# **Document overview**

#### **General product definition:**

Software with a variety of functionalities with the main purpose of improving driving lessons quality for driving students, and driving skills assessment for active drivers/employees.

#### **Product application:**

Client type: driving schools.

**Location:** EU, and in future - Worldwide.

#### Main research points:

- **1. Competitive study based on application** (*web research for specialized and suitable products*) for similar software or services on the market?
- a. Define and compare main functionalities;
- 2. Personas based on the data found regarding average age and education levels requiret to obtain a driving license;
- **3. Creating questionnaires** with product-related questions, based on the potential/active/past students expectations, needs, experience, and defined functionalities.
- 4. Questionnaire analysis.

# **Competitive study**

#### Table legend:

Option available: + | Option not available: - | Information not found: ?

Driving schools							
Product name (+link)	Simply book me	Acuity Scheduling	Total Drive	Driving School Software	<u>Teachworks</u>	<u>Picktime</u>	Archibald Drive Assistant /OUR PRODUCT/
Booking and schedule overview	+	+	+	+	+	+	+
Bookings reports	+	+	+	+	+	+	+
Instructor ratings	+	-	-	-	+	+	+
Students success rate by different criteria (instructor, seasons, car transmission type, driving license category, etc. options for custom filtration)	-	-	+	-	+	-	+
User roles and rights (student, school administrator, driving instructor)	+	?	+	+	+	+	+

Vehicle park and car data	-	-	+	-	+	-	+
Automatic reminders (students and instructors). In-app communication	+	+	+	+	+	+	+
Predefined lesson routes /pick-up and drop-off points	-	-	+	-	1	-	+
Multiple school locations	+	+	+	-	+	+	+
Document management / intake forms	+	+	+	+	+	+	+
Payments related options	+	+	+	+	+	+	+
Lessons cam. recordings	-	-	-	-	-	-	+
Speed limits tracking	-	-	-	-	-	-	+
Street signs recognition	-	-	-	-	-	-	+
Automatic indication of regulations violation	-	-	-	-	-	-	+
Driving lessons progress and statistics	-	-	+	-	+	-	+

Theory lessons and tests	-	-	-	-	-	-	+
Theory lessons progress and statistics	-	-	+	-	-	-	+
Notes	-	-	+	-	+	-	+
Video lessons or other attachments/assignmen ts	-	-	-	-	+	+	+
Course progress	-	-	+	-	-	-	+
Smartphone app (Android or iOS)	+	-	+	-	-	-	+
Integrated design customization options	+	+	-	-	+	+	+
Available for integration on the school website	+	+	-	+	+	-	+

### **Personas**

\*Minimum age requirements for getting a driving license." https://europa.eu/youreurope/citizens/vehicles/driving-licence/get-driving-licence/index en.htm

#### Persona #1

High school students

Name: Michael; Age: 16 years old;

Family status: an only child in a mid to higher class family;

**Education:** currently a high school student;

Previous driving experience: little to none; occasional attempts for driving an older

friend's/family member car;

**Motivation for obtaining driving license early:** he will be able to hang out more with friends, and he will look cooler;

#### Main characteristics:

- still in puberty and wants to be independent;
- wants to be cool and always be ahead or at least keep up with his friends;
- child with lots of friends;
- comparing himself with the group of friends and searches for their approval and attention:
- lots of experience with different kind of devices and interactive softwares (mobile phone, tablet, computer; playing a lot of computer games)

#### \*\*Image not used due to legal age concerns\*\*

"It's gonna be sooooo cool to have a driving license and drive around with the gang. Surely, I will become more popular in school too if I have a car..."

#### Key goals:

- to pass the tests with high grades from the first time so he can ask his parents for a car;
- to create a buzz around himself while he is still learning how to drive;
- to become a good enough driver in order to win his parents' trust that he is not a child anymore and he is responsible enough;
- most of his friends still have not started driving courses, so he wants to be ahead of the game and be the "cool kid from the group".

#### Persona #2

Graduated high school students

Name: Sarah;

Age: 18 and a half years old;

Family status: younger child in a mid-class family;

has a bigger brother; has a boyfriend;

**Education:** graduating or just graduated high

school student;

**Previous driving experience:** little to none; occasional attempts for driving boyfriend's/family

member's car;

Motivation for obtaining driving license early: she wants to keep up with her friends and in future to travel more with them.

#### Main characteristics:

- Independent in a high degree, but wants more freedom and mobility;
- most of her friends already have a driving license, or are currently taking lessons;
- smart and capable with lots of friends;
- isn't planning to be a very active driver in the beginning, but does not be able to drive around when she starts college;
- an average level of technical and software experience (mostly mobile phone user, uses the devices mostly because of social media)



/Photo by Антон Жук from Pexels/

"I am not a child anymore and most of my friends have a driving license already... Besides, I will be moving out from home for college soon, so I want to be more independent."

#### Key goals:

- to learn how to drive properly and safely;
- to get a driving license so she can take the family car when needed;
- to keep up with her friends;
- wants to have a car in future so she can travel more and be more mobile when she is in college;

#### Persona #3

A young mother

Name: Maria; Age: 32 years old;

Family status: married, has one child; Education: masters' degree in Economics; Previous driving experience: little to none;

occasional attempts for driving the family car under

her husband's guidance;

Motivation for obtaining driving license early: for her as a young mother is a must to have a driving license and drive safely. Her husband travels for work several times per month, so she has to be able to take care of their newborn baby, go shopping, visit parents, etc.

#### Main characteristics:

- highly educated and organized;
- loving and caring mother and wife;
- on a busy schedule when her husband is out of the town for work and can't help her;
- determined to be a good driver for the safety of her child and her own safety;
- not a tech-savvy, but above the average level of skills. Had previous experience with different software and interfaces for managing documents and data in her line of work



/Photo by Yan Krukov from Pexels/

"I am a mother now, so for me, one of the most important things is our son safety when I am behind the wheel. I must be as good a driver as possible to be able to deal with my schedule on time, safely, and without too much tension in the process."

#### Key goals:

- to be as good a driver as possible;
- to feel comfortable behind the wheel when she's driving alone or with her child in the car;
- be flexible and mobile;
- wants to have time for the more important things than dealing with public transportation or waiting for taxies;

# **Questionnaire analysis:**

#### **Survey question №6:**

Are you willing to use digital assistant tools to improve your learning process?

**The goal of the question:** To validate if a digital assisting tool for driving lessons would be desirable/used at all.

**Question result:** Yes, such a tool would be used by 94.1% of the survey participants.

#### Survey question №5:

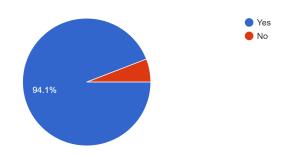
What is the average time you could spare daily for learning and improving your driving skills?

The goal of the question: To define the average learning time the users could spare in their daily routine.

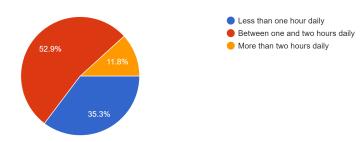
**Conclusion:** The bigger part of the survey participants can not spare more than two hours daily for learning, **so we should:** 

- define the features that might be more desirable;
- define some of the most often learning process pain points; Based on that we must prioritize the findings in order to shorten the learning curve for mastering the tool.

Are you willing to use digital assistant tools to improve your learning process? 17 responses



What is the average time you could spare daily for learning and improving your driving skills? 17 responses



#### Survey question №4:

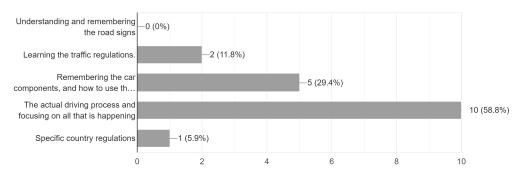
Which of the following parts of the learning process would you define as the hardest for you?

The goal of the question: To define some of the most common pain points in the learning process for different users, and ideate for potential solutions that would improve the learning process.

#### The assumption to be validated:

Based on the competitive study and highlighted functions that are considered as an advantage compared to the rest of similar tools on the market, the following ones could potentially improve the learning process of the drivers:

Which of the following parts of the learning process would you define as the hardest for you? 17 responses



Feature	Description
Lessons cam. recordings	Video and audio recordings of each driving session, that are accessible on-demand for the driving student. Having such an archive, the user can revisit it, analyze it and understand better in a calmer environment what did he/she did wrong. In addition - an option for the driving instructor to mark when a specific situation occurs. Those marks are to be automatically attached to the video recording time frame, so the user can get back to them easily and hear again the instructor's explanation.
Speed limits tracking	The software should constantly track the vehicle location and speed, and based on that data if the driver is speeding, this should be marked on a route map. That way the user can identify how many speed limits were broken, and where, which would help in the driving style self-monitoring process.
Street signs recognition	The software should be able to recognize the street signs, and if the driver violates them, the software will place a pin on the route map. The pin would consist of information about the sign (image + text) and based on the overall driving performance - a scale of how often the driver violates this sign regulation. In addition - street lights recognition.
Automatic indication of regulations violation	Based on the two features above (Street signs recognition and Speed limits tracking), the software could have an option for warning signals/voice commands for the driver to return in the regulation in case the driver is violating the traffic regulations or the card behavior is suggesting future regulation violation.

For example, the system could indicate if the speed is too high and the car might not stop in time in close distance to a crossroad with a red light or a STOP sign.

#### Survey question №9:

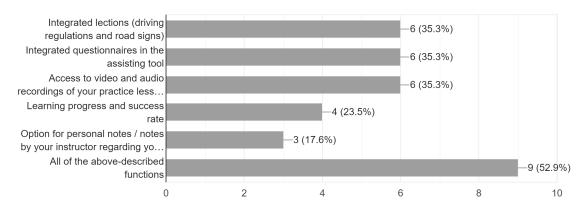
In case you are willing to use digital assistant tools to improve your learning process, which of the following functions and features would you find helpful?

The goal of the question: To define what functions, that are related to the assumed features in **Question** No4 would be desired.

**Conclusion:** The users are positive that will have interest in lessons related to driving regulations and road signs, and find video and audio recording useful. Considering that, the features pointed as assumptions in **Question №4** have the potential to be in high demand, which would give the product a head start on the market.

In case you are willing to use digital assistant tools to improve your learning process, which of the following functions and features would you find helpful?

17 responses



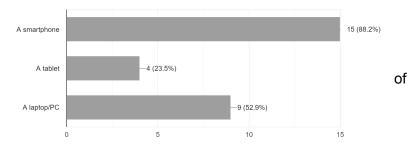
#### Survey question №7:

In case you are willing to use digital assistant tools to improve your learning process, what devices would you prefer?

**The goal of the question:** To define what are the device preferences the users.

In case you are willing to use digital assistant tools to improve your learning process, what devices would you prefer?

17 responses



**Conclusion:** As expected, the device preferences tend to be mobile-first experience, followed by desktop devices. Based on that data, the main focus should be on the user experience on a mobile device.

\*\*Competitive study shows that out of six similar tools, only two have apps available, so well designed and developed app could give an additional advantage of the tool.

#### Survey question №8:

In case you are willing to use digital assistant tools to improve your learning process, what studying forms would you prefer?

**The goal of the question:** To define the learning method preferences of the users.

**Conclusion:** Most of the users would prefer both reading and video lessons.

#### Survey question №11:

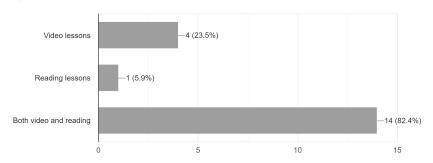
How helpful for your learning progress would you find a digital assisting tool that gives you access to all theory lessons, success rate, data for tour driving performance, video and audio recordings that you could watch on-demand?

The goal of the question: To the overall opinion of the user for the helpfulness of that kind of tool.

Conclusion: Most of the users define such toll as very helpful.

In case you are willing to use digital assistant tools to improve your learning process, what studying forms would you prefer?

17 responses



How helpful for your learning progress would you find a digital assisting tool that gives you access to all theory lessons, success rate, data for tour... audio recordings that you could watch on-demand? 17 responses

