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# Exploration of a Blockchain Assisted Framework for Through Baggage Interlining: Blocklining

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**Abstract :** International travel journeys, by their nature, incorporate elements provided by multiple service providers such as airlines, rail carriers, airports, and ground handlers. Data needs to be stored by and exchanged between these parties in the process of managing the journey. The fragmented nature of this shared management of mutual clients is a limiting factor in the development of a seamless, hassle-free, end-to-end travel experience. Traditional interlining agreements attempt to facilitate many separate aspects of co-operation between service providers, typically between airlines and, to some extent, intermodal travel operators, including schedules, fares, ticketing, through check-in, and baggage handling. These arrangements rely on pre-agreement. The development of Virtual Interlining - that is, interlining facilitated by a third party (often but not always an airport) without formal pre-agreement by the airlines or rail carriers - demonstrates an underlying demand for a better quality end-to-end travel experience. Blockchain solutions are being explored in a number of industries and offer, at first sight, an immutable, single source of truth for this data, avoiding data conflicts and misinterpretation. Combined with Smart Contracts, they seemingly offer a more robust and dynamic platform for multi-stakeholder ventures, and even perhaps the ability to join and leave consortia dynamically. Applying blockchain to the intermodal interlining space – termed Blocklining in this paper - is complex and multi-faceted because of the many aspects of cooperation outlined above. To explore its potential, this paper concentrates on one particular dimension, that of through baggage interlining.

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