D8.2 Economic valorisation

Interview with Geert Wets

Developing the i-DREAMS platform which helps stakeholders to improve their road-safety performances will only be useful if we are able to conquer a place in the market. This deliverable focuses on the steps we undertake to reach that market. We had a talk with Geert Wets, work package leader of WP8 'Road map to market and society' and one of the co-authors of this deliverable.

Hello Geert, thank you for this interview. I will fire away with my first question. What do you consider important for us to know about this market?

GEERT: "I think it is important for you to be aware of the status of the telematics industry in the transport sector. This industry has seen a significant acceleration in its capabilities and applications such as fleet management, eco, safe driving... This is largely due to a couple of striking trends. Firstly, there is the booming of e-commerce which surged during the COVID pandemic due to lockdowns and social distancing. But that shift in how people shop turned out to be permanent. Secondly, there is the phenomenon

called usage-based insurance (UBI) which implies a different way of calculating a person's insurance premium. Instead of using the total distance to calculate that premium, UBI uses real-world driving behaviour. So, if you can demonstrate safe driving habits, your premium will become lower. Then thirdly, there is a growing demand for entertainment, sustainability, safety & security and navigation purposes. Overall, the demand for telematics solutions in the transportation industry continues to grow as organizations seek to improve efficiency, safety, and compliance."

If you want to bring i-DREAMS to that market, I believe it is important that you have an idea of what i-DREAMS is able to do compared to other competitors on the market. Is that something you looked into?

GEERT: "Yes of course. We did a survey of 39 companies of varying sizes and operations that provides us with insights in their businesses and market activities. The majority of these companies appeared to be focussing on fleet management (77%) and compliance (72%). Fleet management companies usually provide telematics equipment with built-in compliance features. The survey also found that 69% of companies provide driver behaviour insights, 56% show driver scores and real-time warnings, and 59% offer ecodriving. Coaching services, however, are less common, with only 30% of companies providing them. Original equipment manufacturers (OEMs) and commercial vehicle manufacturers are found to have a significant competitive advantage in telematics integration due to the development of their own telematics systems. Other are consolidating through acquisition to complete their ecosystems."

Did you compare companies based on the telematics solutions that they offer and the differences between that and what i-DREAMS offers?

GEERT: "To gain a deeper understanding of the telematics solution market, we selected six companies¹ based on their popularity in the market, size, market segment and availability of information. These companies offer a range of safety features that are based on their ability to collect data. They track various dangerous driving behaviours, such as distractions, speeding, tailgating, rolling stops, harsh braking and acceleration, sharp turns, and others. The safety features they offer range from real-time alerts during a trip to posttrip analysis and coaching of driving performance. These companies and i-DREAMS are compared based on the safety metrics they track, their real-time and post-trip intervention capabilities, and the strength of their overall ecosystem which focuses on human driving safety behaviours. Each company has its own unique features which could become its competitive advantage depending on its target market segment. Among them, i-DREAMS stands out with its comprehensive range of safety metrics and a full-spectrum knowledge-based approach that spans from real-time intervention to post-trip analysis, coaching with data-based footage, and motivating drivers via gamification."

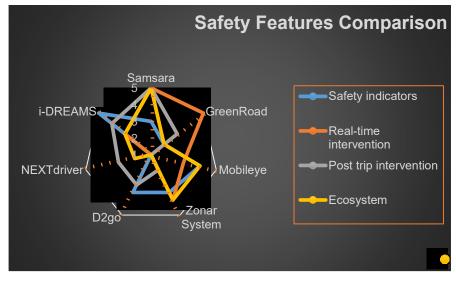


Figure 1: Safety feature comparison of i-DREAMS and some other telematics solution companies

Could you highlight for us again what the main assets of i-DREAMS are?

GEERT: "The i-DREAMS platform integrates various factors, including context, operator, vehicle, task complexity, and coping capacity, into a comprehensive framework to establish a Safety Tolerance Zone (STZ). Empirical experiments have demonstrated that in-vehicle and post-trip interventions can effectively complement each other and maintain drivers in the STZ. All interventions come with footage as evidence, while post-trip interventions offer additional incentives, such as gamification



¹ These companies are Samsara, GreenRoad, Mobileye, Zonar Systems, D2go, and NEXTdriver. Later, along with i-DREAMS, these companies are compared on their features on human driving safety.

challenges and rewards, to encourage safer driving practices. Invehicle interventions are aimed at preventing immediate crashes, while post-trip interventions focus on long-term effectiveness and sustainable driving safety improvement."

What was your next step to getting i-DREAMS closer to the market?

GEERT: "In a next step we drew up a Lean Canvas for the modes 'truck' (see Figure 2), 'bus' and 'car'.

PROBLEM	SOLUTION	VALUE PRO	POSITIONS	UNFAIR ADVANTAGE	CUSTOMER SEGMENTS
 Follow up of professional drivers is limited Education perceived as out of pocket cost → limited to what is legally required (Code95) Very low sector margins (2-3%) Time to follow up drivers is negligible 	 Gamification features for safe & eco driving Personalized post trip features Real-time alerts in vehicle Assessment of driver's suitability to drive 	 Create additional benefit, become an ambassador Possible lower insurance fees Lower operating costs (fuel, tires), improved service level Lower risks, less variable risks CSR Innovative solution to follow up trainees 		 Continuous automated feedback Integration real-time (safety tolerance zone) and post trip feedback 	 Truck drivers Truck company management Insurance companies Training companies (e.g., Code95)
	KEY METRICS			CHANNELS	
	 Number of drivers % of driver performance improved by x% % operating cost reduction % claims reduction 			 Direct sales Insurance brokers Add-on to existing TMS solutions 	
COSTS			REVENUES		
 Software platform (development, hosting) Marketing Sales Legal Customer support (training material, feedback to coaches) 			 Trucks (15€ per user / month) Delivery vans (5-7,5€ per user / month) 		

Figure 2: Lean Canvas for trucks

Based on these canvasses we identified four potential markets: (1) professional light vehicle insurance, (2) heavy vehicle insurance, (3) driver teaching & examinations and (4) bus companies (see Figure 3).



Figure 3: Potential markets for the valorisation of the i-DREAMS technology

Given the fact that the i-DREAMS platform consists of numerous components, we checked for a productmarket fit. This is important because it is doubtful that each market is ready to implement, use or need all the components of the entire i-DREAMS platform. In Figure 4 we provided an insight in what that product-market fit could look like for each of the selected markets.

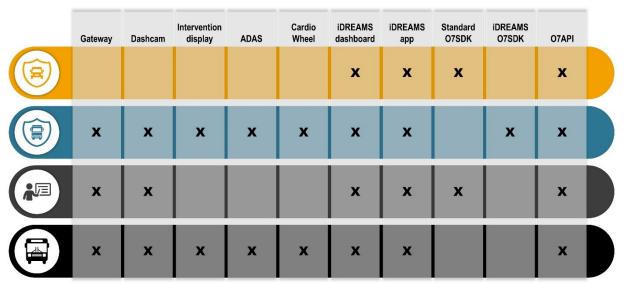


Figure 4: Product-Market fit of the i-DREAMS configuration

What do you consider to be the biggest challenge to operationalize all of this?

GEERT: "There are many challenges, but the legal aspect of facilitating it all definitely falls under that category. The operationalisation of the business cases originates from a set of agreements between the consortium partners that document in detail the rights and responsibilities of said consortium partners for the collaboration within the context of the i-DREAMS project, as well as after the completion of the project."

What type of agreements do you mean?

GEERT: "Firstly, there is the Grant Agreement (GA), the principal document! The GA is a contract between the European Commission and the grant recipients. It describes all the financial and legal conditions that must be met to realize the EU grant. Secondly, we have the Consortium Agreement (CA), a mandatory agreement between the consortium partners that sets the framework for a successful collaboration in the project. It complements the GA (without any contradiction). And since the consortium (jointly) processes personal information, an agreement concerning the (joint) processing of personal data was compiled and signed by the consortium partners. Furthermore, there is a significant valorisation potential for the i-DREAMS project results after the conclusion of the project. The i-DREAMS Framework Agreement with respect to the i-DREAMS platform documents the terms and conditions for a legal framework with respect to the academic and commercial use of the i-DREAMS platform. And then of course, there are the legal and ethical aspects. The development and use of the i-DREAMS platform involves the participation of people and the processing of their personal data. This created the need for a GDPR agreement. Given that the GA, CA and GDPR agreement are set to expire at

the end of the i-DREAMS project, the i-DREAMS Framework Agreement remains the principal required agreement for further valorisation activities involving the i-DREAMS framework. However this will not suffice to conduct our valorisation activities. We will need to foresee several types of agreements along the way."

Such as?

GEERT: "Firstly, an <u>addendum to the existing i-DREAMS Framework</u> <u>Agreement</u> for it to remain in full force after the completion of the project. Secondly, <u>agreements to be signed with client businesses</u> in a B2B relation. These are user agreements on the one hand, determining the conditions for clients for the use of the i-DREAMS platform offerings and the rights, obligations and liabilities that come with that. On the other hand, these are material transfer agreements (MTA) arranging the exchange of company and driver data. Then thirdly, there will also be <u>individual agreements</u> to be signed by each individual driver that produces and shares personal data within a valorisation project."

That indeed does sound challenging. In the deliverable, I also read something about demo projects. Can you explain what those are?

GEERT: "To narrow the gap between research and validation and facilitate commercialization, several demo projects were established during the *i*-DREAMS project to demonstrate a scalable prototype version of the *i*-DREAMS technology in a real-world, industrial case. While the *i*-DREAMS field trials demonstrated a technology with a Technology Readiness Level (TRL) of 6 (technology demonstrated in relevant environment), the purpose of these demo projects was to bring the *i*-DREAMS technology to TRL 7 (system prototype demonstration in operational environment). To achieve this, several changes and compromises had to be made to the technology used during the *i*-DREAMS field trials. Four companies were selected to run demo projects with the adjusted *i*-DREAMS technology."

What conclusions did you draw from those demo projects?

GEERT: "The purpose of the demo projects was primarily to bridge the gap between research and commercialization. Based on lessons learnt during the i-DREAMS field trials, a new and scalable solution was developed where research hardware is replaced with industrial grade hardware. This exercise also has been a good example of the flexibility and modularity of the i-DREAMS platform, where data input can be provided by various sources with the main concepts of scoring and influencing driving behaviour remaining unaffected. Similarly to the i-DREAMS field trials, the industrial hardware solution also required emphasis on flexibility and modularity to meet the requirements of different companies, vehicles and transportation types. Furthermore, the biggest challenge has been to create a scalable solution while also assuring the highest possible standards of quality and keeping cost-perinstallation at a minimum. Therefore, clear installation procedures, documentation and tools for validation were developed. A comparison was made between different suppliers of telematics and GPS-tracking hardware, with Teltonika hardware being the first to be integrated into the i-DREAMS platform."

Geert, thanks a lot for you time! Edith Donders DisCom Manager Deliverable 8.2 is part of WP8: Roadmap to market and society

i-DREAMER in the spotlight



GEERT WETS

Graduated as Commercial Engineer in Business Informatics in 1991 and PhD in 1998 Employed at the Transportation Research Institute of Hasselt University as Director since 1998 Passionate about chocolate and wine Tasks in i-DREAMS: work package leader of WP8