# **Executive Summary**

# Corporate

- Field: Big data analytics
- Activity: Mobility Analysis for Smart Cities
- Swiss Corporation (04/2018)
- Team: 14 people

# Segments

- Smart cities
- Tourism
- Transportation
- Urban Planning

#### Solution

- Deep tech
- Actionable insights
- GDPR compliant

#### **Product**

- Web based interface
- API
- Output data file (.csv/.shp)

# **Partners**

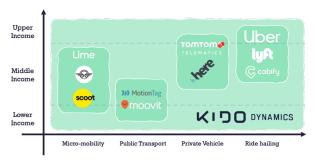


Data is the new oil, but Big Data analytics remains a luxury good.

Kido Dynamics democratizes Big Data, providing the most advanced insights to make cities smarter. Companies, governments and public institutions can know deeply understand people's mobility patterns: where they come from and go to, the routes they take, and time and seasonal aspects.

Our algorithms automatically and efficiently extract the most relevant information from telecom operator data, with a fully GDPR compliance technology.

Good quality, inclusive travel data are needed both to portray existing situations and to help identify problems related to the operation of today's increasingly complex mobility ecosystem, and where current solutions just focus on limited applications.



## **Our Solution**

Kido applies *quantum principles* to complex, massive data set in order to reconstruct the past and forecast future movements of people. This approach allows us to analyze all possible scenarios, assess likelihood for every state and identify most contributing ones.

After more than 10 years of academic research, we have developed the most advanced, available, quantum ready technology to efficiently transform mobile phone data into mobility insights.

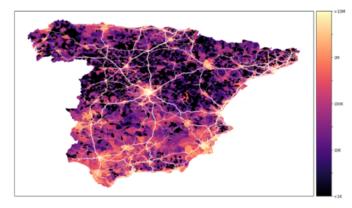


Figure 1. Travel density in Spain over one year (4+ billion trips analyzed)

Mobility is changing at a speed never seen before. Machine Learning and Artificial Intelligence might help to ease the transition, but they work with massive amounts of data and data is *expensive*, *complex*, *multisource*, and *difficult to integrate*.

However, there's an insufficient understanding and acceptance of Big Data, while companies/consultants are charging loads of money, arguing a big complexity of managing data quality.

There's an underpinning and unsolved issue regarding how tricky is to convert big data into valuable insights and make it at scale.

#### But we have fixed it.

- "Partnering with Kido Dynamics allows us to leap frog our solutions portfolio, reducing our development cost and time to market, and increasing our end-customer engagement and understanding, while we can easily monetize our data within a fully GDPR compliance framework"
- "Data monetization is becoming a focus area for Telecoms. The application of telecom data is principally across different industry verticals such as Transportation and Tourism and these requirements could be very complex. Having a plug&play, easy-to-use solution such as Kido Dynamics allows telecoms to simplify this complexity and effectively scale operations in such verticals"

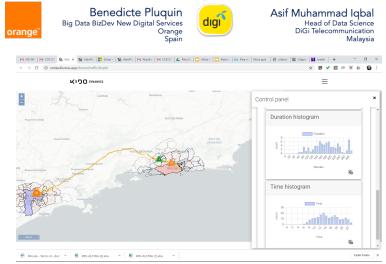


Figure 2. Kido Platform - Traffic analysis between Sao Paulo and Rio de Janeiro (Brazil)

# **Existing Problems**

- Scalability and usefulness of existing solutions
- Sample size biased
- Technical capabilities
- Understanding of customers' needs

#### **Existing Solutions, Existing Problems**

In most countries, including some of the most wealthy and advanced, conventional cross-sectional travel surveys are conducted roughly once a decade (i.e. they are "one-off" exercises) and only one weekday is surveyed for each respondent in "representative" periods when traffic flows are maximal<sup>1</sup>.

The kinds of data gathered, the methods used, how it gets interpreted, what gets overlooked, the context in which it is generated, and by whom, and what to do as a result, are all choices that shape the facts of a matter<sup>2</sup>.

The high cost associated with collecting data on transport supply and/or people's mobility has been mentioned as a reason for interrupting continuous data collection in different countries Worldwide<sup>3</sup>.

Transport, tourists or mobility analysis are based on manual surveys, with a very limited sample (less than 1'000 interviews<sup>4</sup>), which generalizes statistics and generates very inaccurate insights.



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<sup>&</sup>lt;sup>1</sup> http://creativecommons.org/licenses/by-nc-nd/4.0/

<sup>&</sup>lt;sup>2</sup> https://www.theguardian.com/science/political-science/2018/apr/18/smart-cities-need-thick-data-not-big-data

<sup>&</sup>lt;sup>3</sup> https://hal.archives-ouvertes.fr/hal-00559503

<sup>4</sup> https://doi.org/10.1080/10630732.2018.1471874

Furthermore, these methods are expensive, slow to implement, and difficult to scale<sup>5,6</sup>.



Figure 3. <u>www.smartdestination.app</u> – Kido Dynamics application for continuous monitoring of tourists' flow

SaaS B2B Licensing Model

## **Active Markets**

Spain

Qatar

Kuwait

Brazil

Malaysia

Dominic Republic

#### In conversations

Switzerland

Portugal

France

Sweden

Chili

Argentina

Mexico

US

Panama

UAF

Indonesia

#### **Business Model**

Kido Dynamics aims to be World reference in advanced mobility analytics, offering a scalable and easy to use platform suite to meet the needs of each client segment.

By servicing our larger and most innovative clients directly via our sales force *Kido* will continue a self-reinforcing cycle of product development based on client feedback.

To boost growth in the early stages, in addition to direct sales *Kido* will leverage a network of partners for each segment and region, such as marketing research companies, telecom operator sales teams, consulting firms and software distributors.

## Go to Market Strategy

Kido already has significant client contracts and a fast-growing pipeline of orders. We find and work with clients both directly and via partnerships.

Our platform will be fully operational on February 2020 (alpha version and project based so far), which represents a key milestone to boost our sales strategy and engage with customers at a massive scale.

We plan to boost our sales force and roll out our City and Tourism management platform in those countries where we have established partnerships with telco operators, including a signed contract in Qatar to provide analytics during FIFA World Cup 2022.



Figure 4. Total number of tourists in Barcelona (left) and relative ratio to residents (right)

 $<sup>^{5}\ \</sup>underline{\text{http://www.crtm.es/conocenos/planificacion-estudios-y-proyectos/edm2018.aspx}}$ 

<sup>6</sup> https://www.lainformacion.com/empresas/consorcio-transporte-publico-de-madrid-gasta-2-2-millones-en-una-encuesta-de-movilidad/6337578

#### **Markets Size**

- TAM = \$79B
- SAM = \$21B
- SOM = \$210M

### **Financials**

- 14 FTE
- 25 FTE by Q4 2020
- Next Fund Raising: Series A, CHF 3-5 M
- Closing: Q2 2020

## **Clients & Pipeline**

Kido has fulfilled contracts for CHF 650'000 in 2019, and we aim to achieve CHF 2'500'000 sales during 2020.

# **Opportunity & Market Size**

Considering that we use mobile data as a source of information, global total addressable market<sup>7</sup> for telecom data is estimated to be **US\$24.1B** in 2015, growing to **US\$79B** in 2020.

Due to a variety of challenges and constraints, telecom operators themselves do not have the leading data analysis teams and are only winning a small portion of the Telecom Data as a Service (TDaaS) market opportunity, capturing just 10% of the possible market today. There is a huge opportunity for fast, innovative companies like *Kido* in this space.

Likewise, smart roadways are expected to be the fastest growing segment in the smart transportation industry between 2017 and 2022 of a **US\$1.2T** market<sup>8</sup>.

Furthermore, **urban mobility** is the top priority and investment need for cities Worldwide<sup>9</sup>, with an expected investment volume of **US\$829B** by 2050. At the same time, many mature cities do not yet have a clear vision and strategy on how their mobility systems should look in the future, and Kido Dynamics can outstandingly yield clarity on this topic.

#### **Financials**

On July 2018, *Kido Dynamics* raised CHF 650'000 in equity from private investors, and was awarded on December 2019 a FIT Tech Growth Loan worth CHF 400'000. Furthermore, Kido Dynamics received an H2020 European Gran worth € 1.6M on May 2019.

This has allowed us to count 14 FTE in 4 different locations and presence in 6 countries.

All contracts are incrementally profitable, and revenues are growing very quickly. We are discussing recurrent contracts that will guarantee economic performance.

We plan to enhance our platform development incorporating technical talent and deploy our presence in at least 12 countries during 2020, for which we expect to reach 25 FTE. For these goals, we aim to raise CHF 3-5 M of growth capital in 2020.

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<sup>&</sup>lt;sup>7</sup> https://451research.com/report-long?icid=3534

https://www.prnewswire.com/news-releases/smart-cities-market-by-focus-areas-transportation-types-solutions-services-utilities-types-solutions-services-buildings-types-solutions-services-citizen-services-types-and-region-global-forecast-to-2022-300492002.html