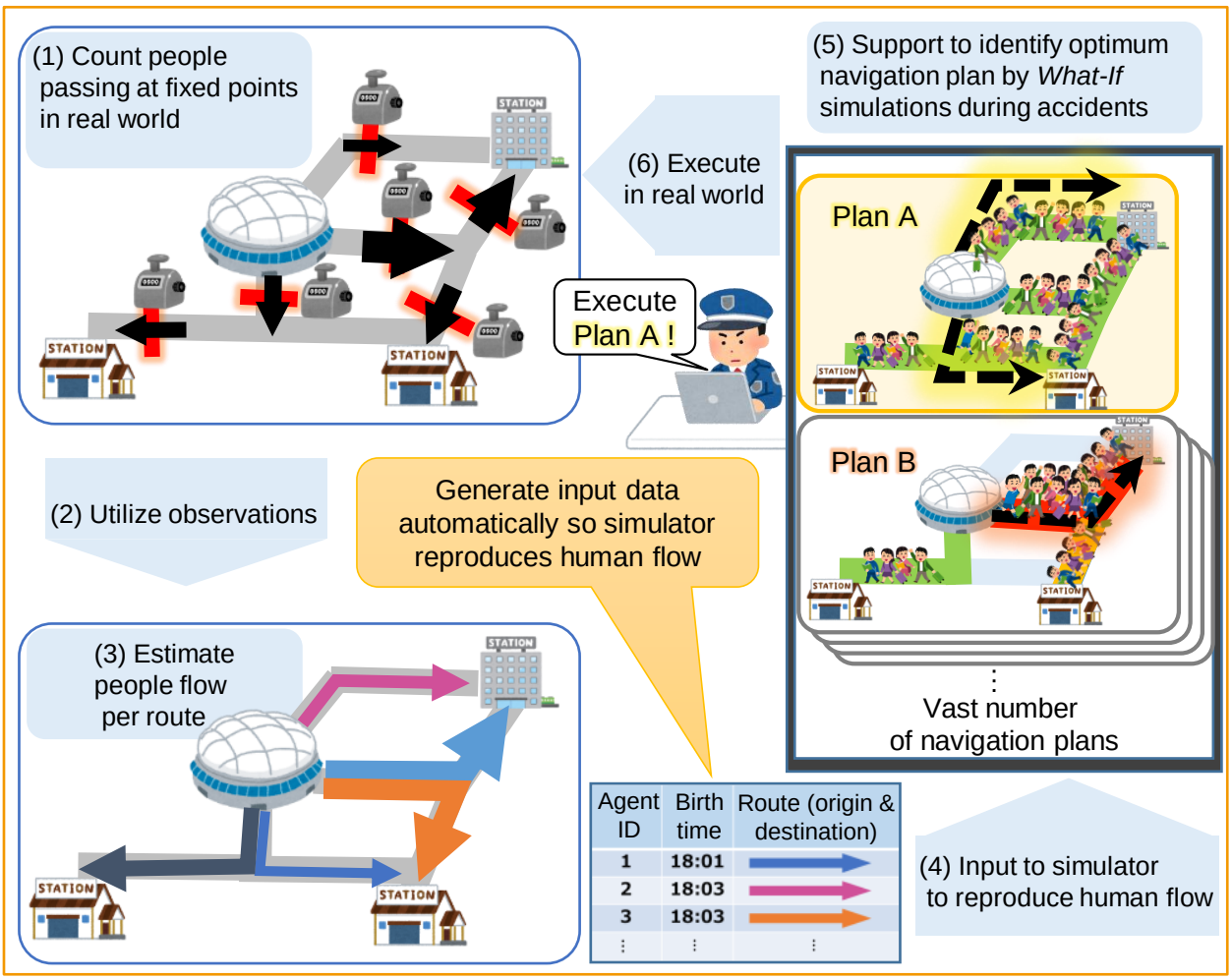
03 Where do they come from? Where are they going?

- Data assimilation and navigation learning for crowd -

Abstract

We smoothen the flow of people gathering at big events like sporting events. For that purpose, formulating a navigation plan in advance is critical. We introduce technologies that reflect actual world observations in crowd simulations and utilize them for navigation plan formulation. Based on observations of amount of people passing fixed points in real world, we accurately estimate people flow per route and simulate crowds. Among a vast number of navigation plans, we can efficiently search for optimum navigation plans on the simulation. Last year, we used this method when considering navigation plans for actual events. By predicting congestion and selecting appropriate navigation plans, organizers can hold events more safely and efficiently. Visitors can comfortably participate in them. Our method can also be applied to efficient car navigations and human flow analysis in stores.



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