

– при построении плана развития отрасли – выявление потенциальных рыночных ниш и выбор технологий, позволяющих максимально быстро разработать конкурентоспособные продукты для новых рынков сбыта.

Суть форсайта состоит в том, что наступление наиболее оптимального варианта развития процесса в будущем во многом зависит от действий, предпринимаемых именно сегодня. Вследствие этого выбор вариантов развития сопровождается разработкой мер, обеспечивающих оптимальный путь инновационного развития.

Результаты форсайта представляются в форме выступлений, отчетов, наборов сценариев, рекомендаций. Небольшой сложностью выступает лишь необходимость создания площадки, в рамках которых сотрудники предприятий, образовательных, научно-исследовательских учреждений, служащие, специалисты смежных областей знаний могут периодически обсуждать возникающие проблемы. При этом развитие цифровых технологий позволяет значительно упростить решение данной задачи.

В целом следует отметить, что современные тенденции социально-экономического развития транспортной системы, а также необходимость поиска новых резервов роста предъявляют новые требования к управлению организацией пассажирских перевозок. Использование в практике управления форсайт-технологий будет способствовать повышению качества управления не только пассажирскими перевозками, но и в целом железнодорожным транспортом в Республике Беларусь.

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ОПТИМИЗАЦИЯ ПАССАЖИРОПОТОКОВ ПРИ ОРГАНИЗАЦИИ ВЫСОКОСКОРОСТНОЙ ЖЕЛЕЗНОЙ ДОРОГИ ЦЗЯНМЭНЬ – МАОМИН

PASSENGER FLOW CHARACTERISTICS ANALYSIS AND TRAIN OPERATING ORGANIZATION OPTIMIZATION FOR JIANGMEN – MAOMING HIGH SPEED RAILWAY

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I have an idea is about the passenger flow analysis for Jiangmen-Maoming High speed Railway. You know with the rapid development of China's economy, the number of high-speed railways in operation and the number of total passengers delivered by high-speed railways are increasing. How to optimize train operation organization to meet the travel needs of passengers is the important problem that high-speed railways operators need to face. Of course, the same is true of Jiangmen-Maoming high speed Railway.

Jiangmen-Maoming high speed Railway is a high-speed railway from Jiangmen to Maoming in Guangdong Province. It is an important part of Shen-Mao High-speed Railway. Its total length is 265.539 kilometers and its designed speed is 200 km/h.

Therefore, I intend to analyzes the passenger flow characteristics based on passenger ticket data of Jiangmen-Maoming high-speed railway, from spatial distribution and time distribution. and puts forward corresponding suggestions.

Then analyses the matching of passenger flow space-time characteristics of high-speed railway station with current train operation organization, and puts forward the optimization method of train operation organization based on the passenger flow characteristics of the station and its application scope.

I will do some analyses the passenger flow, such as, Node passenger flow, origin destination (OD) passenger flow and Passenger flow direction from spatial distribution.

Holiday Passenger Flow, Weekly Passenger Flow and Time interval Passenger Flow from time distribution.

Then research some laws about the passenger flow, and does the Train Operation Plan Operation Match with the Passenger Flow Law? If there are unreasonable factors, how to optimize them?

That's the problem we need to solve.

However, there are some problems and difficulties. Such as getting the current real date about the high-speed railway, the optimal algorithm for train operation. All these need more detail research and discuss.

**ОПТИМИЗАЦИЯ МАРШРУТОВ СЛЕДОВАНИЯ ПАССАЖИРОВ
НА ВОКЗАЛАХ ЖЕЛЕЗНОДОРОЖНЫХ СТАНЦИЙ
ПРИ ОРГАНИЗАЦИИ ВЫСОКОСКОРОСТНОГО ДВИЖЕНИЯ**

**A STUDY ON PASSENGER ACCESS ROUTE SELECTION
AND OPTIMIZATION BASED ON LAYOUT
OF FACILITIES THROUGHOUT HIGH-SPEED RAILWAY STATION**

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As it turns out, the layout of the facilities throughout the high-speed railway station, can largely affect the time for passengers to enter railway station. Take Guangzhou South railway station as an example, there are so many customer service facilities including ticket office, real-name certification, ticket vending machine, exit, entrance, galleries, passenger waiting room, escalators, ticket gates (check-in office/ticket entrance/wicket), security check as it is one of the largest junction station. The location of these facilities will influence passengers' route selection, and it will cause an imbalance usage of facilities under the circumstance of passengers' unfamiliar with the layout of facilities, as a result, it will take much more time for passengers to enter railway station. Therefore it is significant to guide and optimize passengers' access route selection to reduce the time of queuing.

This paper will start with real-name certification and security check since they serve as two important and time-consuming steps for passengers to enter railway station. Adopting mathematical statistical principle, the paper analyzes the characteristics of queuing by adopting Queuing Theory Basis, establishes M/M/1/∞/∞/ FCFS (First come first served) queuing system model and calculates the queuing time and the quantity of waiting passengers. Then, this paper establishes a model to calculate the minimum time for passengers to enter the station based on the current layout of facilities. Finally, it gives out some advice for passengers to choose the access route.

To improve the efficiency of passengers' access.

Passengers' entrance process The ordinary entrance process includes 5 steps: ticket booking – real – name certification – security check – waiting hall – boarding. From the facility perspective, it contains entrance – ticket booking office or ticket vending machine – real – name certification machine – escalators – security check – waiting hall – check in.