwidth has become a more sensitive problem. Text chat function and real-time game function do not require high network rate, but have high reliability. Therefore, TCP protocol should be used for transmission. The use of TCP protocol can not only meet the functional requirements of text chat, but also the reliability of transmission is in the charge of TCP protocol, which is convenient for design. The voice chat function has high requirements for the transmission rate and delay of the network. When the bandwidth allows, the TCP protocol should be used for transmission. However, when the network is congested, the UDP protocol should be used for transmission. At the same time, the verification and timeout retransmission function should be adopted at the application layer to ensure the reliability. A better design should be that the voice chat system automatically selects TCP protocol or UDP protocol according to the network situation. When TCP protocol can meet the transmission requirements, TCP protocol is used for transmission. When the network is congested and the transmission rate of TCP protocol drops to the point where the voice quality cannot be guaranteed, it should automatically switch from using TCP protocol to UDP protocol. Because the video chat function has high requirements for the network transmission rate and can tolerate certain packet loss, UDP protocol is a better choice. At the same time, from the perspective of reducing server load, P2P technology can also be used to directly transmit video information between chat objects, and it is easier to penetrate NAT using UDP protocol. The file transfer function has high requirements for the transmission rate of the network. All bandwidth should be used as much as possible. After adding the packet verification and retransmission function in the application layer, UDP is the best choice.

Conclusions: The selection of the above protocols is in line with the current domestic Internet network status and communication technology, and can provide better instant messaging function. The author

believes that in the near future, with the further development of domestic network infrastructure, the popularization of cloud technology and the emergence of new audio and video protocols, the real-time communication system will provide better communication functions for network users.

Key words: mental - communication protocols - users

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MARKETING STRATEGY OF AGRICULTURAL PRODUCTS BASED ON CONSUMERS' MENTAL NEEDS

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Background: In recent years, China's agricultural ecological environment has been effectively improved, the pace of agricultural standardization has accelerated significantly, the quality level of agricultural products has been significantly improved, and the domestic demand for agricultural products has also changed from energy-based and nutritional-type to healthy, cultural-type superposition, leisure agriculture, and e-commerce to expand the colorful and unlimited potential of agricultural development space. However, in this context, in many places, agricultural products are still difficult to sell, agricultural products cannot be sold at good prices, and family farms are struggling to sell, and the problem of marketing agricultural products is becoming more and more prominent. The connotation of agricultural product marketing, the analysis of consumers' psychological motivation to buy and the marketing strategy of agricultural products, the value of customer transfer and the marketing of agricultural products.

Objective: This paper introduces agricultural product marketing and its strategy from three aspects: the connotation of agricultural product marketing, the analysis of consumers' purchase mental motivation and agricultural product marketing strategy, and the combination of customer delivered value and agricultural product marketing strategy.

Subjects and methods: 1. Consumer demand. Need refers to a mental state in which people feel a certain lack in individual life and social life and strive to be satisfied. In other words, the lack of a certain physiological or mental state of consumers is the needs of consumers. If consumers feel hungry, they will have a need for food; When you feel cold, you will need warm clothes; When you feel lonely, you will have the need for entertainment and communication; When you feel despised, you will have a need for social status and valuable commodities. Consumers' needs for agricultural products, It mainly includes: (1) The need for the use value of agricultural products. The use value is not only the basic attribute of commodities, but also the basic content of consumer demand. (2) the aesthetic need for agricultural products. The pursuit of beauty is human nature, and consumers' aesthetic requirements for the color, flavor and shape of agricultural products are advancing with the times. (3) The contemporary needs of agricultural products. Endow agricultural products with fashion value and meet the contemporary requirements of consumers for agricultural products. (4) The need for social symbols of agricultural products. Eating seasonal and local (origin) agricultural products has become a consumption mode of social elites. (5) The main body of agricultural product marketing must establish the service consciousness of taking consumers as the center.

2. Mental motivation of consumers to buy agricultural products. Different from the traditional product purchase mental motivation, for the consumption of agricultural products, there are mainly the following aspects of purchase mental motivation. (1) Mental motivation for peace. The consumption of agricultural products is related to everyone's survival and health. With the improvement of people's living and consumption standards, people's demand for agricultural products has changed from pursuing energy (food and clothing) to health, safety and nutrition. (2) Leisure mental motivation. With the development of social economy, people begin to understand "slow life" , enhance the desire for leisure life and expect to obtain the consumption of leisure agricultural products. (3) Experience mental motivation. Urbanization has caused environmental pollution, tense life and lack of green living environment, which makes people have the experience consumption motivation to escape from the "pressure mountain" and "get close to nature". (4) convenience mental motivation. Consumers regard the convenience of using and purchasing agricultural products as the first standard for choosing the mode of consumption and purchase of agricultural products.