

SYN+AIR's Smart Contracts Framework

an enabler of data sharing for multimodality

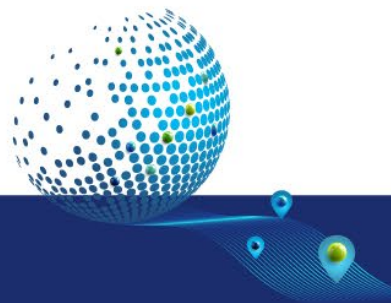
Ismini Stroumpou, Sparsity Technologies

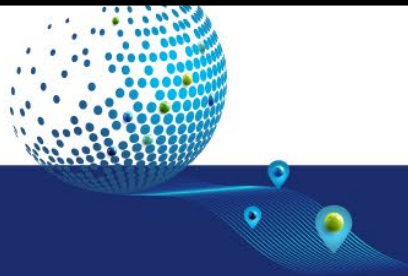
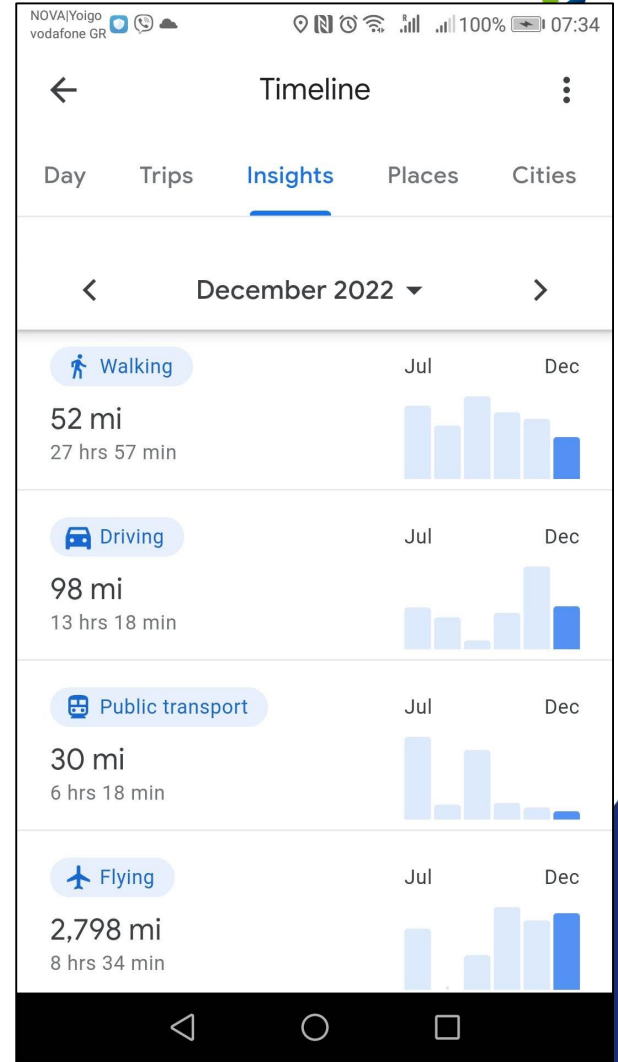
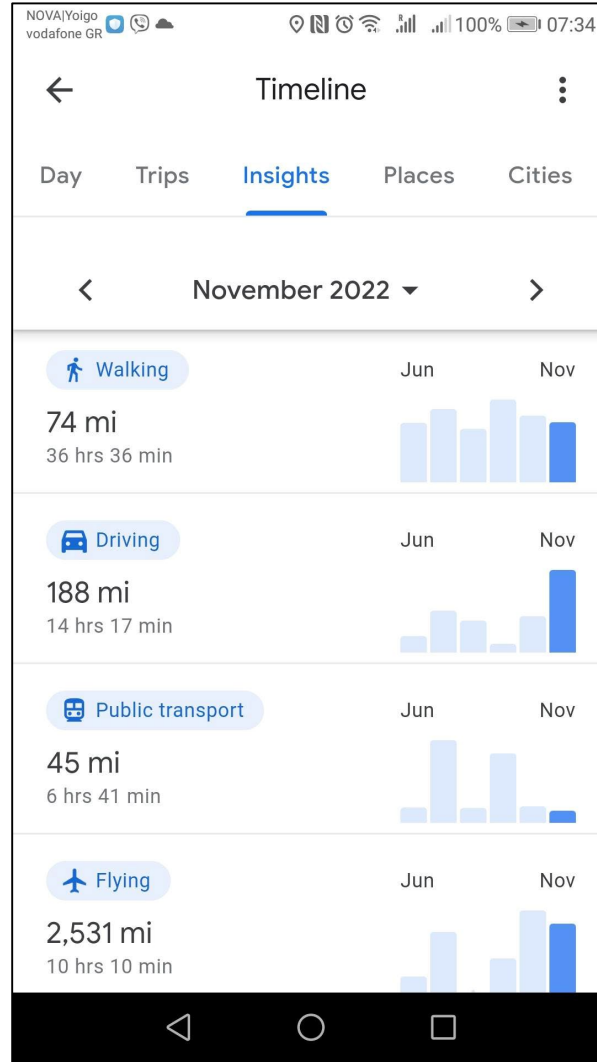
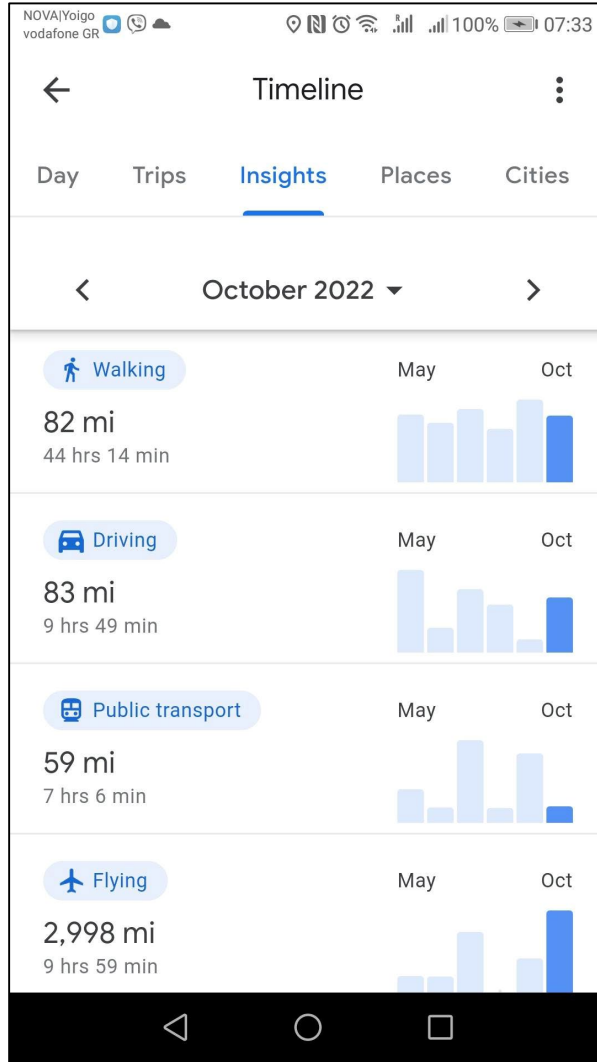
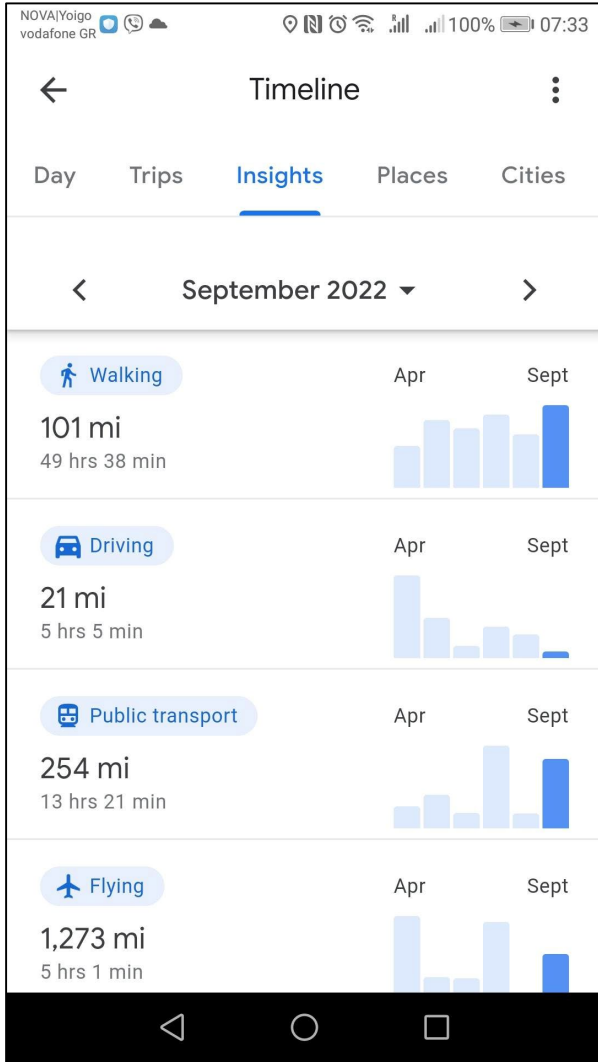
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This is your life in activities...



- Socializing/networking
- Eating
- Travelling
- Working/Studying
- Sleeping





Ideal situation



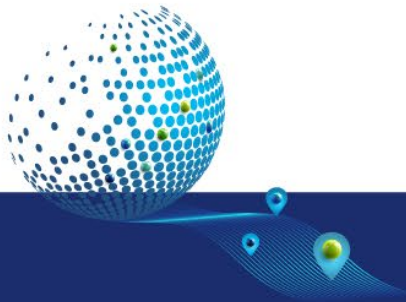
Joanna's needs & wants

1. Single ticket at a reasonable price
2. Real time information
3. Low waiting time at the interchanges
4. Re accommodation in case of disruption



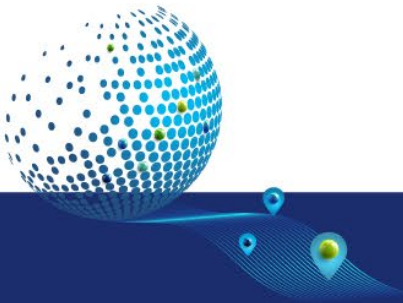
Transport Service Providers
(TSPs) should agree on:

1. Share data e.g., schedules, traveler's ID etc.
2. Pricing scheme / Revenue sharing
3. Responsibility sharing & real time information
4. Common interface such as a travel companion application dedicated to multimodality



Problem statement

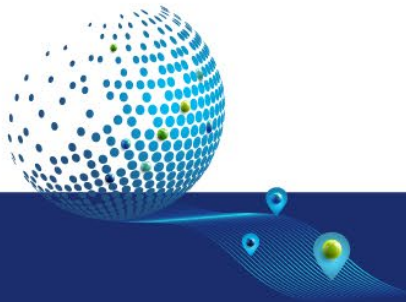
- Stakeholders want to collaborate, but they do not have a structured way to collaborate → Lack of standardization and means of collaboration
- Stakeholders want to store their data in their premises, and they are not willing to share them to new data cloud or to an external party → Lack of TRUST
- Different level of digitalization of different stakeholders (air transport, rail transport, buses etc., country-based differences)
- Hidden value of datasets → waste of value of time



What is the Smart Contracts Framework?

A **business process** that defines data exchange rules among TSPs that share the common goal of getting the passenger to the destination through a multimodal chain of trips

- provides a **centralized hub** for **contracts management** via a web platform (named SYN+AIR platform) that allows TSPs to create, modify, terminate, and validate signed contracts (both data **sharing agreements** and **smart contracts**).
- the storage of TSPs' data and, all the data sharing processes are executed **outside** of the SYN+AIR platform.



Framework's steps

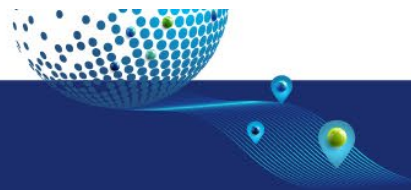
CONTRACT CREATION



Consider using the Smart Contracts Framework...

The objective of the proposed solution is to **simplify and standardized** the process of data sharing between TSPs and facilitate their mutual obligation in the field of multimodal transport.

- Get familiar with a **standardized process** for data sharing
- Identify **only the necessary data** to be shared and objective of data sharing/added value (e.g., single ticketing, reduce waiting time, disruption management) depending on the available data and on the objective resulted or selected. (Bidirectional process)
- **Optimize** negotiation time from a legal and technological perspective (use of existing standardizations models, protocols and technologies)
- By signing a **data sharing agreement**, the datasets (**what**) and the objective of sharing them (**why**) will be clear
- By signing a **smart contract**, the way operational obligations (actions) (**how**) and when to execute them (**when**) will be clear and continuity of data sharing will be secured with a proof statement.
- **Be part** of the implementation of this ambitious concept by participating at our advisory board



Thank you! Ismini Stroumpou

For more information about SCF please contact
me (ismini@sparsity-technologies.com)
or visit SYN+AIR's webpage (<http://syn-air.eu/>)

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