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EVOLUTION OF EDTECH BUSINESS MODELS

Prospective monitoring
March 2020
by Geneva Intelligence









Edtech definition



Monitoring Methodology



Analysis of trends

Summary of the March 2020 edition



Marmelade is a micro learning application that allows you to acquire knowledge by answering a question displayed on the home screen of your mobile phone.



Kipoya is a tutoring application that locks remotely "recreational" applications (social networks and video games) on students' mobile phones and tablets by sending a series of exercises adapted to their grade level.

Kahoot!

Kahoot is a game-based platform that offers a fun and social learning environment by generating interactive quizzes.

satchel:

Satchel One is a digital platform designed to optimise the time spent by teachers and school staff on classroom management.



Studytracks is an application that allows students to study while singing.





Example of Prospective Monitoring



Definition of Edtechs:

The acronym EdTech is short for Educational Technology. **EdTech represents the use of new technologies to facilitate and improve knowledge learning and transmission.**

For example, e-learning provides individual digital training instead of physically attending classrooms. The "classrooms" and MOOCs (Massive Open Online Courses) are lectures broadcast on the Internet. The LMS (Learning Management System) makes it possible to distribute educational content online, including the possibility of offering a complete course. There are also educational robots that accompany young people in their learning by capturing their attention.

EdTech provides tailor-made and on-demand services. It revolutionises training, making it possible to **design a personalised learning path for students.**

Teachers and schools in general also benefit from these technologies to facilitate the transmission of knowledge in collaboration with their students through participatory and pedagogical teaching. In addition, they use these technologies as **online platforms to better organize, control and monitor learning and adapt their teachings to students**. This allows them to provide more relevant and effective services.

Overall, Edtech benefits students and teachers as well as schools by **facilitating administration and communication**. They improve dialogue, education, learning and above all pedagogy.

DISCOVER MONITORING METHODOLOGY







Definition of Prospective Monitoring



Overview

Prospective monitoring consists of implementing a systematic monitoring process of the environment in order to identify weak and mature signals which are indicators of change. It is a question of collecting strategic information to be able to anticipate changes in the ecosystem in order to respond as soon as possible and adequately. Prospective monitoring provides support for the implementation of a commercial and technological strategy.

Methodology

An effective method is to conduct products and service developments monitoring.

The below steps were taken to carry out the monitoring and illustrate the results:

- Research, analysis and comparison of a dozen innovative offers in the field of Edtech
- Identification and understanding of the commercial and technological benefits of these technologies
- Identification of Edtech trends and innovations. Trends represent market characteristics and developments.

Objectives

A company or an educational institution which wants to be sustainably competitive must constantly be aware of changes in its market in order to limit risks or benefit from these changes.

- Monitor competitive products and service developments
- Identify and distinguish innovative trends and strategies over the long term
- Analyse, critique and compare this information with the existing strategy of the reference organisation
- Evaluate competition and their business strategies through their innovations
- Carry out a self-evaluation and develop a strategy
- Find inspiration in the business and technological trends.

DISCOVER EDTECH TRENDS ANALYSIS





Edtech Trends Analysis



The canton of Geneva, in consultation with the Federal Council, introduced from 16 March to 19 April, the the stay-at-home order for all pupils compulsory school, upper secondary education and persons pursuing higher education in order to limit the spread of the coronavirus. However, kindergartens, primary schools and special education facilities provide very limited care for the children of parents working in a field related to the management of the pandemic.

However, the Covid-19 crisis represents great opportunities for certain sectors of the economy, such as the Edtechs sector. Indeed, the containment measures have made schools aware of the need to have a continuity plan for education based mainly on distance learning made possible by Edtech solutions. This sector has perfectly seized this opportunity and most of its actors make their tools and technologies available to schools during the containment period. As an example, the Edtech France association which federates more than 250 companies offers free and unconditional digital resources and tools for schools, teachers, parents and students.

What are the needs to be met by these solutions during a period of containment?

- Interaction between students and teachers should be maintained through distance education. This is what the start-up Kahoot allows in part through a playful and social learning environment allowing the emission of interactive guizzes that can be done at a distance.
- The acquisition of knowledge by students must also continue. The Marmelade application promotes micro learning by displaying a question on the home screen of students' mobile phones. The answer to the question, whether correct or incorrect, allows the student to unlock their phone and access its content. In a similar vein, Kipoya allows the remote locking of "recreational" applications (social networking and video games) on students' mobile phones and tablets by sending a series of exercises adapted to their grade level. Completing these exercises is the key to unlocking these applications. In a lighter tone, Studytracks allows students to revise their lessons through music and singing.
- The administrative management of classes and interactions with parents, although less important, should not be neglected in order to ensure a resumption of normal activity as soon as possible. This is what the Satchel One solution offers by optimising the time teachers spend on this task.

The Covid-19 crisis therefore represents a **significant and undeniable economic springboard** for **Edtech companies** facing an exponential increase in demand. However, this demand **must be put into perspective** with regard **to the potential crisis in public finances** that will follow the **protective economic announcements** made by the Swiss authorities.

DISCOVER EDTECH TRENDS













Collaborative course learning platform and soft skills

Online platforms allow information to be transmitted and facilitate access and learning processes.

- The accessibility of knowledge is the main advantage of these technologies for teaching across different media. They enable remote learning at the appropriate time for the individual.
- These platforms foster collaborative relationships between teachers and students. They facilitate group activities and communication.
- They enable the monitoring of the evolution of learning and the implementation of pedagogical procedures.

























Artificial Intelligence and adaptative learning

Artificial intelligence (Al) in Edtech facilitates learning which is personalized. Edtechs learn themselves how to teach students better.

- Al helps to understand the individual's reasoning, to take into account his/her knowledge and the best ways for him/her to learn.
- This technology facilitates understanding by using the most appropriate techniques at the right moment.
- Teachers can use the analysis made by these tools to better understand students and their processes.









Edtech Trends





Experiential learning platform

Edtechs link internship offers with teachers and students.

- These services provide a better understanding of the labor market and its opportunities.
- Students receive hands-on training with mentoring from experts.
- Companies can discover new talents whereas students can discover the job market.









Tools for creating, marking and evaluating exams, as well as reviewing papers with an anti-cheat system.

These Edtechs provide access to a secure platform in order to set up an evaluation procedure.

- They allow the creation of exams (MCQ, gap text, essay, graphs...) in all subjects, including tools for marking and grading.
- These platforms facilitate the monitoring of student results to visualise changes in grades per student and per class. These technologies are secure and prevent any cheating.







Game-based learning

By using fun and educational tools, Edtechs are using games as a way to facilitate learning and attract the attention of students of all ages.

- These technologies make it possible to reinvent learning methods by using neuroscience.
- They value collective interaction and intelligence as well as group experience and creativity.











Language learning

Language learning is easier and faster.

- Edtechs measure the individual's pace of learning and calculate the appropriate timing of teaching and adapt course content based on knowledge.
- These technologies are permanently accessible and enable more effective learning processes.















Edtech Trends





Life at school in community

Edtechs promote the school community and the smooth running and functioning of the school.

- These technologies promote communication between teachers, students and parents.
- They facilitate administrative procedures such as tracking school records or absences, for example.
- They highlight new pedagogical techniques to support students, for example, with awards.



















Tools or solutions to directly or indirectly improve the physical and psychological wellbeing of students and/or teachers.

These have a significant impact on academic performance, teaching quality, pedagogical excellence and the school's reputation.

- These technologies allow the teacher's administrative work to be reduced as much as possible so that he can concentrate on teaching and on student's well being.
- These platforms aim to guarantee the physical and psychological integrity of the students.





Degree Analytics

















Marmelade: micro learning at your fingertips

Marmelade is a micro learning application that allows you to gain new knowledge by answering a question displayed on the home screen of your mobile phone. The answer to the question, whether correct or incorrect, allows you to unlock your phone and access its content.



Type

A tool to promote the acquisition of knowledge.

Competitive advantage

Turning a mobile phone into an educational tool and a daily gesture into a continuous learning process.

Price

No information is currently available on this subject.

Number of users

Since 2019, the application claims about 20 customers using its solution for about 13'000 users.

Stage of development

Founded in 2017, Marmelade launched its application for French students in 2018 and then opened its product for companies.

The start-up raised EUR 500,000 in 2018. Marmelade also launched a new fundraising campaign in February 2020.

Link https://marmelade-app.fr/





Marmelade: micro learning at your fingertips

Advantages

- The solution promotes learning with locked questions at the mobile phone's home screen unlocking step (as seen in the screenshot here).
- The start-up provides schools with a catalogue of questions and training courses. However, schools are free to propose their own questions.
- The application allows you to set the desired number of questions per day as well as the time slots during which the questions will be asked.
- Depending on the proposed answer, Marmelade's artificial intelligence can be used to generate a short explanatory sheet supplementing the answer with additional information.
- Student progress and knowledge acquisition are measured by Marmelade.
- Phone functions are not impaired. For example, a phone call will have priority and will not require the question to be answered to answer the caller.
- Marmelade is available on iOS and Android, the two most popular operating systems in the world.

Suitable for:

Kindergarten



Primary School



Secondary School



University













Marmelade: micro learning at your fingertips

Analysis of the offer

Marmelade is an application that allows students to gain knowledge by unlocking their phone's home screen.

In an identical way to the Wooclap solution (presented in the June 2019 edition available here) Marmelade transforms the mobile phone, traditionally considered as an **obstacle to learning**, into **an opportunity to acquire knowledge** through a daily gesture made many times by students. Indeed, an average user consults his or her mobile phone between **150 and 220 times a day**, which suggests the **educational potential of the application**. In this respect, Marmelade claims that on average **23 interaction**s are carried out per user and per day at its customers.

A teacher can thus **program questions on the knowledge transmitted** during a lesson and check that the students assimilate them in the following days. It should also be noted that the **content of the questions** is **completely customizable** and can be proposed for different courses.

School directors will also be able to use this tool **to carry out awareness-raising campaigns**. For example, at a time when pupils are confined to their homes in the face of the spread of **Covid-19**, questions relating to **social distancing behaviour** can be asked in order to determine whether the health and safety message of the school or the authorities has indeed been assimilated by the pupils.

However, this application has some limitations. First of all, its tool promotes the acquisition of knowledge but does not focus on the development of critical thinking or analytical skills. Indeed, the answers to unlock the phone are only binary. In this respect, Marmelade should be seen as a learning complement.

On the other hand, **not all students own a smartphone for economic reasons**. Some parents also wish not to entrust a mobile phone to their children **for educational and cultural reasons**. By choosing to offer Marmalade to its students, a school may cause some form of **social and economic inequality** in the **acquisition of knowledge** among its students. School remains an important factor in **social upliftment**, although many intellectuals such as the sociologist Pierre Bourdieu have highlighted **social reproduction** and the **inequalities** inherent in its functioning. Therefore, the adoption of such an application could lead to **counterproductive results** in this respect.







Kipoya: lock mobile phones to learn better

Kipoya is a tutoring application that remotely locks "recreational" applications (social networks and video games) on students' mobile phones and tablets by sending a series of exercises adapted to their grade level. Completing these exercises is the key to unlocking these devices.

Type

A tool to promote the acquisition of knowledge and the practice of school exercises.

Competitive advantage

Promote student learning while reducing conflicts between parents and students around mobile phones.

Price

Kipoya offers 14 days to test the solution. A monthly flat rate of EUR 4.99 is available without any commitment, while the solution can be purchased for one year for EUR 3.99 per month. The start-up offers its service free of charge during the period of coronavirus spread until the Easter holidays.

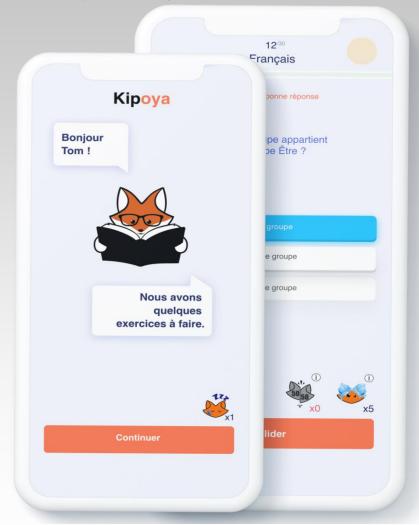
Stage of development

The start-up was created in July 2018. The product was made available to the general public in January 2020.

Suitable for:



Link https://kipoya.com/







Kipoya: lock mobile phones to learn better

Advantages

- The exercises consist of evaluations in the form of quizzes allowing the memorization of the courses and the anchoring of knowledge.
- The exercises focus on French and mathematics lessons for students between 11 and 14 years old.
- Different levels of difficulty related to the exercises exist according to the age and class of the student.
- A personalized interface allows parents to follow the student's results and progress.
- The exercises are short, between 10 and 20 minutes, which allows maximum concentration of the student.
- Parents will be able to set a time slot to activate the device lock.
- Setting up the application is simple and intuitive and can be done in less than a minute.
- Essential phone functions such as calls and messages are not locked voluntarily for security reasons.
- The solution undertakes to scrupulously respect an ethical charter with regard to data protection.







Kipoya: lock mobile phones to learn better

Analysis of the offer

Kipoya is an application that blocks social networks and video games on students' laptops and tablets. By completing exercises, recreational applications can be unblocked. The application is primarily intended for the students' parents to encourage their children to study. Nevertheless, this solution can be recommended by schools for parents, especially in this period of confinement due to the spread of Covid-19, where distractions are legion at home.

90% of schoolchildren are equipped with a smartphone and spend an average of 2h40 per day on social networks. Kipoya seeks to capture a tiny part of this time, between 10 and 20 minutes, by proposing exercises to be carried out to unlock social network and video game applications.

Kipoya is an interesting solution for parents and their children's interactions with mobile phones. This object is often at the centre of conflicts between them. Traditionally, technological objects such as telephones and video game consoles were confiscated, hidden until homework and exercises were completed and induced tensions. Kipoya avoids this type of situation by restoring some control to parents over their children's mobile phones, not over the object itself but over the content they can access, which may seem potentially less invasive and repressive to children than taking possession of their phones.

However, this solution has a number of drawbacks. A first **technical limitation** inherent to the application concerns the **elements that it is able to block, namely online applications.** For example, video games that do not require an Internet connection, which are becoming increasingly rare, will escape blocking.

A second disadvantage concerns **the content of the proposed exercises**. At present, they **focus** only on **mathematics and French lessons**, which partly limits the attractiveness of the solution for some parents who would not see the point of such an application if their child has good marks in these lessons.

The main limitation of this service would be the immediate retributive nature of the solution in response to the completion of the exercises. Indeed, the adoption of such a solution introduces a "reward", i.e. access to social networks and video games, whereas the completion of exercises to reinforce its knowledge must be assimilated by the child as necessary in order to continue his or her studies. The risk is to internalize in the student an expectation of immediate reward in reaction to an effort made. The fruit of the efforts made is not always visible and available in such a short period of time, which could potentially discourage a student in the continuation of his studies and his professional life.

Furthermore, the **principles of student empowerment and responsibility** are not favoured by the designers of the solution with regard to its management of digital tools. Nevertheless, the application seems to be a relevant tool in a logic of transition towards a more moderate use of social networks and the Internet by pupils.









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Kahoot: play at the service of learning

Kahoot is a game-based platform that offers a fun and social learning environment by generating interactive quizzes.

Type

A tool to promote student learning.

Competitive advantage

Kahoot focuses its product on gamification using the mechanisms of play to promote the acquisition and assimilation of knowledge by students.

Number of users

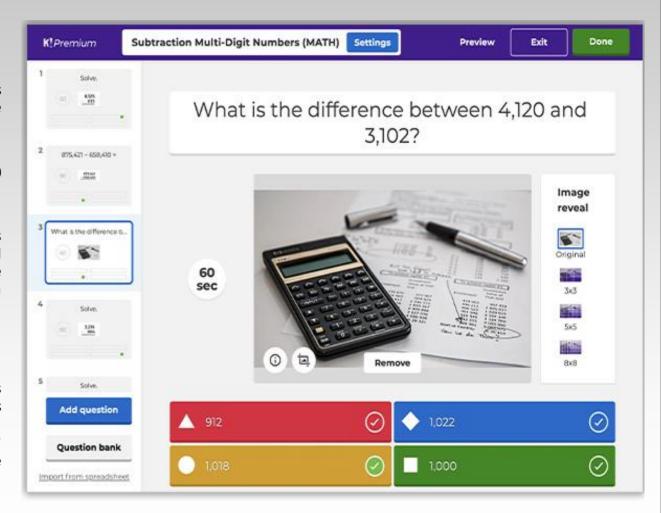
Kahoot claims more than a billion players a year in over 200 countries. More than 50% of American teachers use the solution.

Price

Kahoot is a freemium solution. A free version is available but is however limited in the functionalities it offers. A professional version can be purchased for EUR 3 per teacher per month. The premium version, which offers all the platform's functionalities, can be purchased for EUR 6 per month per teacher.

How does it work?

- The teacher creates a Kahoot (interactive quiz) on the platform.
- The quiz is broadcast online or conducted in class. Questions and answers are displayed on a large screen while students answer on their own devices.
- An analytical report is issued with regard to the students' answers, making it possible to measure, for example, the integration of knowledge in a simple and instantaneous way.



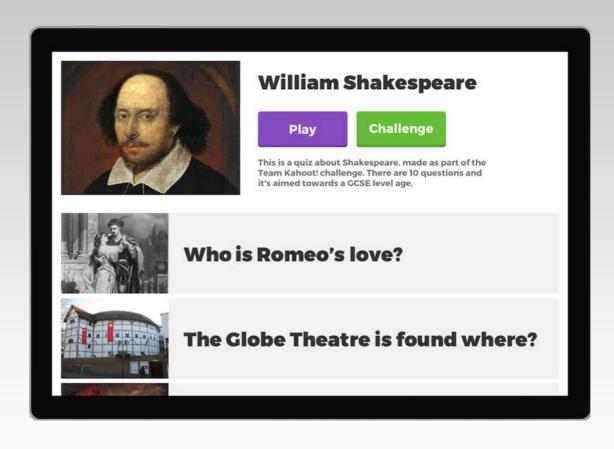




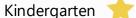
Kahoot: play at the service of learning

Advantages

- The creation of the game (quiz) is quick and takes only a few minutes.
- The questions the teacher wishes to ask can be imported from an Excel file.
- A database of 500 million questions is available to teachers.
- Additional supports can be added within the quiz, such as Youtube videos.
- The quiz can be spread on an overhead projector or remotely via a video conferencing service.
- Students can answer the questions individually or in teams.
- Surveys can collect student feedback and comments instantly.
- Detailed reports listing student responses can be produced by the platform, allowing the monitoring of student progress.
- These reports are easily shared between teachers and school administrators allowing a comprehensive and global following of the student.



Suitable for:











University 🔭





Kahoot!

Kahoot: play at the service of learning

Analysis of the interest

Kahoot is a tool for creating interactive quizzes to encourage student participation and engagement.

The solution may first allow teachers to **introduce new topics** by assessing students' prior knowledge. Because of the universal format of the multiple-choice questions, Kahoot seems to be adaptable **to any courses and subjects taught.**

In the same logic, this tool can also be used **to identify knowledge that would not have been assimilated by the students** after a lesson. The solution makes it possible to record the pupils' answers at the end of each question session in order to determine what information have been retained. The teacher can come back in the next lesson on the concepts that would not have been well understood, thus facilitating the good understanding of all and better results. **A personalized and adapted follow-up of each pupil** can then be carried out by the school, which can **reinforce its pedagogical excellence**.

More anecdotally, but nevertheless importantly, Kahoot displays answers on the screen visible to all students but does not indicate which students made a mistake in formulating their answers. This ensures that even **the most shy students are not discouraged by encouraging them to participate** by quaranteeing the anonymity of the answers.

Being able to respond to a Kahoot in teams of several students is particularly interesting. This can potentially **accustom students to working in groups, motivating and arguing their choices.** This encourages a student's ability to work in a team from an early age and can only help him/her in future work with other students in the pursuit of his/her studies.

The ability to **use Kahoot both face-to-face and online** also enhances the attractiveness of the solution by **allowing for distance learning** or allowing students to **complete their homework** via this application. In a period of containment due to the spread of Covid-19, **Kahoot can be a timely tool that schools and teachers can offer.**

However, this **solution has some disadvantages**. Firstly, students have **to answer via their own mobile phones or tablets**. This requires that each of them has such tools. The school can acquire such technological means, but this will **require a significant investment**. The format of the questions is also somewhat limited. Only multiple choice questions or quizzes are available, which will **not allow the school to go beyond the simple pedagogical objective of acquiring knowledge.**







satchel:

Satchel One: a tailor-made classroom management platform



Satchel One is a digital platform designed to optimise the time spent by teachers and school staff on classroom management. The tool centralizes in one place various applications useful for the supervision of students.

Type

Class management tool.

Competitive advantage

The solution reduces the amount of time that teachers spend on administrative tasks related to classroom management.

Price

No public information is currently available on the price of this technology. However, the price will vary depending on the applications chosen.

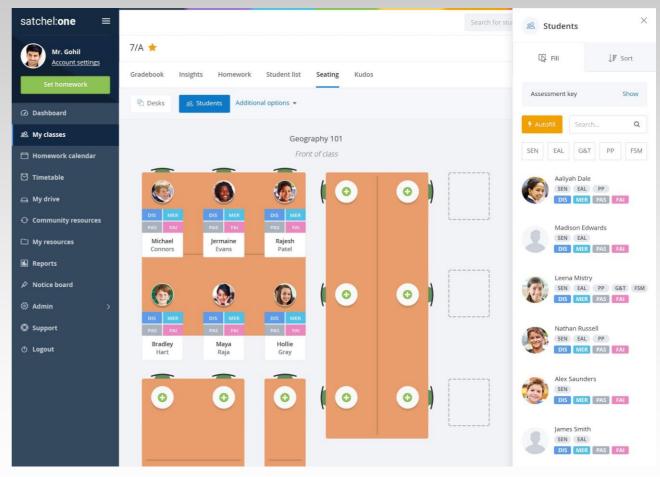
Number of users

The start-up claims more than 1'600 users for its various applications. 1/3 of British Secondary Schools have acquired its flagship product Show my homework, an aid for planning, managing and carrying out homework.

Suitable for: Primary and Secondary School



This solution seems adequate only in the context of primary and secondary school studies. The various applications proposed relate to the management of a class that does not concern higher education, since teachers working in these structures are partly exempted from this type of task.

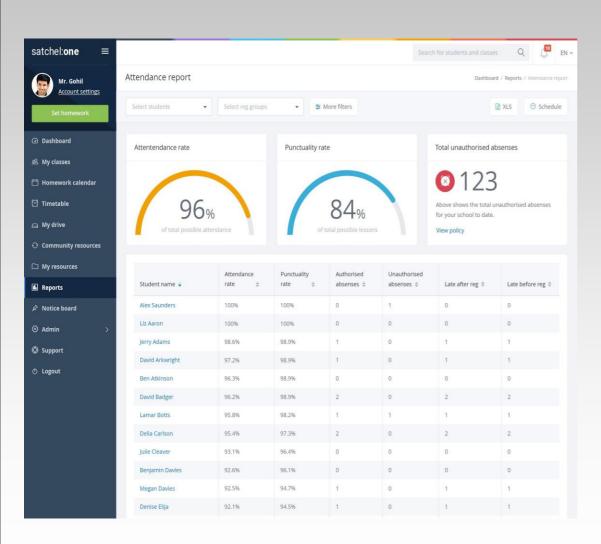




satchel:

Satchel One: a tailor-made classroom management platform





Advantages

- The solution allows teachers to plan the assignments and ensure that they are completed correctly and for the students to submit them online through the platform. The teacher can also customize the assignments according to the students' level. Parents are also integrated into the process and notified of their child's work.
- The solution makes it possible to create class plans and optimize the placement of students in the classroom.
- The presence of students in class, attendance and punctuality are managed from the platform. Statistics are issued at the level of the students and the institution.
- Schedules can be built on the platform. Updates of times and locations are automatically communicated to students.
- A follow-up of the students' behaviour is possible through the online distribution of good and bad points. The system makes it easy to identify students who should be followed up more closely by the school.
- The tool can be used to manage "bad school behaviour". Student detention for bad behaviour can be planned from the solution. Both the student and his/her parents are immediately notified of such a measure.
- Satchel One also offers pedagogical content for teachers to facilitate the transmission of knowledge.



satchel:

Satchel One: a tailor-made classroom management platform

Analysis of the offer

Satchel One provides teachers and schools with a tool for **optimized classroom management.** Through various applications, teachers are able to **reduce the time spent managing homework, schedules, class attendance, class plans and disciplinary actions**.

A significant advantage of the solution is the **centralization of all these functionalities in one platform**. Many solutions exist for each functionality on the Edtech market. **Satchel does not innovate radically by offering these services** but **it brings all of these into one single platform.**

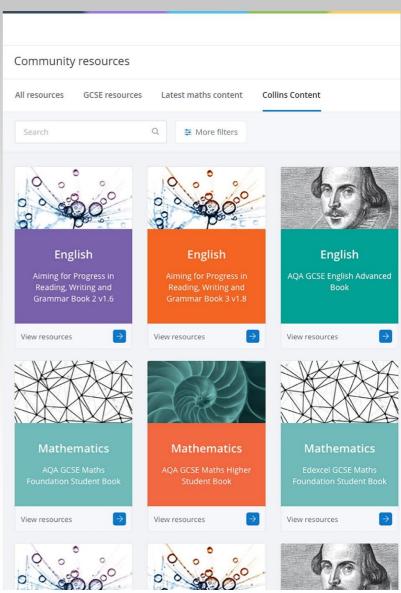
The solution avoids the multiplication of service providers used, requiring different connections relatively time-consuming and therefore allows teachers to drastically reduce the time spent on these tasks.

In another logic, a particularly attractive element of the solution is that **the different applications do not work in silos but communicate with each other**. As an example, an unjustified absence detected by the attendance application will, if the school sets it up in this way, result in a detention measure being made and a notification being sent to the parents. This makes it possible to carry out an **effective follow-up of the pupil** and to **propose an accompaniment by the school** if the need is felt.

Moreover, Satchel One **does not impose all the functionalities** in its commercial offer. Schools can choose from the different applications those that best suit their needs, which is **advantageous from an economic and functional point of view.**

However, the start-up's product has certain limitations. Firstly, the solution may appear potentially **repressive** to students if all the functionalities are adopted by an educational institution. All events and actions taking place within a school are **reported**, **measured and analyzed**, which can induce a feeling of **generalized surveillance** and be **counterproductive** to an **educational and reputational level** of the institution.

Furthermore, although Satchel offers the possibility to choose only certain applications among those available, the start-up only offers its own products, which does not give the school any choice in the selection of the provider. A teacher will potentially be more inclined to choose Satchel One for **the centralization of the services** the company offers rather than for the **relevance of its products.**













Studytracks: learning in song

Studytracks is an application that allows students to study while singing. Teachers make revision sheets while producers, musicians and performers put them into song.

Type

Tool to help memorization and acquisition of knowledge.

Competitive advantage

The main advantage of this tool lies in its ability to encourage students to learn through a medium they are particularly fond of: music.

Price

The solution for students without the accompaniment of one of their teachers is available for EUR 4.99 per month. Teachers can make the solution available to their students for EUR 10 per month with an unlimited number of identifiers.

Number of users

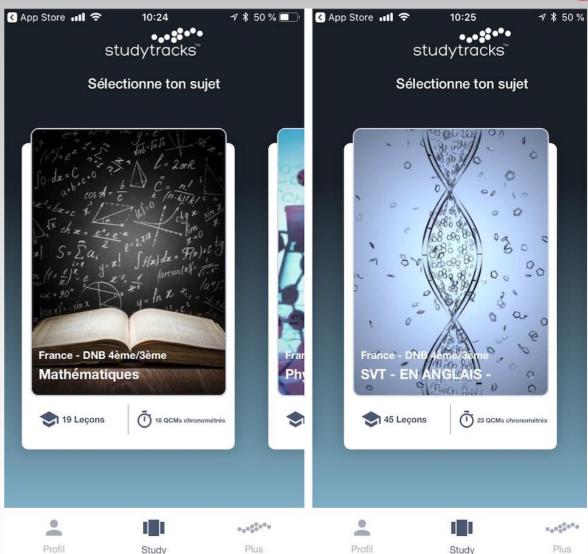
The Studytracks application has been downloaded more than 500,000 times worldwide and more than 200,000 times in France. The high use of the application in France is explained by the collaboration of the start-up with famous French artists.

Stage of development

The start-up was founded in 2015. The application is available in the UK and the US since 2016 and 2018 in France. The start-up raised EUR 1 million in September 2019.



http://www.studytracks.fr/







Studytracks: learning in song



STUDYTRACKS Fiches de révision en musique



Suitable for:

Ecole primaire

Ecole maternelle



Ecole secondaire



Etudes supérieures



Advantages

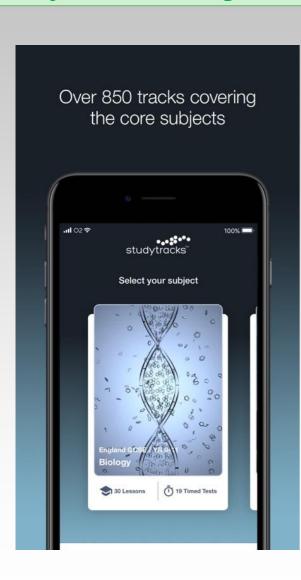
- Revision sheets are made by teachers, structured by cognitive science specialists to maximize information retention, and put into song by artists.
- Many styles of music are used in order to guarantee the interest of all students (Hi-pop, Rap, pop, techno, rock...).
- At the end of the song, a quiz is available in order to guarantee the good understanding of knowledge.
- Many subjects and teachings are covered by the solution (mathematics, science, economics, history, geography, philosophy...).
- A platform is available for teachers to create playlists of songs and assign them to specific students, making it easy to customize homework assignments.
- Studytracks allows teachers to visualize on the platform the songs listened to by the students as well as their quizzes test results.
- The solution is digitised, making it easier for students to listen to the revision sheets in their daily lives (transport, recreation, etc.) through multiple media (telephones, tablets, computers, etc.).





Studytracks: learning in song





Analysis of the offer

Studytracks is an application that allows students to **assimilate revision sheets** written by teachers and put into song by artists.

Young people between the ages of 13 and 18 particularly enjoy listening to music. They spend more than an hour a day listening to songs. Studytracks started from this observation to encourage young people to revise their lessons by reducing the mental load associated with music. This assumption, which at first glance might seem crazy, seems to have a scientific and pedagogical basis validated by various studies. Thus, 75% of the students studied were able to retain all the information from the first listening. The auditory memory of some people is particularly developed and favours the retention of information.

Studytracks thus seems to be a **complementary tool** available to teachers to encourage students to revise or improve the effectiveness of their lessons, while the solution can also be used by teachers for students who are **failing or dropping out of school** in order to give them a new taste for school work thanks to the playful aspect of the solution.

In addition, Studytracks can be an innovative initiative available to schools to demonstrate **their concern to take into account all modalities** that favour the transmission of knowledge among pupils. This can only contribute to strengthening their **pedagogical excellence and reputation.**

There are, however, a number of limitations to the solution. First of all, teachers have **no control over the pedagogical content and the information transmitted** through the songs, although the revision sheets are made by certified teachers.

A potential risk also lies in the fact that **students do not appreciate the types of music offered**, although the platform ensures that the various musical tastes of the students are taken into account.

Moreover, some **resistance could potentially come from the parents of the students**, who would see music more as a factor of deconcentration and diversion of students' attention than as a facilitator of knowledge assimilation.