summary & team

Out Of The Box (OOTB) is an education startup founded in the MIT School of Architecture and Planning, with the mission of creating exceptional learning environments for preschool children anywhere in the world.

OOTB is a mobile, modular classroom-in-a-box comprising integrated hardware and software for learning. The hardware has a provisional patent awarded.

OOTB has won multiple international awards. It was the audience choice awardee at the World Bank Youth Summit 2018. More recently, OOTB received an honourable mention at Fast Company’s World Changing Ideas 2020. OOTB is part of MIT’s DesignX Accelerator and the Sandbox Innovation Fund Program, and also an awardee at the MIT IDEAS Global Impact Challenge.

Yu Qian ANG

Yu Qian is a PhD student at MIT. He completed his undergrad at the National University of Singapore as valedictorian, and also holds a MPhil from the University of Cambridge (Gates Scholar). He was Senior Assistant Director at the Singapore Ministry of Trade & Industry, part of the team that planned Singapore’s five-year science and technology masterplan. Between his studies, he founded a profitable education company, worked at a London based VC, and was Associate Faculty at the Singapore University of Social Sciences.

Kloe NG

Kloe is an incoming SM student and Legatum Fellow at MIT. She holds a Master in Urban Planning from the National University of Singapore and a Master in Urban Analytics from New York University. Kloe has international master-planning experience as an Urban Planner for Surbana Jurong, Asia’s largest urban development consultancy. She has also founded two profitable companies including one related to preschool education.
Facilitating effective and engaging preschool learning is a perennial challenge. Parents either put together activities themselves by searching the web, send their children to high-end, quality preschool, or attempt to home-school / hire a teacher to their homes. The process of putting together materials is time consuming, and online content are low in quality.

High-end, quality preschools are either very expensive or inaccessible, and average childcare spending has increased significantly over the years. Finally, homes in many cities suffer from lack of space and lack of appropriate learning tools, making home-schooling or hiring personalized teachers challenging. As a result, there is high demand for quality but affordable preschool education globally.

Out Of The Box

OOTB comprises two integrative, complementary components – hardware and software. With our solution, exceptional learning environments can be created anywhere, anytime.

The hardware is a mobile, modular classroom-in-a-box with parts interchangeable according to needs, while the software provides instructions and curriculum / learning activities.

The software comes in the form of a web platform that provides research-based curriculum and learning activities for parents and educators under the themes of Science, Technology, Engineering, Arts, and Mathematics (STEAM). The web platform includes instructions, video tutorials, and downloadable content.

Over time, OOTB will include data analytics and machine learning capabilities to better profile individual children, and help them learn more effectively.

The goal of using OOTB is to improve learning – OOTB can be utilised as a personalized learning system where learning outcomes are maximised with a combination of hardware and software. OOTB provides individualized curriculum for different learners in fun and engaging ways. It also saves time for parents and educators.
business model

classroom-as-a-service

We make setting up learning environments and curriculum planning effortless. Our customers purchase the physical classroom-in-a-box for a one-time payment, and subscribe to our web platform for unlimited access to curriculum and learning content.

The hardware comes with a one-year warranty, and future expansion packs for the hardware will be sold separately.

This model ensures sustainable, recurring revenue, and provides constant value to users.

market potential

current market size

US$334 billion

for childcare centres alone
(excluding products etc.)

market growth

11.3%

CAGR

>1.4 billion

in target age group
(3 to 7)

The market potential is large, especially since demand for quality childcare and preschool services has been growing rapidly. Additionally, in the United States alone, there are over 3 million children currently being home-schooled. OOTB solves perennial pain-points and unlocks value for parents of preschoolers and educators.

OOTB has significant competitive advantages. First, there is no other organisation offering similar integrated products for preschoolers. Second, OOTB is both educator- and learner-focused, and provides curated, research-based learning content. The hardware design is also patented.

curriculum framework for learning content

Cognitive Skills

How children think and explore: Curiosity & Creativity

Gross Motor Skills

Physical activities such as Jumping, Hopping, Running

Intellectual Skills

Ability to reason logically, comprehend and fulfil academic requirements and beyond

Fine Motor Skills

Control & Coordination in tasks such as cutting, drawing, writing

Intraperisonal Skills

Awareness of emotions and self

Interpersonal Skills

ability and willingness to interact with others: Listening, Communication, Leadership

Each OOTB learning activity targets one or more of the core areas above – each learning activity has a short (one to three minute) instructional video explaining the learning objectives and providing guidance for setting up. Some activities also come with additional downloadables and printables such as worksheets, flash cards, or supplementary teaching materials. These can be downloaded directly from the web platform as part of the monthly subscription.