

April 7th, 2021

ROBOGROUP T.E.K LTD

INITIATION OF COVERAGE

Stock Exchange
TASESymbol
ROBOSector
TECHNOLOGYSub-sector
ELECTRONICS AND OPTICSStock price target
NIS 7.9Closing price
NIS 5.0Market cap
NIS 229.7 MnNo. of shares
45.4 MnAverage Daily
Trading Volume
1,588 stocksStock Performance
(3 months)
-19%

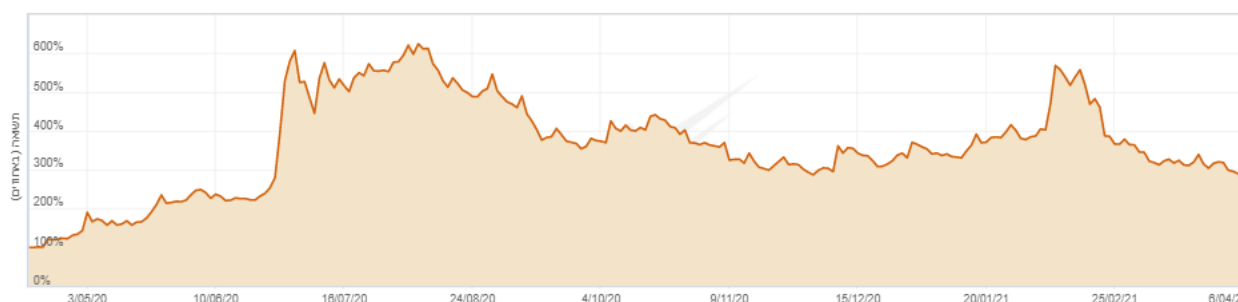
RoboGroup (TASE: ROBO), formerly known as Eshed Robotec, was founded in 1982 and has been publicly traded for over two decades. The company develops, manufactures, and markets training products and e-learning systems, as well as engineering and manufacturing technology training systems. It offers its products internationally under the Intelitek, Robotec, and CoderZ brands.

Market – The education technologies industry is expanding exponentially, with demand rising due to COVID-19 and associated significant changes in the realms of work and labor. **Education technology expenditures are following a growth trend, increasing from \$152 billion in 2018 to an expected \$404 billion by 2025.**

Strategy – In addition to expanding its traditional core activity, the company has invested heavily in developing new products to address the growing education technology (EdTech) market needs. RoboGroup's strategy is to become a leading integrated STEM and industry virtual education learning platform by eliminating the key barriers and challenges that exist today. The company's goal is to become the preferred choice for STEM and robotics education using a gamified, competitive and self-based learning methodology.

Valuation – To evaluate RoboGroup's equity value, we combined two methods: (1) market benchmarking approach to estimate the STEM CoderZ activity, (2) the DCF method to estimate the Vocational & Robotec activity. Then, we combined them to reach the company's overall equity value

We value RoboGroup's equity at NIS 359.2, and its price target in the range of NIS 7.5 to NIS 8.3, with a mean of NIS 7.9.



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Investment Thesis

RoboGroup T.E.K. Ltd. (TASE: ROBO) is an Israeli company that is publicly traded on the Tel Aviv Stock Exchange. RoboGroup's vision is to disrupt the STEM (science, technology, engineering, and math) education technology market with its proprietary online virtual platform that enables students to learn coding, mathematics, and physics using virtual robots. The robots operate according to real-world physics and are controlled using unique coding techniques designed for young students.

The platform represents an accessible alternative for teachers and students lacking access to physical robots due to high costs, major logistical barriers blocking scalability, and high teacher proficiency requirements regarding robotics and coding. The platform also offers flexibility for simulating advanced technology (such as AI) and advanced environments (such as space) for students who are already engaged in STEM work. Its second business unit offers Industry 4.0 training with a range of physical and remote-learning products and services.

Global Education Technology Market

Size

- Education technology expenditures are following a growth trend, increasing from \$152 billion in 2018 to an expected \$404 billion by 2025.
- The COVID-19 pandemic has fueled a spike in growth in global e-learning for schools (K-12) that is expected to generate over \$240 billion by 2022 and \$300 billion by 2026 from various sources.
- The first investments in EdTech were made a decade ago with \$500 million in VC investments, expanding exponentially with an 32-fold increase of \$16 billion in 2020.
- The physical robotics market in education is currently valued at \$1.3 billion globally, and is positioned to grow to \$3.1 billion by 2025.

Current Challenges

- There is a shortage of STEM teachers.
- High costs (often reaching hundreds of USD per student for hardware, travel, etc.) create a "glass ceiling" that prevents minority populations and lower socioeconomic groups from participating in competitions, thereby reducing their chances of participating in the growing STEM economy.

- Learning progress is hard to measure, as it's not individual learning/robots.
- Teaching methods that inspire children's curiosity are lacking, and there is a need to shift the emphasis away from simply learning facts to enabling students to carrying out innovative and enjoyable projects using the knowledge gained, including being creative by applying their own ideas.

RoboGroup's Opportunities

- The COVID-19 pandemic has had a marked positive impact on market growth.
- STEM studies using robotics and science represent a significant pillar that is shaping the future of the economy, in addition to the well-being, security, and progress of all societies and states.
- Mid- and long-term growth is expected in the STEM education segments as governments increasingly move to support the STEM curriculum by, for example, mandating programming training in the K-12 curriculum.
- Schools around the world are facing growing demands by parents and other stakeholders to prepare students for rapid economic, environmental, and social changes, and for jobs that have not yet been created.
- CoderZ can become a leading and enabling platform for expanding STEM and robotics education through its development of individual, integrative, and fully digital learning solutions. In this way, it can penetrate new market segments.

RoboGroup's Value Offering

- **Two company divisions:** (1) STEM Professions Training and Education; and (2) Professional Training in the Industry 4.0 Domain, including Automation, Robotics, and Smart Factories.
- **Unique technology and innovative processes:** (1) highly advanced simulation of physical robots accessible from a browser; (2) modular simulative world to support wide-scale; and (3) efficient content creation mechanism that saves significant development resources, (4) multiplayer options.
- **Business model:** STEM education—user/class/school licensing. Industry—turn-key projects, equipment, and software sales.
- **Vision:** “Inspire every learner on the planet to realize their full potential and own their future.” Increase the accessibility of STEM education and robotics so that every student will have more career options in their future. Become the preferred choice for STEM and robotics education, through a gamified, competitive, and self-based learning methodology.

- **Market penetration:** Enter schools' STEM curricula through standards-aligned and integrated curricular activities and extra-curricular competitions and activities.
- **Channels:** Multiple channels to market, including distributors, partnerships with software companies (such as Amazon), robot manufacturers (such as Lego), industrial robot manufacturers (such as Yaskawa), and many others. Scaling will focus on volume/value partner development, together with strong B2C activities, when the company is ready to launch.
- **Company roadmap:** Moving toward an integrative, virtual, and fully digital platform.

The education technologies industry is expanding exponentially, with demand rising due to COVID-19 and significant changes in the world of work and labor. This so-called third education revolution involves a personalized, digitized, and decentralized education system.

Due to RoboGroup's unique value proposition and its strategic collaborations with leading channels to market, we believe that the company will play a vital role in the growing education technologies market. We see RoboGroup as an outstanding investment opportunity. However, like any technology firm, RoboGroup needs to achieve its vision of becoming a fully digitized and automated solution and to execute further significant sales.

We conducted RoboGroup's valuation using market benchmarks from recent deals, relevant market multiples, and a bottom-up valuation using the DCF method, all based on RoboGroup's updated business model. The company has 45,425,289 shares as of April 07th, 2021; thus, in view of all the bellow-mentioned findings and assessments, we value the company's stock price target to be in the range of NIS 7.5 to NIS 8.3, and NIS 7.9 on average.

Definitions & Segmentation

STEM

STEM courses teach Science, Technology, Engineering, and Math through hands-on learning and projects rooted in real world challenges, thus preparing students for the future job landscape. These courses can take place in school, with after-school STEM programs, or at a STEM summer camp, etc.¹²³

Robotics

Robotics is an ideal STEM learning experience primarily because it engages, empowers, and challenges students through real-life learning tasks. It also thoroughly addresses key STEM aspects such as Integration, Problem Solving, 21st Century Skills and Personalized Learning⁴⁵.

Industry 4.0

The Fourth Industrial Revolution (also known as Industry 4.0) refers to the digital transformation and automation of traditional, “analog”, manufacturing and industrial practices, using modern smart technology. Industry 4.0 refers to the broad set of technologies including mobile applications, cloud services, robotics and artificial intelligence⁶⁷⁸.

TVET (Technical and Vocational Education and Training)

Technical and vocational education and training (TVET) is understood as comprising education, training and skills development relating to a wide range of occupational fields, production, services and livelihoods.

Without proper TVET in secondary and post-secondary levels, countries cannot fulfil the open positions in their manufacturing sector, making it a high importance / national-security and geo-political issue (such as Trump’s “bring back the factories’ policy and Modi’s “buy India” policy and others)⁹¹⁰.

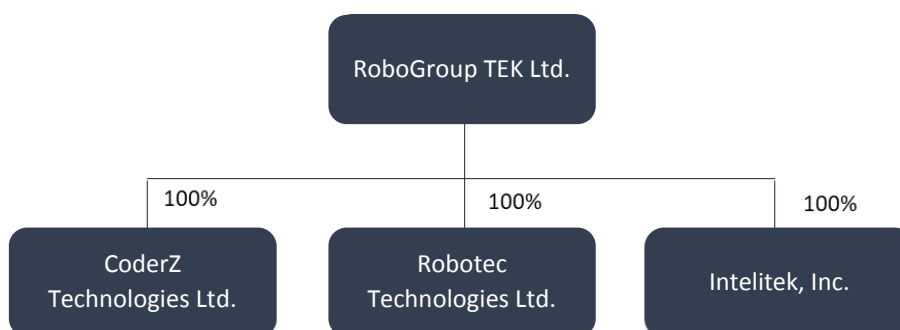
1. Company Overview

RoboGroup T.E.K. Ltd., headquartered in Israel, is engaged in developing, manufacturing and marketing technology training and education products. It offers its products under two business units – industrial training and STEM education.

Company was incorporated in 1982 as a private company (current name is used since 2000). Company's shares are listed for trading on the Tel Aviv Stock Exchange since 1991 (TASE: ROBO).

Company holdings: 37.56% float, and 62.44% interested parties, of which main shareholder is Chairman & CEO, Yoram Doitch (58.76%).

The RoboGroup consists of three subsidiaries:



CoderZ Technologies Ltd. - a private company incorporated in Israel and engaged mainly in the development, marketing and distribution of an experiential and gamification-based STEM learning platforms via the use of virtual robots.

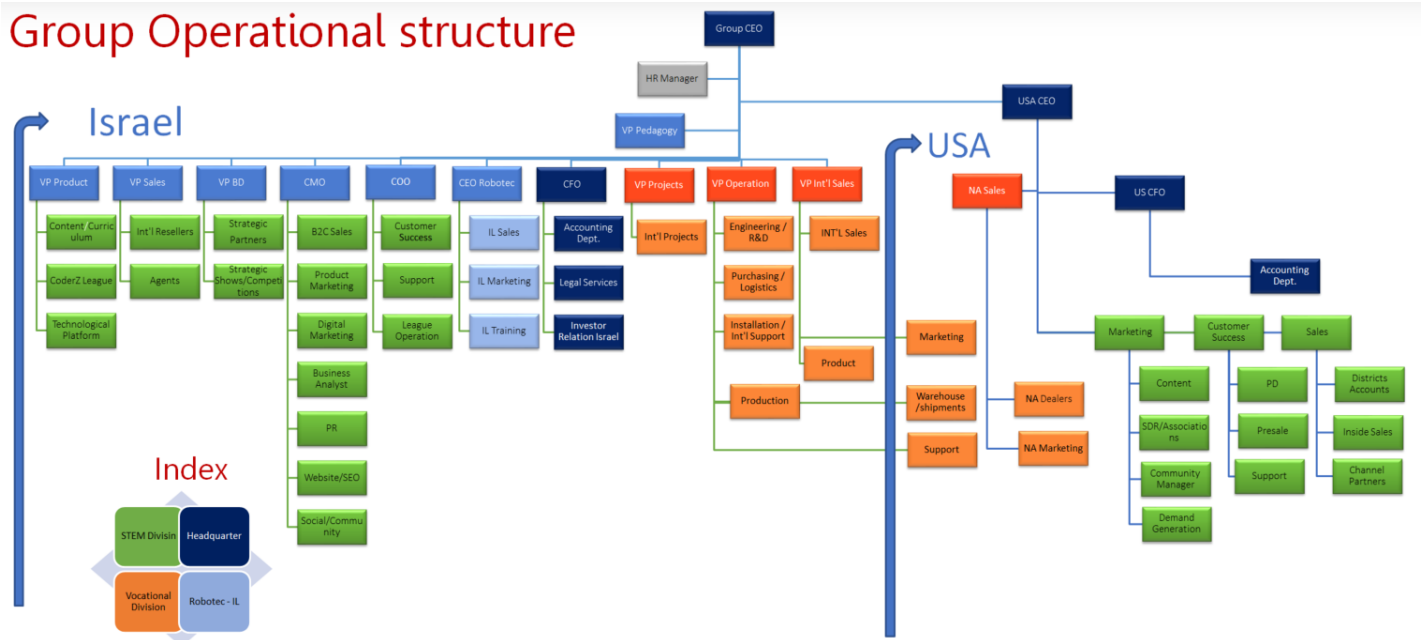
Intelitek - a private company incorporated in Delaware, USA and engaged mainly in marketing, sales, technical support and maintenance of the Group's products and products of third parties to the North American education market.

Robotec Technologies Ltd. - a private company incorporated in Israel and engaged in planning and implementation of technology laboratories in the education system, marketing, distribution, installation and maintenance of all the Group's products, third party products and related products in the STEM field, to the training and education markets. Robotec characterizes and develops advanced solutions, and maintains an extensive set of tutorials and advanced training courses.

Offices, facilities and employees

Company has offices in Israel and US (Derry, New Hampshire). As per December 2020, it employs approx. 75 people, of which 58 are located in Israel.

Group Operational structure



Company Business Activities

RoboGroup develops and sells technology education platforms that simplify complex topics in the fields of programming, engineering, science and technology for children, for youth and adults.

The company has two divisions:

1. Science, Technology, Engineering and Mathematics (STEM) professions training and education
2. Professional training in the industry 4.0 domain: automation, robotics, smart factory

Products and Services

STEM Platform - CoderZ™ Products:

The CoderZ platform is an online virtual platform that teaches students in schools STEM through virtual robots, focusing on coding, mathematics and physics, operated under real-world physics, and controlled using unique coding techniques designed for young students. Teachers can monitor students easily and use it as tool to learn and understand the progression and understating of students. This is a unique tool which will help identifying key talents in this field.

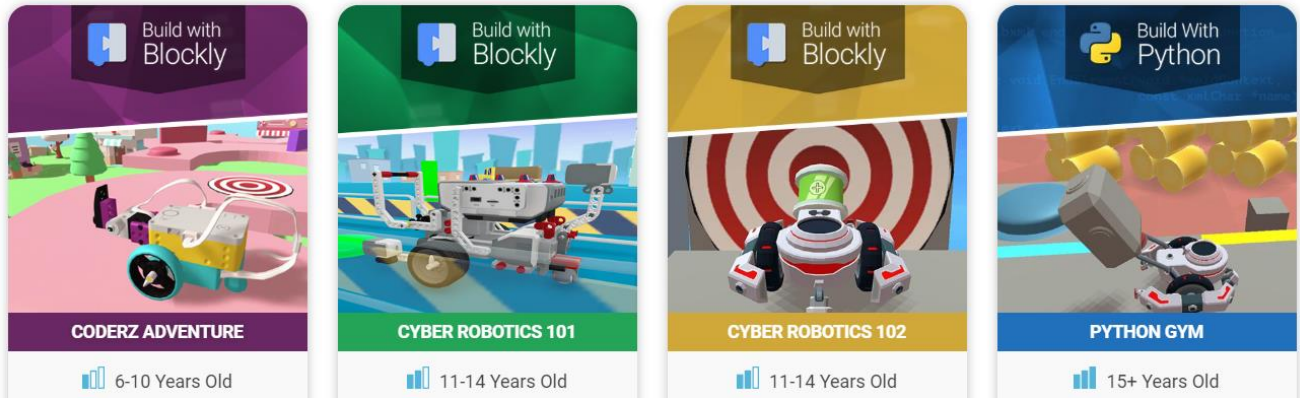
The simulation has a variety of virtual scenes that places the robot (and the student) in the face of new and encouraging challenges thinking, creativity, knowledge and practice skills in the fields of science and technology.

The platform offers accessible alternative for teachers and students who don't have access to real physical robots due to high costs, major logistical barriers blocking scalability, and high proficiency from teachers in robotics and coding, together with flexibility to simulate advanced content (such as AI) and advanced environment (such as space) for students who already engaged in STEM.

The platform also enables the participation in virtual robotics competitions – presenting students with goals, encouraging them to engage in STEM together with developing other advanced significant skills such as – creative thinking, decision making, teamwork, leadership and more.

The CoderZ platform is adapted to privacy standards such as COPPA, FERPA, GDPR, accessibility standards such as Google Classroom, Clever, ClassLink and could potentially be accessed in any language. Today, the platform is translated, in whole or in part, into about 10 languages, and includes a number of modular systems built with the most advanced cloud technology available on the market:

- The licensing system - a licensing system that enables the distribution of licenses of the company's products through external resellers (dealers). The hierarchical licensing model supports accounts at various levels - teacher, school principal, district principal etc.
- The educational content system - CoderZ is a fun and engaging online application where kids learn (self-paced) while playing with robots. School students can program their own virtual robot online using visual tools and then test their code with real-time simulation. There is no hardware, software or teachers required – just a computer and a browser.



- CoderZ League** - an online robotics tournament that includes two levels to accommodate students of every coding experience (Junior, Pro). For the 2021 competition, scheduled to start in October, CoderZ league will inaugurate 3rd level for Novice. The tournament engages students through gaming and competition in STEM, coding, and tech literacy. CoderZ League is cloud-based, available on any device, and uses simulation of virtual 3D Robots to perform complex tasks and missions. The virtual experience makes it easy to design, program, and test a simulated robot in a variety of 3D environments. Teams of students work collaboratively to program, plan, and complete missions. The final stages of the competitions in 2020 were produced and broadcast in an exciting television event on the Twitch.tv channel.



- The reporting system** - development of a CoderZ reports application that allows customers to quickly view data in various sections visually (dashboard) and track student progress. Thus, allowing decision makers to get a clear and online picture of the results of their financial investment. This app could help to identify learning gaps in different topics / areas and will help in making decisions on content / teaching issues.

- Professional Development Teacher Training System – a program designed for anyone who teaches Computer Science or Robotics through the CoderZ learning platform. Each CoderZ training is a hands-on, two-hour online workshop led by an experienced CoderZ trainer that demonstrates best practices for online teaching, 21st century skill promotion, and inquiry-based learning.

CoderZ has been awarded twice for R&D grant from the Israeli Innovation Authority and was awarded multiple innovations awards in the Ed-tech industry.



2021 Coding, Computer Science, Engineering solution



Industry 4.0 Training products:

The field of professional training appeals to vocational schools, colleges, universities, Government Ministries (Education, Labor), Professional Training Centers and Advanced Industry. Company offers a range of physical and remote-learning products and services, including:

iCert4.0 – Industry 4.0 Certification Program The Smart Factory - collaboration with industry-leading manufacturers such as Siemens, Cognex and Yaskawa for specific certifications combined with technical content focused on systems integration. iCert4.0 certification is in line with the initiative of the Government Standard Development Committee for industry 4.0 certification in the US. The iCert4 system is designed for sale in the SaaS model and includes options for purchasing advanced physical laboratories. Products in development stages in the field of iCert4.0:

- Smart Condition Based Monitoring Lab - is a complete set of hardware, software, learning materials and exercises to enable students to understand how sensors work and how to use them in real industry.

- Smart Sensors lab – the use of real-time data collected from the production floor. The collected data is analyzed and processed into insights that affect the entire production floor of the plant including, improving performance, operation, maintenance and management.
- SmartCIM4.0 lab - smart factory laboratory that includes data collection to the cloud and data analysis, among other technologies: I-O LINK, PLC & HMI, IIOT, MES, AI and Digital Twin.
- I4.0 CyberSecurity lab - the training system for cyber security labs mimics common environments in industries such as power plants, oil and gas refineries, water processing, manufacturing industry and process management. The lab kit includes a common IT network devices and users experience cyber threats simulation and learn how to evaluate, detect and respond to cyber breaches.

Distance learning products, e-learning and computerized exams - the group's products provide a learning environment that incorporates content and tools designed for both learning a-synchronous, i.e. each student connects via the Internet to a computerized learning system cloud-based developed by the company and learns at a time and place of its choice and through synchronous learning, that is, "live lessons" with a distance teacher. Products in this category include:

- LearnMate®Content - hundreds of training hours interactive on issues of industrial technology and science, both virtually and practically "on-hands" in a lab environment through 3D simulations
- LearnMate®LMS - a system that serves as a virtual campus for content and student management, designed for training managers and operators.
- Computerized exams - a computerized system that allows you to take exams, assessments, certifications and screenings of students with the help of diverse questions and an analysis set of the answers.
- LearnMate®Live - an interactive distance learning system that offers students a similar experience to a frontal lesson experience: students see and hear the guide and can communicate with it in real time.

CIM (Computer Integrated Manufacturing) - automatic computerized production system which integrates within it a variety of technologies. In the CIM system, the student experiences a comprehensive computerized manufacturing process, from the stage of product design to its full production. The CIM system consists of a series of stations, such as: computerized warehouse; a conveyor belt with the command of a programmed controller; production stations (such as CNC, laser processing, etc.), assemblies, welding, quality control; central management station; communication networks (LAN) and management software.

This physical production line for training and education is mainly targeting engineering students. System cost range \$0.7 to \$2.5 million and business model may include sale as well as leasing and JV in education centers for accreditation. Currently, the company is running a plan of upgrading the product and move to industrial 4.0 offering in partnership with startup companies, and provide cloud based curriculum and software simulations. Sales are expected to start late 2021 and no significant revenues before 2023.



Human capital development products

- Didactic training services – a field of training services, which are not necessarily related to the company's traditional products, but are designed to address the needs of customers in the fields of training, education, diagnosis and human resource development.
- Additional Services - providing installation and maintenance services for the company systems. These services include the implementation and assimilation of the systems at the customer, maintenance and upgrade services for existing systems.

Technology / IP

The company has over 38 years of extensive knowledge in all aspects of automation, robotics and the development and writing training/education content. Overall, the company has thousands of proprietary content hours.

R&D and sales and marketing investments in the STEM division (CoderZ) during 2015-2020 totaled \$12.4 million. Intellectual property assets lie in its unique technology and innovative processes that were developed, including:

1. Highly advanced simulation of physical robots that is accessible from the browser

2. Modular simulative world that enables easily adding and editing modules, robots and different technological tools to support wide scale of STEM education
3. Efficient content creation mechanism that enables STEM tasks and games development in a very easy way that saves significant resources in comparison to manually developing each game and tasks separately from scratch
4. Multiplayer mechanism

Revenues and Customers

STEM Education (CoderZ)

CoderZ has experienced rapid growth in 2020, propelled by Covid-19 impact on the education system.

In a relatively short period CoderZ has managed to gain significant traction, developing strategic partnerships and revenue-generating opportunities with education robot manufacturers (Lego), large software companies (Amazon), competition organizations and school chains (Brazil).

Lego (largest education Robot manufacturer) realized that it has a disadvantage in the current environment and expanded its 2017 cooperation with RoboGroup to integrate between LEGO® MINDSTORMS® Education EV3 and in 2020 its new **Lego Spike™ Prime** robot and CoderZ's educational content so it can now expose wider-spectrum of solutions to its customers.

CodreZ has entered into agreements with Amazon USA, Amazon France and Amazon Australia and New Zealand, as part of which, Amazon funds for students and teachers to learn from home courses in the field of STEM and virtual robotics in a dedicated environment developed on the CoderZ platform.

In addition, Amazon promotes and distributes exclusively and directly through the global Amazon network a virtual challenge simulating Amazon's Fulfillment Center and developed on the CoderZ platform. The challenge was developed as part of a sponsorship agreement signed between Amazon and RoboGroup.

In Brazil, the company received an order for 90,000 licenses to be used in over 200 schools in the 26 states and also to train teachers on how to use the platform. It is a first order from large school chain that is active across South America.

Since Covid-19 outbreak the company experienced steep growth and direct demand from schools and teachers, which the company is not accustomed to or had experience with before.

Schools orders usually come in via mails from schools and teachers in the range of \$500-2,500. Sales cycle is very short.

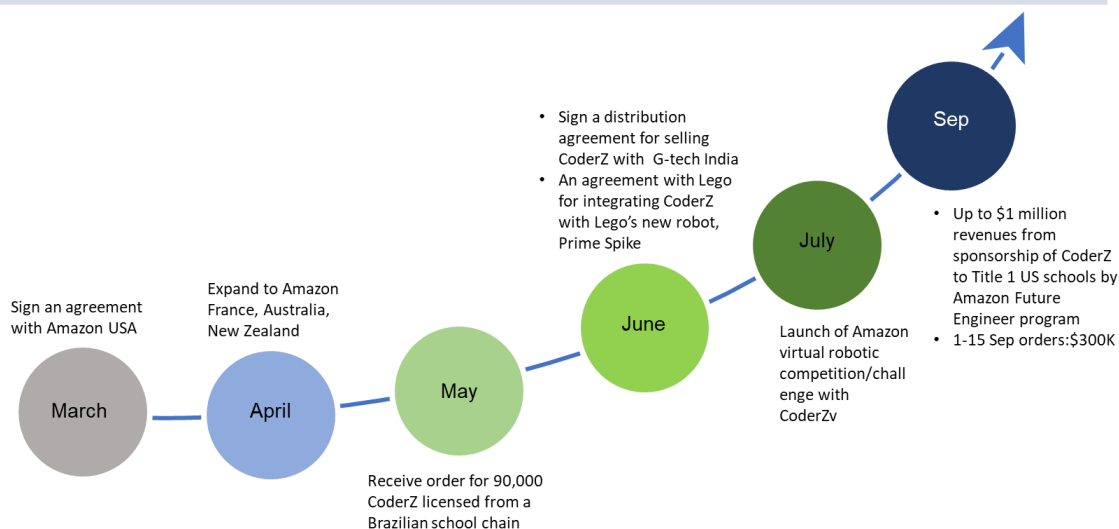
Orders from districts, generated via direct approach or local distributors, are in the range of tens to hundreds of thousands of dollars but require longer sale cycle of several months.

New growing segment during Covid-19 times are teachers with after school activities.

In most cases, customers pay upfront for 12 months.

The company started to promote the concept of virtual competitions with 100,000 free participants in 2018 and 46,000 paid participants in 2019.

Covid-19 Impact? Rapid Adoption and Growth in 2020



Industry Training

Since 2008, Company's revenues in selling to tech-institutes and schools have seen steady decline due to weakening of demand in the Western economies. Such orders, mainly generated via distributors, are in the tens to several hundreds of thousands of dollars, each.

Activities to sell large, multi-million dollars turn key projects to ministries of education in developing countries are a slow process. Company has signed 2 large turn-key projects with developing countries since 2012, one with Paraguay (\$7.5 million) and another with Ghana (\$36 million).

As of 31.12.2021, the company has strong market position and can expect to generate \$15 million a year on average. The company has a Vocational backlog of \$17.5M and STEM backlog of \$8.1M to be delivered and received by 2022.

Revenue Model

RoboGroup has 2 sets of pricing models, one per each business unit activity.

Industrial education

- Turn key projects
- Equipment
- Curriculum
- Software/ CoderZ

STEM education (CoderZ)

- User license
- Class license
- School license

The 2021 virtual competition - CoderZ League pricing model, Team License (6 students) – \$290.

Class (minimum of 5 Teams) and Schools orders usually come in via CoderZ League on-line shop or mails from schools and teachers in the range of \$750-5,200. 2021 Sales cycle is very short.

2. Market Overview & Analysis

The Transformation of Education Industry

The world of work is undergoing a massive shift and as a direct impact we are also at the heart of a global revolution in education.

According to McKinsey Global Institute's report¹¹, 30-50% of American workers may have to change jobs by 2030 because of artificial intelligence and automation and the past promise of governments and universities that higher education equals secured jobs and income no longer apply.

The current changes in education and training are likely to be marked by continual training throughout a person's lifetime—to keep current in a career, to learn how to complement rising levels of automation, and to gain skills for new work. Workers will likely consume this lifelong learning in short spurts when they need it, rather than in lengthy blocks of time as they do now when it often takes months or years to complete certificates and degrees.

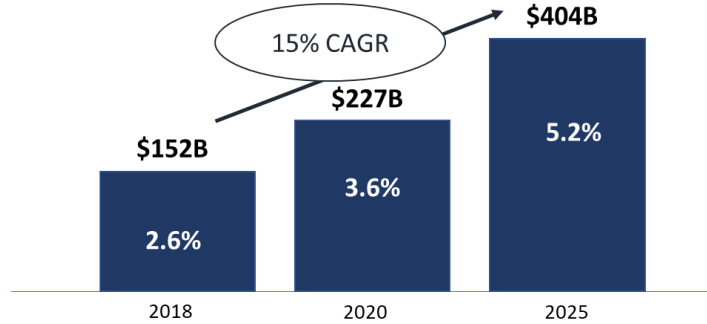
Education was already going through a significant change and a slow evolution going back 10 years or so when Covid-19 hit and turned it into a revolution. Key aspects of what is known as the 3rd education revolution¹² are:

- New alternatives to a central education system
- De-centralization of budget allocation and responsibilities
- Personalized student development programs
- The decline of formalism and the rise of personal digitization
- The labor market and the education market are one

According to Wittgenstein Centre for Demography and Global Human Capital, there will be **half a billion more school and university graduates** in the world by 2025 than today, driven primarily by population growth in developing countries.¹³

Education technology expenditures are in a growth trend **from \$152 billion in 2018 to \$404 billion by 2025**. However, there is still a lot of growth available as it is still **5% of overall expenditure**.

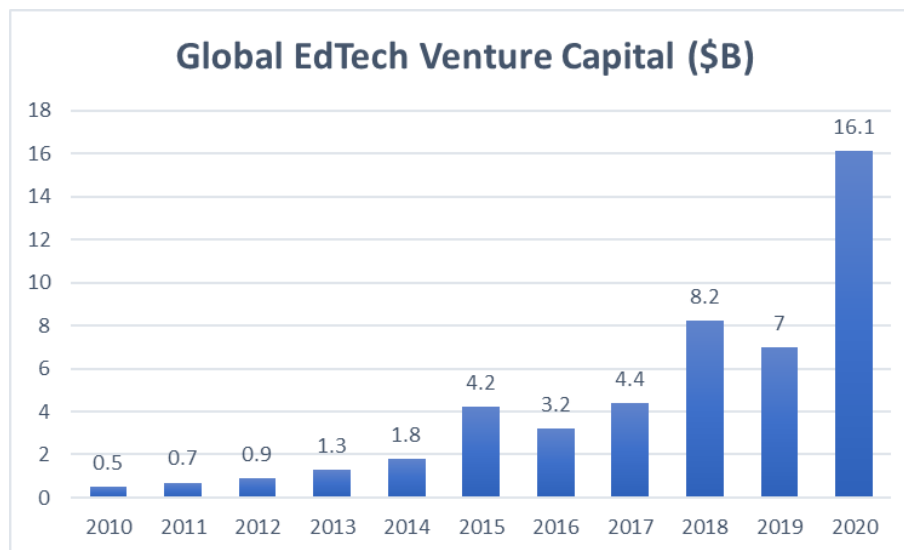
Growth in Total Global Expenditure on Education Technology in USD



Source: HolonIQ

The Covid-19 pandemic is fueling a spike growth in global e-learning for schools (known as K-12) which is expected to generate over **\$240 billion by 2022** and \$300 by 2026 by various sources¹⁴. About 60% of market revenues are generated from software.

Investments in Education Technology (EdTech) startups started a decade ago with \$500 million of **Venture Capital investments** exploding to 32x higher at \$16B in 2020.



Source: HolonIQ





Long Tern Impact of Covid-19

Global lockdowns and schools roll out of remote learning since March/April opened up massive opportunities for EdTech companies as schools, teachers and parents look for effective remote learning solutions.

A recent report by & Co. Global Strategic Studies Institute from October 2020 stated that “...as the introduction of EdTech progresses, learning will likely be transformed significantly from being centered on

group education in one-way lecture format to personalized learning. ...this could be described as a “*paradigm shift in learning*”: the mainstream of learning is moving from group education to personalized learning optimized to each individual, and a modular, lifelong form of learning is emerging in vocational education.”¹⁵

Many other related opportunities that arise following the COVID-19 outbreak contribute to the growth potential of the market – Demand for robotics, virtual learning and the future of remote work.

 Connected Work	 Lights-Out Operations	 Connected Living	 Technology Advancements
Remote Work <ul style="list-style-type: none"> • UCaaS • Consumerization of IT/Work Wearables • Real estate: Telecommuting • Digital Personal Assistants Virtual Collaboration <ul style="list-style-type: none"> • Synchronized (Real-time Collaboration) • Asynchronized (Offline Collaboration) Hybrid Workplaces <ul style="list-style-type: none"> • MicroJobs • Gig Workers • Robotic Worker 	Remote Asset <ul style="list-style-type: none"> • Asset Condition Monitoring • Plug-and-Play Condition Monitoring Kits • Predictive and Prescriptive Analytics Digital Twins <ul style="list-style-type: none"> • 3D Laser Scanning • 3D Capture • Photogrammetry B2C/C eCommerce <ul style="list-style-type: none"> • Voice Commerce • Social Commerce • Ambient Commerce • AR Shopping 	Smart Homes <ul style="list-style-type: none"> • Home Automation • Home Energy • Home Security Virtual Entertainment <ul style="list-style-type: none"> • Live AR/VR streaming • Online Arcades/Gaming • Virtual Tours Virtual Learning <ul style="list-style-type: none"> • Learning Management Systems • Flipped Classrooms • eLearning Programs 	Cybersecurity <ul style="list-style-type: none"> • Biometrics • AI-based Cybersecurity • Quantum--based Cybersecurity • Blockchain-based Cybersecurity Robotics <ul style="list-style-type: none"> • Industry Robots • Service Robots AI <ul style="list-style-type: none"> • Machine Learning (ML) and Deep Learning • Natural Language Processing (NLP) • Video Analytics, Computer Vision

STEM Education & Using Robotics

Key Trends

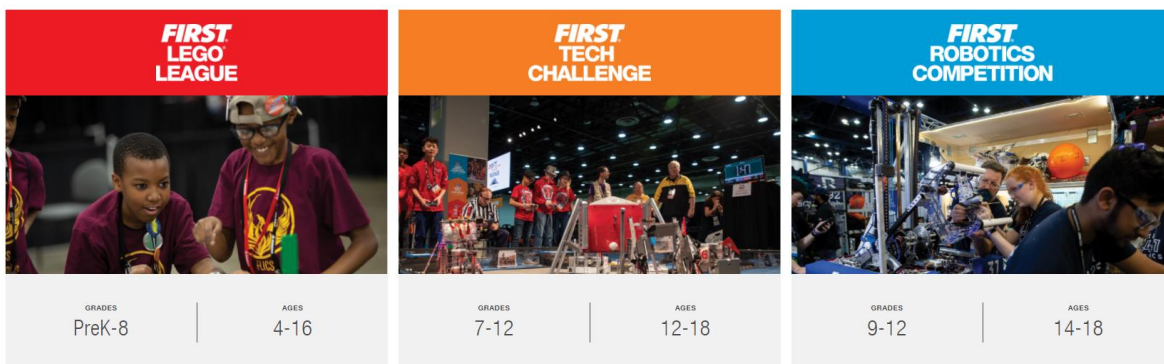
Schools around the world are facing increasing demands by parents and other stakeholders to prepare students for rapid economic, environmental and social changes, for jobs that have not yet been created, technologies that have not yet been invented, and to solve social problems that have not yet been

anticipated. For example, google trends show global dramatic growth in the past 2 years in search for “Coding for kids”.



In robotics lessons, pupils are experimenting with code writing, and are given a robot, an environment where the robot is, and a mission - a goal such as moving the robot to a certain location, picking up objects, etc. This code written by the pupil controls the robot which performs the operations as determined by the code. In this teaching method, pupils can learn STEM subjects (coding, math, physics, etc.), while doing this as part of a game. Groups of pupils can be formed to complete missions and even competitions between groups can be held - this also improves pupils’ social skills and increases their engagement in the robotics lessons even further.

Robotics Competitions: “FIRST” program is among the leading programs today for robotics competitions, in 2019-2020 alone over 84,000 teams took part in the program, approximately 690,000 students from around the world.¹⁶



Overall, it is eminent that STEM studies by robotics and science are a significant pillar in shaping the future of the economy, wellbeing, security and the progress of any society or state.

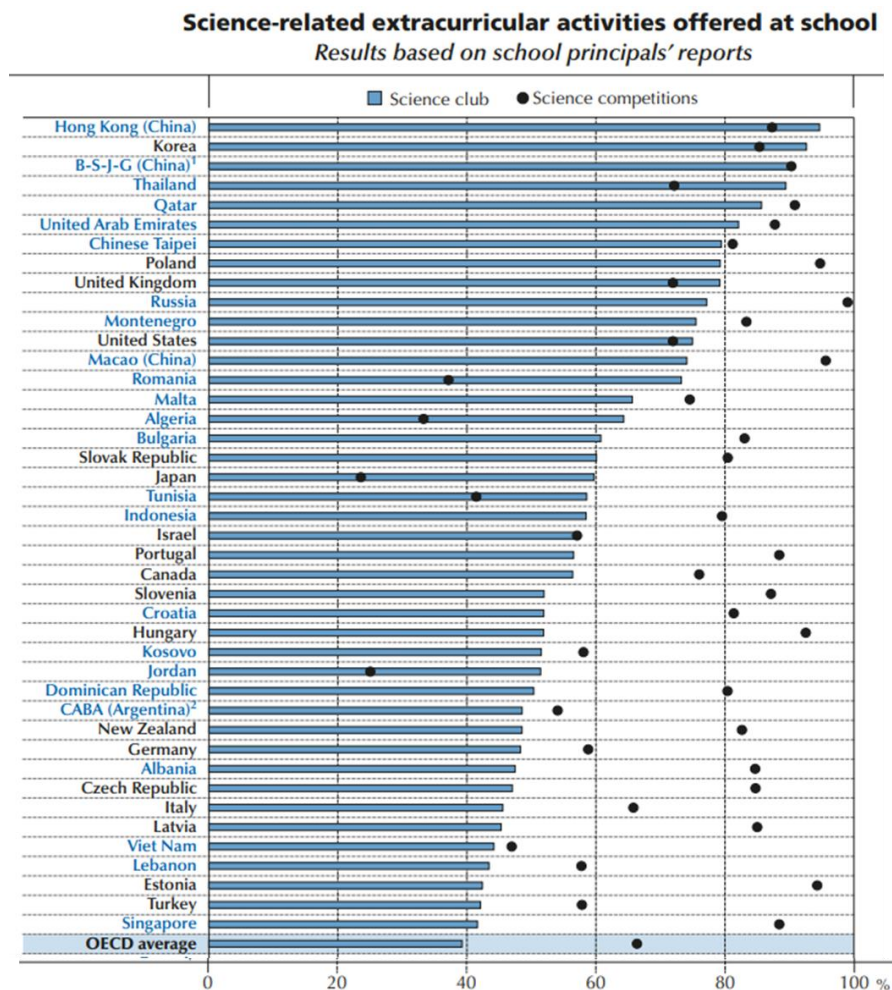
DIY Technology education: Another example of how much interest such solutions attract is Arduino (www.arduino.cc), an open-source hardware and software company, project and user community that designs

and manufactures single-board microcontrollers and microcontroller kits for building digital devices. Common examples of such devices intended for beginner hobbyists include simple robots, thermostats and motion detectors. Started in 2005 it has over 30 million users worldwide.

STEM Learning & Opportunity

Mid and long-term growth is expected in the STEM education segments as governments increasingly move to support STEM curriculum, by, for example mandating programming in K-12 curriculum.

However, until governments mandate STEM in K-12 curriculum, most of the content is being implemented through extracurricular activities. As for today, across OECD countries, 39% of students are enrolled in schools that offer a science club, and 66% attend schools that offer science competitions¹⁷.



Source: OECD

The US Education System

There are over 130,000 schools in the US, of which:¹⁸¹⁹

- Elementary schools: 87,498
- Secondary schools: 26,727
- Combined schools: 15,804

Total enrollment in 2020 is estimated to be around 76 million, of which elementary and secondary 56 million, Degree-granting postsecondary institutions 19.7 million.

California alone, as an example, provides academic instruction and support services to nearly 6 million students in grades kindergarten through twelve, in more than 10,000 schools throughout the state.

The US national average public school spending / student is approximately \$11,598 (2020-2021). The state with the highest average student spending is District of Columbia, with \$19,903 spent per student. The state with the lowest average student spending is Utah, with \$6,922 per student.²⁰

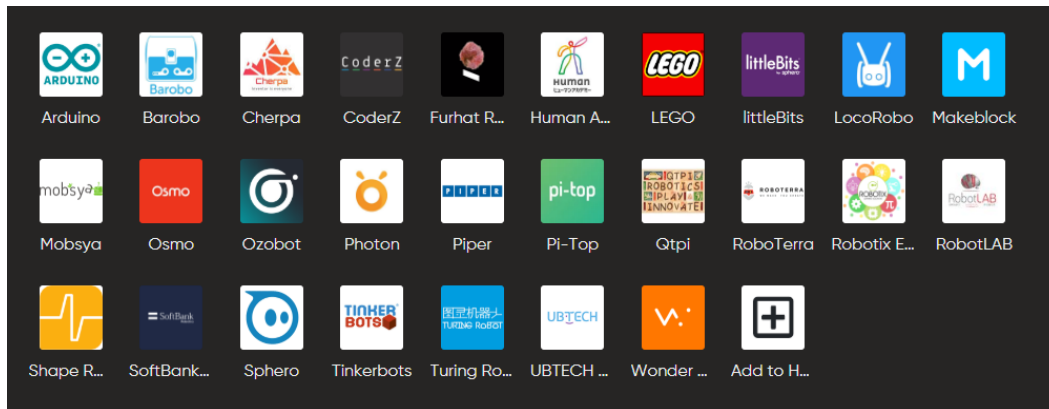
However, there are over 200 districts that spend over \$20,000 per student (of 13,500 US school districts).

Educational Robotics

As a sub-segment, supporting STEM, physical education robotics has rapidly developed over the past 10 years and is forced to continue to grow over the next decade.

The market for Physical Robotics in education is currently valued at \$1.3 billion globally, set to grow to \$3.1 billion by 2025.²¹ Total expenditures on education using robots is estimated to be X4 as it includes the cost of the training course, the teaching materials and the fees to the teacher/instructor.

Examples of startups that are targeting the robotics domain -



Activities of large SW companies

Large software companies such as - Amazon, Google, Microsoft and others - are pushing into the formal education system and have pledged \$300 million to support computer science education in low-income/ socio-economic schools across the US.

These programs help them push brand/awareness, as well as push cloud use, while gain positive PR.

Key Challenges

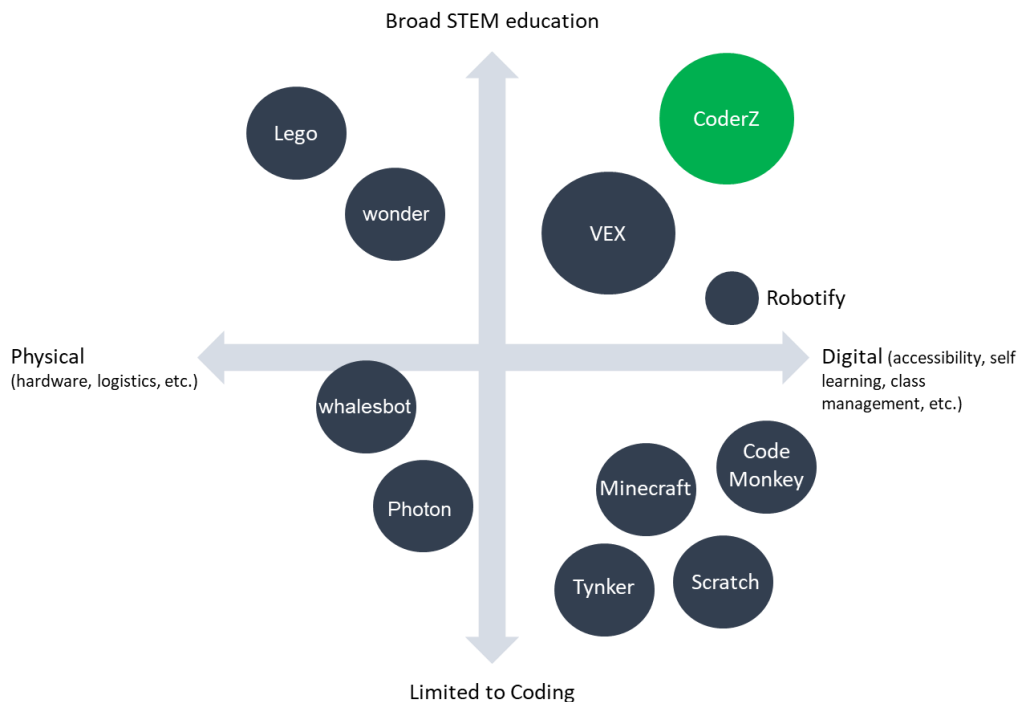
Despite the tremendous effect on STEM studies for children and teenagers, only very small percentage of school children and teenagers (under 5%) take part in Robotics Competitions and lessons. Key reasons include:

- Shortage in STEM teachers
- High costs reach hundreds of USD per student (hardware, travel, etc.) creating a "glass ceiling", preventing minority populations and lower socio-economic level groups from participating in competitions and increasing their chances of participating in a growing STEM economy.
- Not measurable as its not individual learning/robots
- Inadequate teaching methods that can inspire children curiosity and the need to shift emphasis from knowing facts to doing innovative and enjoyable things with knowledge including being creative with application of ideas.
- STEM teaching techniques are more oriented for boys, do not succeed in changing stereotypes, and do not successfully address girl students and perpetuate gender gaps.

Competitive Landscape

CoderZ's competitive landscape is comprised of tens of companies who sell physical robotics to teach STEM on one hand, and other companies that are web-based and more scalable but limited to only teaching coding on the other hand. Schools have to choose whether to compromise on accessibility and affordability (and go with physical robotics as a STEM education solution) or compromise on the STEM content that is and teach only coding with platforms that are affordable and accessible online.

CoderZ offers both and thus provides a more holistic solution that is much more implementable and with a higher potential impact.



CoderZ uniqueness: Offers long term education vs. competitors like VEX that are single-project assignment

Example of alternative/competitor - VEX Virtual

Innovation First International and its subsidiaries (VEX Robotics, RackSolutions, and Innovation First Labs) are a leader in designing and supplying control systems to the largest educational robotics competitions worldwide. VEX has a leading classroom robotics platform designed to nurture creative advancement in robotics and knowledge of STEM education. Recently, the company launched a **virtual robot ecosystem**.

Robot Virtual Worlds

Curriculum Games Competitions Mobile Tools Support Purchase

RVW

No Robot, No Problem! Robot Virtual Worlds is a high-end simulation environment that enables students, without robots, to learn programming.

Research has shown that learning to program in the RVW is more efficient than learning to program using physical robots. RVW simulates popular real world VEX®, LEGO®, and TETRIX® robots in 3D environments while using the same language, ROBOTC, to program both virtual and physical robots. The RVW environment is perfect for home, classroom, and competition environments!

ENGAGING INTERACTIVE EDUCATIONAL

ROBOT VIRTUAL WORLDS

Program in Robot Virtual Worlds using NXT-G, EV3, or LabVIEW for LEGO

Purchase
Get your Robot Virtual Worlds licenses here!

ROBOTC Robot Virtual Worlds for VEX
No robot no problem! Save money and learn to program faster with a virtual VEX robot. (Our software supports the virtualization of Cortex and iQ robots.)

Please select from the options below before clicking the Purchase button.

Seats	License
Single (1 seat) \$49.00	365 Days
Team (5 seats) \$149.00	Perpetual (+\$30.00)
Class (30 seats) \$299.00	

ROBOTC Robot Virtual Worlds for LEGO
No robot no problem! Save money and learn to program faster with a virtual LEGO robot. (Our software supports the virtualization of EV3 and NXT robots.)

Please select from the options below before clicking the Purchase button.

Seats	License
Single (1 seat) \$49.00	365 Days
Team (5 seats) \$149.00	Perpetual
Class (30 seats) \$299.00	

Example alternative/competitor- Wonder Workshop

Wonder Workshop is a US-based education and robotics startup that raised \$80 million. Company's products help children learn about robotics, fundamental coding, and educational skills and to master machine language. Company has also a new virtual competition offering.

Dash & Dot Coach Pack with Class Connect

SUBSCRIPTION LENGTH
1 Year

Add to cart \$510.00 \$469.00

K-5 Classroom Pack with Class Connect

SUBSCRIPTION LENGTH
1 Year

Add to cart \$1,830.00 \$1,699.00

Cue Starter Pack + Curriculum

Unavailable \$1,057.00 \$950.00

Pricing Benchmarks

Pricing Plans		
VEX	\$49 single, \$300 class of 30	
ByJu	\$2,000 per classroom	\$40-60 per student
DreamBox Learning	\$20-25 per student/year. \$7,000 per school (unlimited students)	\$15-25 for unlimited
Edmodo	Freemium + \$2,500 school/year	\$5-10 per student of average
Wonder Workshop	\$700-4,200 classroom robots + curriculum	

Source: company websites, social media

Industrial Training

Industry 4.0 Market

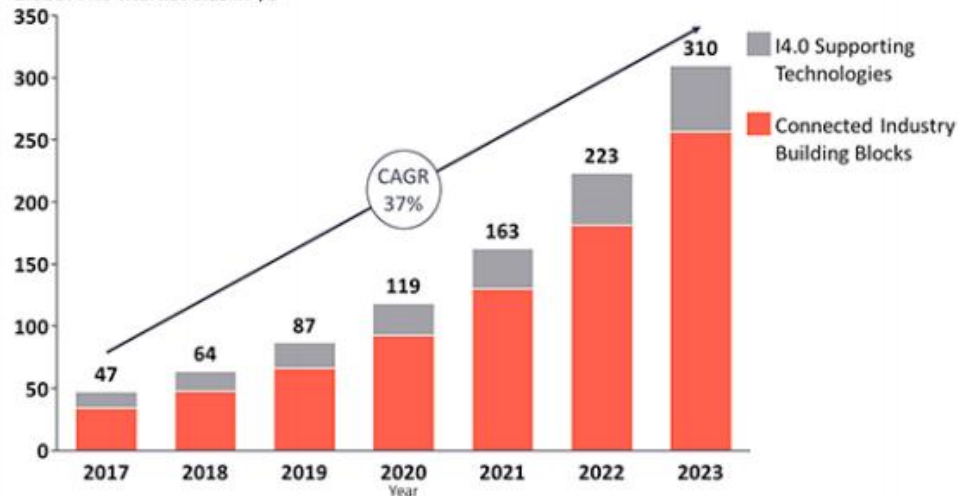
Large and growing market, driven by geo-political tensions (US/EU/China), competitive markets and lack of professionals to operate manufacturing facilities.

IOT ANALYTICS



Global Industry 4.0 Market Size 2017-2023

Global I4.0 Market Size in \$B



Note: The overall market for I4.0 refers to global spending on the six connected industry building blocks and six I4.0 supporting technologies
Source: IoT Analytics – November 2018

The top 10 technologies driving the market drive the its growth –

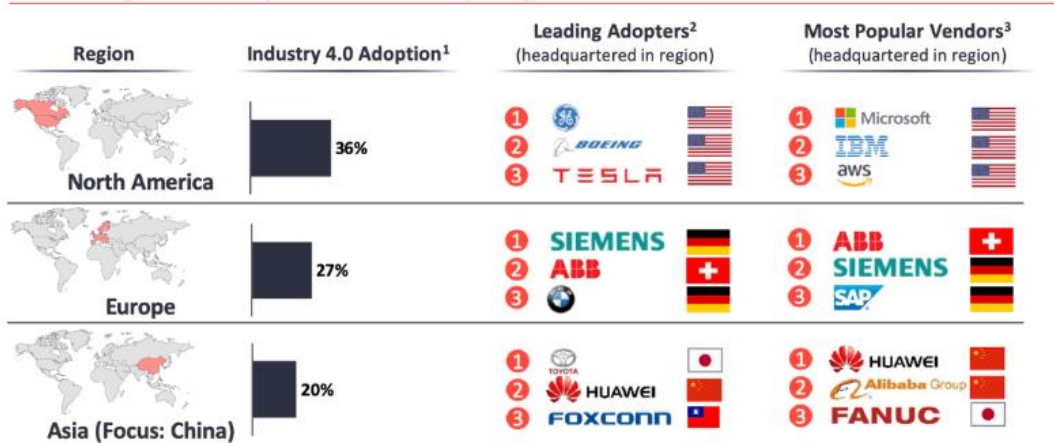
Industry 4.0—Adoption Index: Top 10 Technology Themes, Global, 2019



Source: Frost & Sullivan

Industry 4.0 has already moved to the mainstream adoption curve in all regions.

Industry 4.0 adoption 2020 by region



1) Adoption percentages indicate how many respondents stated that each of 17 shortlisted technologies are either "fully rolled-out" or "extensively rolled-out" across their organizations today
 2) Leading adopters are based on respondents' answers to the question: "Out of all manufacturing companies in the world that you are familiar with (in any sector), which ones do you regard as the best at deploying innovative digital tools in their operations?"
 3) Most popular vendors are based on number of times each company was listed by survey participant as a vendor for any of the 17 Industry 4.0 technologies

Source: IOT Analytics

In the US, overwhelming share of middle market industrial companies (\$500M - \$2B) already implementing and experiencing various elements of industry 4.0.

Technologies	All Respondents		Lower Middle Market		Upper Middle Market	
	Currently Deploying	Considering Deploying	Currently Deploying	Considering Deploying	Currently Deploying	Considering Deploying
Cloud Computing	69%	27%	68%	29%	69%	26%
	96%		97%		95%	
Advanced Analytics	61%	28%	64%	25%	60%	29%
	89%		89%		89%	
Robotic Process Automation	42%	39%	43%	43%	42%	38%
	81%		86%		80%	
Artificial Intelligence & Machine Learning	44%	43%	43%	39%	44%	44%
	87%		82%		88%	
Internet of Things	54%	33%	64%	36%	50%	32%
	87%		100%		82%	
Blockchain/Digital Ledger Technology	38%	37%	36%	43%	39%	35%
	75%		79%		74%	
3D Printing	31%	27%	21%	39%	35%	22%
	58%		60%		57%	
Extended Reality	44%	30%	39%	21%	46%	33%
	74%		60%		79%	

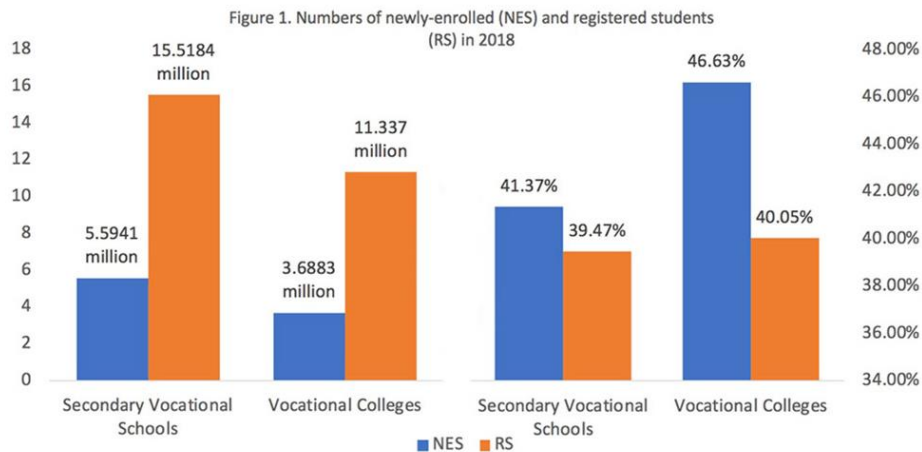
Source: 2020 Middle Market Industry 4.0 Benchmarking Survey, BDO

Training and Education Trends

Despite a chronic shortage of workers and massive government encouragement, young people in the Western world refuse to study professions such as electrical, automotive mechanics, welding, etc.

In most countries, vocational industrial education courses are supported or fully funded by the government. The most ambitious countries in the field are China and India.

China, according to the Chinese ministry of education, had a total of 11,700 vocational education institutions in 2018, including 10,300 secondary vocational schools, with tens of millions of students.²²



3. Analysis of RoboGroup Strategy & Opportunity

General

RoboGroup strategy is to become a leading integrated STEM and industry virtual education learning platform by eliminating key barriers and challenges exist today.



To achieve this vision, the company needs to implement two key transformations. The first is to become a truly digital company (front end/onboarding, back end, business processes, content, etc.), and second, to have a fully automated, touchless, B2C platform.

Target Users

STEM learning with virtual robotics

4th grade to high school

Industrial education (physical & virtual)

Secondary / high school to universities and beyond

Schools
(single, chains)

Parents

Partners/Companies

Education ministries

District managers

Robotic teams

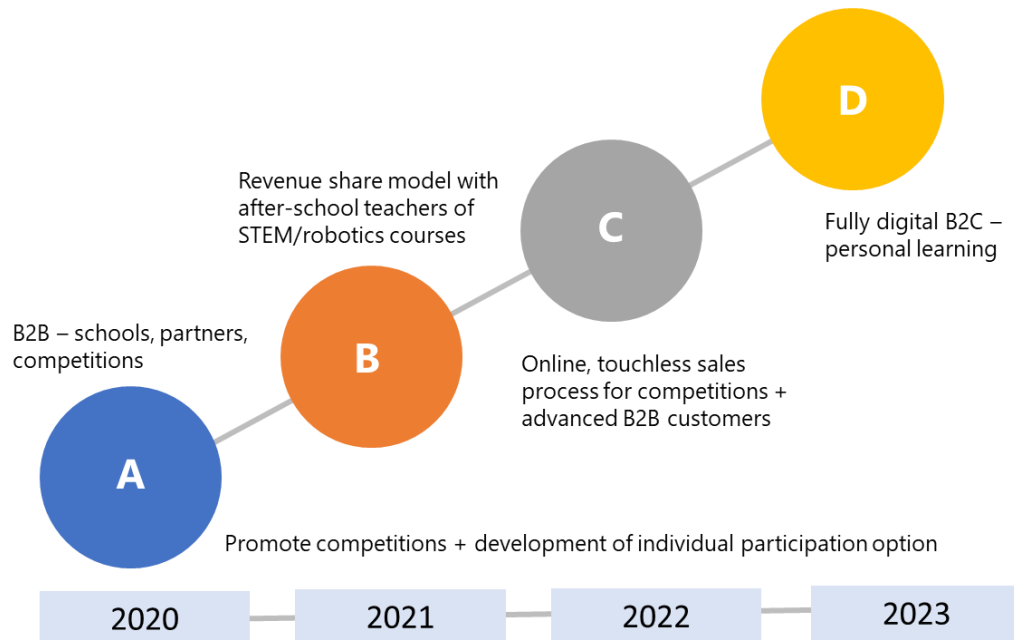
Teachers

Freelance/after-school teachers and courses

Target Customers

Product and Market Strategy

The company has a roadmap to meet the 2 main challenges over the next years, moving towards and integrative, virtual, fully digital platform.

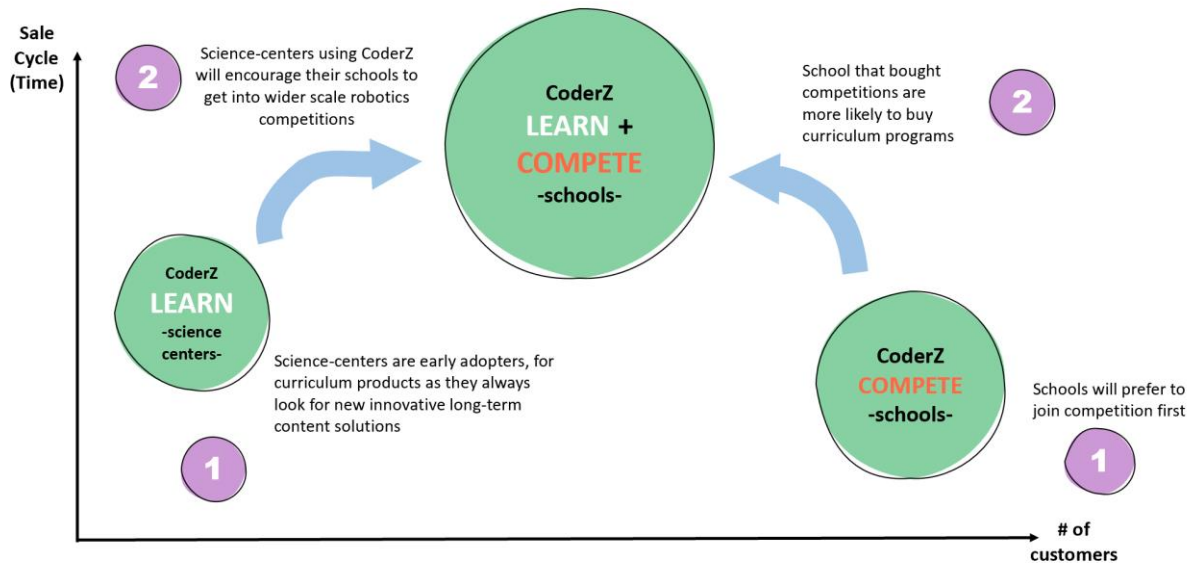


Go to Market

CoderZ goal is to become the preferred choice for STEM and robotics education, through gamified, competitive and self-based learning methodology. The vision of the management team is to promote STEM and robotics to be accessible to everyone, so every student will have more career options to choose in their future.

Company's goal is to enter the schools' STEM curriculum program through ex-curricular competitions and extracurricular activities, as the sale cycle of these products in the education market is shorter and easier for the decision makers in each country.

Commercialization Strategy – How CoderZ gets into Schools' curriculum?



Customer Analysis

RoboGroup believes that CoderZ enables to combine both STEM and industry learning.

Learning with CoderZ can start early, at 4th grade, and continue, at higher levels or replaced with more industry-attuned learning for higher grades, based on student's selection.

Initial end users and customers of CoderZ are (1) Schools who wish to explore and engage pupils in STEM education through extracurricular activities such as competitions and after school programs. (2) Strategic partners such as:

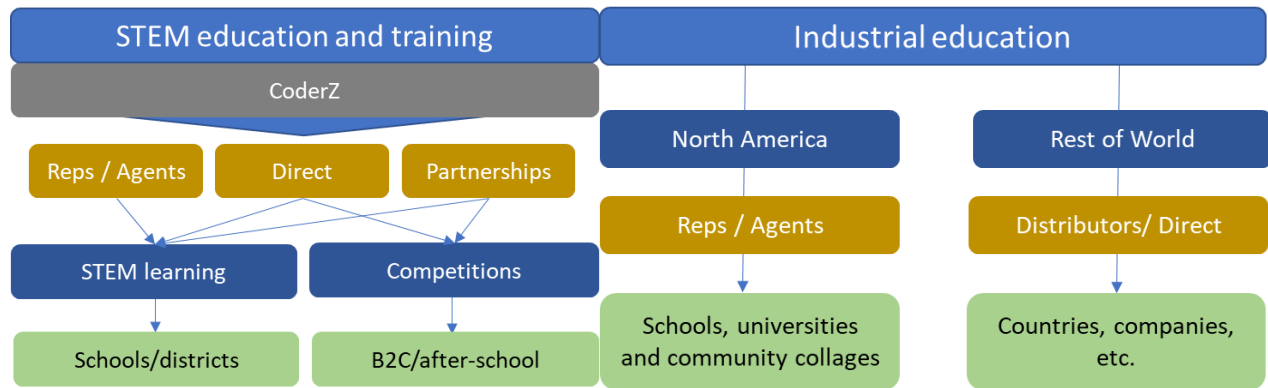
- Educational divisions of large business companies such as - Amazon, Google, Microsoft and others.
- Local governments and municipalities who aim to improve the STEM education in their districts.
- Physical robotics for STEM education solution providers who are looking to expand their market by using virtual environment.
- Local EdTech distributors.

(3) Teachers of 4th -12th grade students both from public as well as private education system, who are interested in affordable and accessible continuing STEM curriculum.

(4) Instructors and teachers of after-school STEM and robotics activities.

Business Model

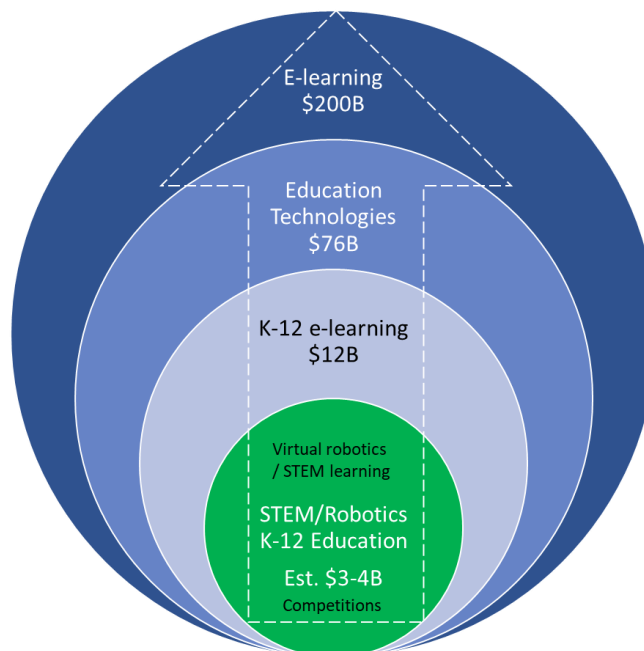
RoboGroup has multiple channels to market including distributors, partnerships with software companies (such as Amazon), robot manufacturers (such as Lego), industrial robot manufacturers (Yaskawa) and many others. To scale, the company will focus on volume/value partner development together with strong B2C activities, when this is ready to launch.



The Opportunity for CoderZ

CoderZ can become a leading and enabling platform for expanding STEM and robotics education. By developing individual, integrative and fully digital learning solutions, it can penetrate new market segments, much bigger than the segments currently served.

Company can use competitions to attract schools, teachers and students that will later become CoderZ and industry education curriculum customers.



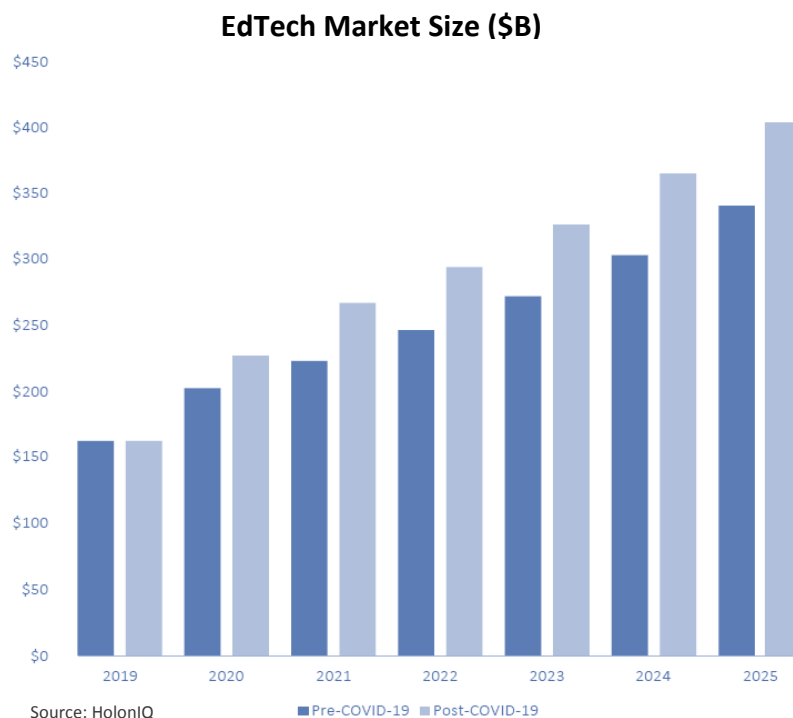
4. Financial Analysis & Valuation

4.1 Financial EdTech Market

4.1.1 Overview²³

The education sector promises to incorporate an expansive embrace of new digital technologies and strategies in the years to come. EdTech solutions have become increasingly instrumental in delivering education outcomes given a growing population of learners, changing preferences among students and educators for more diverse learning styles, and the impacts of COVID-19 in normalizing technology as a tool in parent-student-teacher relationships. These trends are helping create significant new opportunities for venture-backed startups. The market, as a whole, from early education to professional development, amounted to approx. \$227 billion opportunity in 2020. The education sector is experiencing a moment unique in its reliance on technology to facilitate learning, one that will help to intensify the adoption of technology as a crucial supplement to learning far into the future.

Market experts estimate the global EdTech market spend at \$163 billion in 2019 and expect it to reach \$404 billion by 2025, growing at a 16.3% CAGR.²⁴ Though the pandemic may reduce total education expenditure in the near term, the crisis is likely to expedite the transition to digital learning infrastructure. Moreover, direct-to-consumer offerings are expected to experience growth as customers look to solutions separate from traditional learning institutions.



4.1.2 Industry Growth Drivers

Reorienting EdTech as a supplement, not a replacement, for traditional teaching methods:

Many EdTech developments over the past decade have made teachers cynical about the role of technology in improving either their pedagogy or student outcomes, from the suggestion that massive open online courses can substitute for higher education to the overreliance on new devices such as iPads. These days, EdTech companies include the key stakeholders they serve earlier in their development lifecycle to drive greater adoption and growth. Moreover, companies must provide continuous robust support to schools attempting to integrate new technology into traditionally delicate educational structures.

Swelling demand for tools that can personalize instruction:

Large class sizes have stretched teachers' ability to provide meaningful one-on-one instruction to their students, creating an opportunity for technology to supplement teachers' roles through tech programs that alter the content in response to students' learning styles. Educators in both primary, secondary, and higher education arenas are piloting such solutions. In the professional world, digital coaching services can provide a mix of one-on-one business coaching and related activities as enterprises invest in employee growth initiatives.

An opportunity for more "direct-to-parent" business models:

Given the public health challenges of containing COVID-19, remote schooling will likely continue for some parts of the world through the fall and into 2021. In particular, in the US, public education funding, 90% of which typically comes from state and local governments, is dwindling as sales and income tax revenues plummet given the ebb in economic activity. This perfect storm will make it difficult for schools to invest in new EdTech solutions and incentivize parents to seek out supplemental EdTech offerings for their children.

Novel educational engagement strategies that appeal to a younger, tech-savvy generation:

Educators are increasingly adopting technologies such as 3D printing, augmented and virtual reality, artificial intelligence, and robotics as they look for ways to enhance student engagement and connect skills to a progressively digital world. Many educators embrace gamification as students demand more "stimulating" content in an entertainment-saturated world.

A greater premium on reskilling and upskilling opportunities:

Even before the pandemic, companies and workers alike realized the value of continued learning in a fast-changing economy. Surveys have shown that employees are far more likely to recommend their workplace and stick around if their company provides educational opportunities; in turn, companies invest more into educational benefits such as stipends and online courses.

Traditional academic curriculum expanding to include a greater focus on "soft skills":

Schools are investing more into social and emotional learning tools and curriculum, which aim to teach children how to manage their emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions. Employers are also investing in such skills to focus on leadership and management, creative problem solving, and interpersonal communication.

Ballooning college costs:

Tuition costs at public colleges in the US have risen in every state over the past decade, increasing on average by 37%;²⁵ this has put greater pressure on prospective students to reconsider their options, current students to consider dropping out or vying for more scholarships, and past students to lean on their current employer to help them pay down debt. A variety of startups have emerged to help each of these stakeholders tackle the overall problem of educational financial hardship.

Asia continues to represent the largest opportunity for EdTech growth:

In 2014, China alone had almost 260 million students from pre-K to higher education, making it the world's largest education system.²⁶ Across Asia, families have shown a lower income elasticity for education than other sectors, with families in China, Indonesia, India, Singapore, Malaysia, and Taiwan all prioritizing private education spending at greater rates.²⁷ Moreover, increasing Internet penetration rates, particularly in India and Southeast Asia, quickly expand access to digital education tools, especially during COVID-19. Additionally, government policy throughout the continent has further emphasized the importance of education, with China increasing funding toward EdTech every year since 2011, and India recently updating their National Education Policy to include digital learning and coding initiatives.

4.2 Valuation Method & Approach

Valuation of a start-up company in its early stages can be challenging due to limited cash flow (if any) and uncertainty regarding the future. As part of a Discounted Cash Flow (DCF), the accepted method used in financial valuations, there are several modifications to a start-up company's valuation. In general, there are four primary methods within the DCF method:

1. Real options – this valuation method is designated for pre-clinical and early-stage clinical programs/companies where the assessment is binary during the initial phases and based upon scientific-regulatory assessment only (binomial model with certain adjustments).
2. Pipeline assessment – a valuation method used for early-stage companies before the market stage where time-to-market may be a few years for full operations. The company's value is the total discounted cash flow for its products/signed agreements plus unallocated costs and its technology platform assessment.
3. DCF valuation - this method applies to companies with products that have a positive cash flow from operations.
4. Market benchmark – this method is based on recent deals (M&A and/or fundraising) within the company's domain and market multiples.

To evaluate RoboGroup's equity value, we combined two methods: (1) market benchmarking approach to estimate the STEM CoderZ activity, (2) the DCF method to estimate the Vocational & Robotec activity. Then, we combined them to reach the company's overall equity value.

4.2.1 Revenue Overview

RoboGroup is a well-established publicly held firm. We applied discounted cash flow methodology for its Vocational & Robotec divisions activity based on its historical metrics.

Revenues in the Vocational & Robotec segments are generated from executing large, one-time, and challenging to predict projects. However, the company has signed orders and has demonstrated the capacity to create new projects over the past ten years.

From 2015-2019, before the company had any significant revenue from STEM activity, the average company total revenue was \$13.2M.

In 2020, the company revenue from STEM activity increased to approx. \$4M, and total revenue was \$18.8M.

The company also publicly publishes its backlog. As of December 31, 2020, the company had a backlog of \$25.3M to be delivered and received by 2023 (\$18.1M of it by 2021); \$17.1M is derived from the Vocational & Robotec divisions, and \$8.1M from the STEM division.

4.2.2 Valuation by Market Multiples – The STEM CoderZ –Activity

The STEM CoderZ segment is a young, high growth and offers a new teaching paradigm to the market that has significant benefits over existing solutions. This segment business model is more of a SaaS-like/Subscription company, which is best valued using Annual Recurring Revenues (ARR) multiples. Thus, we decided to use the multiples method to evaluate this business activity of the company.

In the past three years, the STEM activity of the company matured and reached commercialization. The company STEM revenues soared from \$200K in 2019 to \$4M in 2020, along with a backlog of \$8.1M as of December 31, 2020.

We believe that RoboGroup is still in the early stages of penetrating the market with its STEM products and anticipate high growth in revenues from this segment.

Based on the company's past performance and current market trends, we anticipate 2021 revenue from this segment to reach approx. \$10M-\$15M.

Valuation by EV/Revenue multiple

A revenue multiple measures the value of the equity of a business relative to its revenue. As with other multiples, other things remaining equal, firms that trade at low multiples of revenues are viewed as cheap

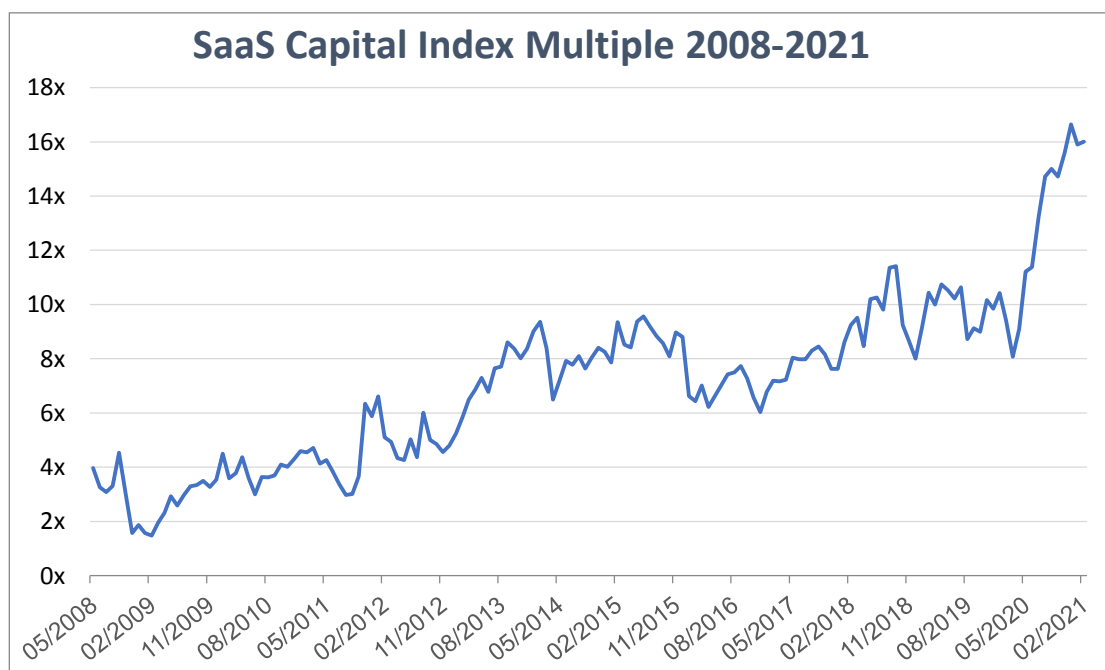
compared to firms that trade at high multiples of revenues. Companies that are evaluated based on future growth are expected to sustain high growth rates over a longer period, have a significant TAM with insignificant penetration, and have a significant competitive advantage over their competitors. The multiple used is often a function of the sustained growth rates. However, we see the downside of focusing on revenues, which can lead to high values for firms generating high revenue growth while losing significant amounts of money, ending in raising more funds and diluting existing shareholders.

As long as the valuation increase is based on high growth rates rather than the dilutive factor – shareholder value is sustained. As a general note, ultimately, a firm has to generate earnings and cash flows to have value.

ARR multiple helps to project future revenues as it looks at existing revenues and assumes nothing changes in the year ahead – no churn, no new customers, and no expansion. As such, ARR is a helpful tool to predict long-term growth and visualize SaaS business's size.

For the valuation of CoderZ, we used the following multiples:

1. We are using the median public SaaS company valuation revenues multiple²⁸, which for February 2021 was 16. As a conservative measure, we use the average of the trailing twelve months, which is 13.47 (SD=2.86).



2. We examined Roobogroup's industry, the education industry, using data from 38 firms (as of 2020²⁹). We found that the average EV/Revenue was 2.81.

3. We also calculated an EdTech industry revenue multiple based on a similar companies sample using Pitchbook data set. The revenues multiple for the mentioned sample is 8.87 (for more details, see the section, 'Recent deals as a valuation benchmark').

Above all mentioned multiples, we determine that our EdTech revenue multiple (=8.87) is the most suitable for evaluating RoboGroups's CoderZ activity.

Thus, according to our SaaS-Education revenue multiple, we value RoboGroup's CoderZ activity at \$88.7M-\$133M.

4.2.3 Valuation by DCF Method – Vocational & Robotec Activity

Revenues:

As mentioned above, the company Vocational & Robotec divisions' activity is well established, along with \$15.5M revenues generated in 2020. Due to this activity's maturity level, we anticipated smaller revenue growth for this segment than the STEM growth. We estimate that RoboGroup's revenue will reach \$17M in 2021 from the Vocational & Robotec divisions.

Over the years, we accounted for a small growth rate of 2% to compensate for these segments' volatile nature (income per project and not a subscription). Yet, we trust the company to continue generating new orders, establish further agreements and increase its market share at the same scale it used to in the past. We expect the company to reach total revenue of approx.—\$19M-\$20M by 2027.

Costs:

The company's financial report refers to all the company's divisions' aggregate costs, without reference to expenses on a division basis. Also, recent years' costs were relatively high due to the company's high investments in R&D of the STEM products and considerable marketing efforts.

Hence, we determine that Vocational & Robotec divisions' costs, as a percentage of overall revenue, should be different from the overall share of the expenses in previous years, as described below:

Cost of sales - In the past three years (2018-2020), average COGS were about 50% out of the company revenue. We used a fixed 55% in our model, as the Vocational & Robotec divisions activity isn't SaaS-like-activity, therefore should have a higher percentage of COGS than the overall COGS of the company.

Operating Expenses -

- **R&D** - In the past three years, average R&D costs were about 11% of the company revenue. As the Vocational & Robotec divisions' products are relatively mature, we accounted for a lower percentage of R&D costs than the overall R&D costs of the company. We used a fixed 4% R&D costs in our model.
- **S&M** - In the past three years, average S&M costs were about 38% of the company revenue. As the company brand is well established in the markets that the Vocational & Robotec divisions address, we accounted for a lower percentage of S&M costs than the overall S&M costs of the company. We used a fixed 28% S&M costs in our model.
- **G&A** - In the past three years, average G&A costs were about 12.5% of the company revenue. In 2020, G&A costs represented only 8% out of the total revenue. In our view, G&A expenses shouldn't vary between the different divisions of the company. Also, we anticipate these costs to decrease further. Thus, we accounted for a fixed 5% S&M costs in our model.

Tax - RoboGroup is an Israeli company; thus, we used the Israeli statutory tax (23%) in our model. We accounted for \$14.6M losses carry forward for tax purposes.

Below, we present our P&L forecasting for the Vocational & Robotec divisions, for years 2021 – 2027:

USD in thousands	2021	2022	2023	2024	2025	2026	2027
Revenue	17,000	17,340	17,687	18,041	18,401	18,769	19,145
Cost of Sales	9,385	9,573	9,764	9,960	10,159	10,362	10,569
Gross Profit	7,615	7,767	7,923	8,081	8,243	8,407	8,576
R&D	676	689	703	717	731	746	761
S&M	4,843	4,940	5,039	5,139	5,242	5,347	5,454
G&A	915	933	952	971	990	1,010	1,030
Total Operating Expenses	6,433	6,562	6,693	6,827	6,964	7,103	7,245
Operating Income	1,182	1,205	1,229	1,254	1,279	1,305	1,331

Equity Value

We also calculated RoboGroup's value based on the following parameters:

- Non-operational assets/liabilities - The company had \$10.7M cash as of 31/12/2020 and \$970K loans.
- CapEx – Over the life of an asset, total depreciation will be equal to the net capital expenditure. We don't expect any significant CapEx investment on behalf of the company in the forecasted period.
- Working capital (WC) changes – based on the current balance sheet and future WC needs, we assume 30 days of working capital needs.
- WACC – we calculate WACC to be 14.27% (see appendix A).

- Growth rate – We estimated a 2% growth rate.

Sensitivity analysis

The table below presents the Vocational & Robotec divisions' equity value matched with different capitalization rates (along with a 2% growth rate). We set a range of 0.5% change from our CAPM model (see Appendix A).

<i>Cap. Rate (%)</i>	<i>Equity Value (US\$)</i>
13.3%	19,840
13.8%	19,490
14.3%	19,168
14.8%	18,870
15.3%	18,594

Using the DCF method, we estimate the Vocational & Robotec divisions' equity value to be in the range of US\$19.5M and US\$18.9M, with a mean of US\$19.2M.

4.2.4 Recent deals as a valuation benchmark

We estimated RoboGroup's post-money valuation based on similar competitors benchmarking (see appendix 2), using data from Pitchbook, a financial database.³⁰ To form a representative sample, we modified the data by applying the following procedure:

1. We identified companies that are similar to RoboGroup in their operating verticals/industries (EdTech companies).
2. We omitted companies in the initial stage (such as accelerator-, incubator-, angel-, and seed-stage companies).
3. We omitted outliers (5% margin).

The stages above add conservatively to our benchmark and provide a sample that reflects RoboGroup's ecosystem.

Based on these companies' last known average valuation, we estimate RoboGroup's equity value at \$137.7M (N=169). A full list can be found in appendix 2.

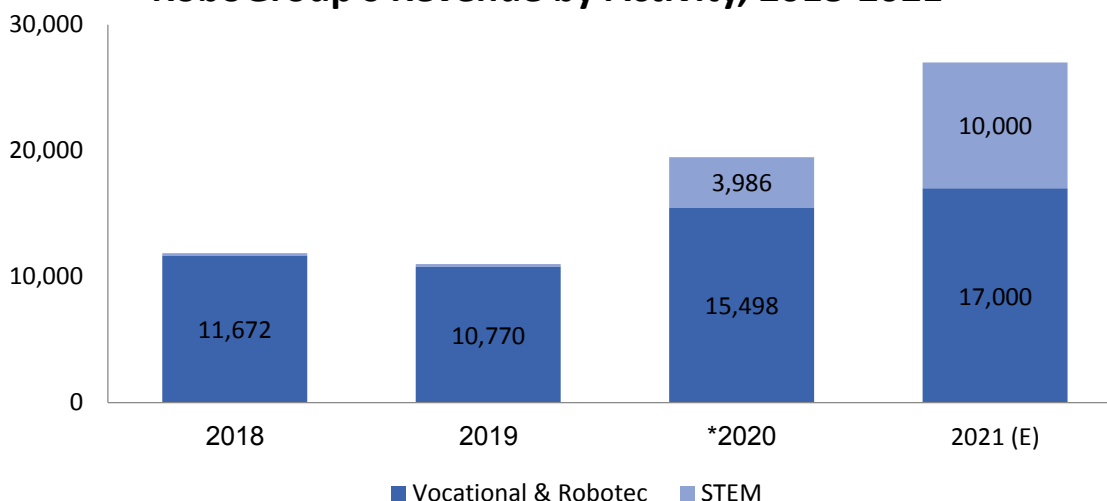
EdTech	\$US Millions	
	All (N=187)	No-Outliers (N=169)
Average Value	417.3	137.7

We also calculated a revenue multiple based on the same data set. However, we used a smaller sample due to data limitations (see appendix 3). Many companies are private and don't provide data regarding their revenue or don't have an income yet. The revenues multiple for the mentioned sample is 8.87 (N=38, see appendix 3).

4.3 Valuation summary

We see RoboGroup as a growth firm. Thus, we based our valuation on current and future market trends and the company's management actions. Due to the high growth in the EdTech market, past performance, and reported activity in the past few months, we estimate the company revenue for 2021 to be approx. \$17M from the Vocational & Robotec divisions, and \$10M-\$15M from the STEM division. As measure of conservativity, we used the bottom of our forecast (=\$10M) for evaluating the STEM segment value.

RoboGroup's Revenue by Activity, 2018-2021



(E) – Estimated

*Before adjustments to a consolidated report

Given all the findings above, summing up the value of the different parts of RoboGroup's activity, we estimate RoboGroup equity value to be in the range of NIS 343.5M and NIS 375.1M, with a mean of NIS 359.2M.

We conducted RoboGroup's valuation using market benchmarks from recent deals, relevant market multiples, and a bottom-up valuation using the DCF method, all based on RoboGroup's updated business model. The company has 45,425,289 shares as of April 07th, 2021; thus, in view of all aforementioned findings and assessments, we value the company's stock price target to be in the range of NIS 7.5 to NIS 8.3, and NIS 7.9 on average.

Appendix #.1: Capitalization Rate (WACC)

The cost of equity capital (Ke) represents the return required by investors. The capitalization rate is calculated using the CAPM (Capital Asset Pricing Model). It is based on an Israeli long-term 10-year governmental bond with a market risk premium and based on Professor Aswath Damodaran's (NY University) commonly used sample (www.damodaran.com). As of January 2021, the equity risk premium for Israel was estimated at 5.4%. A three-year market regression averaged Beta is 0.97, according to a sample of 38 companies representing global education companies. We used an unleveraged beta of this sample, which is higher than a leveraged beta due to the high cash versus debt rate.

RoboGroup is a small-cap company in which marketability and size premiums need to be considered. Duff and Phelps' data research in 1963-2020 indicates that an 8.24% premium needs to be added to the CAPM for small-cap companies.

Weighted average cost of capital model (WACC) is estimated as follows:

$$WACC = R_d(1-t) * (D/D+E) + K_e(E/D+E) + S_p$$

$$\{K_e = R(f) + \beta_e * (R(m) - R(f))\}$$

The company's financial structure, based on the WACC model, is as follows:

WACC	Parameter	Data	Source
Long-term (30 years) T-bond	R(f)	1.14%	Rf - Israeli treasury bonds - 10 years, as of 01/03/2021
Market risk premium	R(m) - R(f)	5.46%	Based on Damodaran (08/01/2021) - Israel
Beta	β_e	0.97	Beta sample - Education (Damodaran, 2021), 38 firms
Cost of Capital	Ke	6.4%	
Debt, rate	Rd	2.5%	Estimated
Debt (%)	D/(D+E)	8.31%	As of 31.12.2020, thousands of USD
Equity(%)	E/(D+E)	91.69%	As of 31.12.2020, thousands of USD
Tax	t	23.00%	
Size Premium - micro cap	Sp	8.24%	10z decimel - Duff & Phelps, 2020
WACC= $R_d(1-t) * (D/D+E) + K_e(E/D+E) + ArP$		14.27%	

We, therefore, estimate the company's WACC to be 14.27%.

Appendix #.2: Similar Competitors Benchmarking Dataset (No Outliers)

Company Name	Deal Date	Company Post Valuation (million, USD)	Employees	Company Country
17zuoye	04-Dec-2020	1,972.59	2,613	China
Varsity Tutors	29-Jan-2021	1,700.00	500	United States
ApplyBoard	16-Sep-2020	1,520.22	400	Canada
Spark Education	24-Jan-2021	1,500.00	6,500	China
Course Hero	26-Aug-2020	1,180.00	773	United States
Learning Technologies Group	29-May-2020	1,048.49	732	United Kingdom
Newsela	25-Feb-2021	1,000.00	466	United States
Quizlet	13-May-2020	1,000.00	200	United States
MasterClass	25-Jun-2020	800.00	250	United States
Rosetta Stone	15-Oct-2020	792.00	1,205	United States
Blocks Group	27-Nov-2020	703.30		China
Brainly	17-Dec-2020	646.00	130	Poland
Vedantu	16-Jul-2020	600.00	1,328	India
Skillshare	10-Aug-2020	501.00	90	United States
Capita (Education Software Solutions Business)	02-Feb-2021	468.55		United Kingdom
Domestika	27-Jul-2020	370.00	607	United States
Epic!	15-Jun-2020	355.00	110	United States
Codema	17-Apr-2020	353.11		China
WhiteHat Jr	21-May-2020	350.00	400	India
Lambda School	05-Aug-2020	260.00	150	United States
Speakaboos	18-Oct-2020	233.65	8	United States
Global Knowledge Training	13-Oct-2020	233.00		United States
Jiean Hi-Tech	22-Jun-2020	229.10	531	China
Noodle Partners	16-Nov-2020	224.98	235	United States
Mintra Group	05-Oct-2020	195.41	106	Norway
Outschool	18-Sep-2020	188.22	60	United States
Class Technologies	15-Feb-2021	185.75	110	United States
Knowledgehook	15-Oct-2020	175.00	45	Canada
Skilljar	06-Oct-2020	175.00	105	United States
Cuemath	07-Dec-2020	170.42	1,328	India
Galvanize (Education and Training Services)	27-Jan-2020	165.00		United States
Lessonly	11-Mar-2020	142.00	300	United States
Ellevation	07-Apr-2020	117.20	121	United States
Mathway	04-Jun-2020	115.96		United States
Mursion	30-Nov-2020	110.00	90	United States
Eleva Educação (Editora Eleva Platform)	23-Feb-2021	107.27		Brazil
Cluey Learning	09-Dec-2020	105.34	85	Australia
Amesite	25-Sep-2020	101.62	11	United States
Snapask	25-Feb-2020	100.00	100	Hong Kong
Squla	24-Dec-2020	96.83	70	Netherlands
Sparx	01-Dec-2020	95.92	93	United Kingdom
Fclassroom	02-Dec-2020	83.11		China
eloomi	23-Oct-2020	78.65	105	Denmark

RedShelf	20-Aug-2020	75.30	109	United States
CodeSignal	08-Dec-2020	75.00	50	United States
WorkRamp	09-Dec-2020	71.00	37	United States
MedCerts	17-Nov-2020	70.00		United States
Enuma	18-May-2020	69.00		United States
GetSetup	03-Sep-2020	59.90	16	United States
ISDI	04-Aug-2020	57.57		Spain
AdmitHub	06-Apr-2020	56.00	50	United States
Lingokids	26-Mar-2020	55.10	65	United States
Flockjay	14-Jan-2021	55.00	194	United States
getBridge	15-Feb-2021	50.00		United States
Career Karma	09-Dec-2020	50.00	74	United States
Totara Learning Solutions	03-Jun-2020	50.00		New Zealand
Amplifire	30-Jun-2020	47.64	63	United States
Preply	29-Mar-2020	47.50	125	United States
Doubtnut	31-Jan-2020	45.00	80	India
Trident University International	02-Mar-2020	43.87		United States
Perlego	12-Feb-2020	42.45	52	United Kingdom
Sketchy	02-Dec-2020	40.00	49	United States
Abintegro	02-Dec-2020	39.68	40	United Kingdom
Ureeka	20-Apr-2020	38.60	45	United States
Osso VR	21-Sep-2020	38.00	53	United States
Tandem (Educational Software)	28-Jul-2020	37.78	24	Germany
AstrumU	28-Jul-2020	37.65	33	United States
Mrs Wordsmith	12-Feb-2020	36.52	39	United Kingdom
Speexx	30-Oct-2020	34.84	335	Germany
Pickatale	02-Jul-2020	34.46	80	Norway
Prenda	22-May-2020	34.33	62	United States
MyTutor	16-Jun-2020	32.69	50	United Kingdom
Ok Play	03-Sep-2020	31.50	5	United States
Drops(Educational Software)	23-Nov-2020	31.00	21	Estonia
Juni Learning	26-Aug-2020	30.50	409	United States
NovaKid	01-Dec-2020	30.25	95	United States
EdApp	15-Sep-2020	29.68		Australia
IC Axon	25-Sep-2020	28.00	90	Canada
Userlane	14-Jul-2020	26.53	80	Germany
CareAcademy	11-Jun-2020	26.50	45	United States
CodeCombat	31-Jul-2020	26.21	41	United States
Tiney	10-Feb-2020	26.17	29	United Kingdom
CoGrammar	19-Feb-2021	25.86	15	United Kingdom
Health Scholars	16-Jan-2020	25.00		United States
Smart Sparrow	16-Jan-2020	25.00		Australia
MySkillCamp	04-Sep-2020	24.28	30	Belgium
Hack The Box	31-Jan-2020	23.72		United Kingdom
Zen Educate	27-Jul-2020	22.91	60	United Kingdom
Esme Learning	31-Dec-2020	22.50	30	United States
Mojimusi	12-Jun-2020	22.48		China
MDBriefCase	29-Jan-2021	22.37	50	Canada
Amira Learning	01-Aug-2020	22.34	22	United States
EduMe (Education and Training Services)	30-Jul-2020	22.29	20	United Kingdom
Trivie	09-Jul-2020	21.37	15	United States
Meritnation	03-Jan-2020	21.28		India

Coding Ninjas (Educational and Training Services)	11-Feb-2020	20.81	80	India
Newton School	05-Feb-2021	20.51	172	India
eThink	04-Dec-2020	20.00	39	United States
ABii	07-Sep-2020	19.45	8	United States
AllRight	20-Nov-2020	19.39		United States
APDS (Other Commercial Services)	13-Mar-2020	19.10	30	United States
Lingumi	01-Apr-2020	18.67	16	United Kingdom
OpenLearning	03-Jun-2020	18.27		Australia
Interplay Learning	15-May-2020	17.60	45	United States
Honorlock	19-Mar-2020	17.00	49	United States
Chem101	30-Dec-2020	16.60	55	United States
Oxford Medical Simulation	24-Jul-2020	16.42	31	United Kingdom
Hallo (Educational Software)	02-Jul-2020	16.40		United States
Soar (Education and Training Services)	20-Oct-2020	16.27	15	United States
Connect Childcare	30-Dec-2020	16.19		United Kingdom
Retrieve	10-Jan-2020	16.00	15	United States
Improve International	23-Jun-2020	15.92	60	United Kingdom
NepriS	12-Mar-2020	15.00		United States
Scientific Learning	14-Sep-2020	15.00	80	United States
Degree Analytics	13-Apr-2020	14.61		United States
AMOpportunities	20-Nov-2020	13.50	30	United States
Stitch & Story	10-Sep-2020	13.18	14	United Kingdom
CamBioScience	01-Feb-2020	12.41	25	United Kingdom
Acadeum	28-Feb-2020	12.40	10	United States
Sense Network	07-Sep-2020	12.39		United Kingdom
Curricula	06-Jan-2020	12.00	9	United States
Zzish	30-May-2020	10.95		United Kingdom
Alelo	08-May-2020	10.77	13	United States
Shape Robotics	25-Jun-2020	10.07	18	Denmark
Levered	01-Dec-2020	10.00	2	United States
Eedi (Educational Software)	06-Mar-2020	9.65		United Kingdom
Developing Experts	13-Jan-2020	9.54		United Kingdom
Learnt	28-Jul-2020	8.88	2	United States
Code Institute	30-Mar-2020	8.87	52	Ireland
Kydon Learning Systems Institute	16-Jul-2020	8.61		Singapore
Third Space Learning	15-Oct-2020	8.15		United Kingdom
Avinu Media	16-Dec-2020	8.00	2	United States
The Artist Academy	15-Jan-2020	7.52		France
Disprz	22-Jul-2020	7.47	72	United States
Safebridge	18-Feb-2021	7.20		Germany
Logistica Training	09-Jun-2020	7.11		United Kingdom
MobileTrain	12-Mar-2020	6.91		Belgium

TeleTeachers	14-Jul-2020	6.79		United States
BBC Maestro	31-Mar-2020	6.68		United Kingdom
Immerse (Educational Software)	29-Oct-2020	6.49	15	United States
Moonshot Junior	13-Aug-2020	6.18	21	United States
Auris (Educational Software)	30-Nov-2020	6.15	10	United Kingdom
Adventure 2 Learning	21-Oct-2020	6.09	3	United States
Illumnus	22-Feb-2021	6.00	12	India
Core (Platform)	27-Nov-2020	5.88		Russia
We are Digital	30-Jul-2020	5.85		United Kingdom
Xtractor	01-Mar-2020	5.74	40	Sweden
LiftEd (Mobile App)	31-Aug-2020	5.00	8	United States
Melanence	27-Aug-2020	4.75	1	United States
Ninja Marketing	01-Sep-2020	4.64		Italy
Learning Labs	27-May-2020	4.57		United Kingdom
Burning Sky Online School	21-Jan-2020	4.32		China
Brio (Educational Software)	28-Sep-2020	4.03	1	Romania
AP Racing (Entertainment Software)	23-Jul-2020	4.01	2	United States
afocusedpath.co m	03-Dec-2020	4.00	1	United States
First Coincidence	02-Dec-2020	3.93		Switzerland
Code Of Talent	15-Apr-2020	3.82		Romania
Talent Creator Center	13-Aug-2020	3.58		China
Mwabu	30-Sep-2020	3.20	10	United Kingdom
Edurio	12-Feb-2020	3.03		United Kingdom
Aulab hackademy	16-Jun-2020	3.00	31	Italy
Kinderpedia	30-Jun-2020	2.95	16	Romania
Lix Technologies	30-Apr-2020	2.77		Denmark
Holos	29-Jan-2020	2.70	11	United States
ASK (Educational Software)	20-Feb-2020	2.59	3	United States
Kiddie Kredit	24-Jun-2020	2.50	3	United States
Play2sell	09-Feb-2021	2.42	15	Brazil
Vocam (Balckburn)	12-Feb-2020	2.37		Australia
MusicGurus	14-Oct-2020	2.19	9	United Kingdom

Appendix #.3: EdTech Industry Revenue Multiple Calculation Dataset

Due to lack of data, we used a smaller companies sample for the calculation of the EdTech Industry Revenue Multiple.

Company Name	Description	Deal Date	Company Post Valuation (million, USD)	Revenue (million, USD)	Valuation/Revenue	Company Country
Levered	Developer of a web-based instructional system intended to promote growth in elementary math. The company's system blends whole class math talks, group pencil and paper activities and online self-paced lessons that support both classroom and distance-based instruction, enabling teachers and students to fill learning gaps and ensure further improvement.	01-Dec-2020	10.00	0.20	50.00x	United States
Kinderpedia	Developer of an educational platform designed to transform education through collaboration. The company's platform optimizes the administrative processes and placing parent-teacher-student collaboration right at the core of the learning act and makes the transition towards intelligent, connected education based on permanent collaboration, enabling users real-time communication between students, teachers and parents.	30-Jun-2020	2.95	0.10	29.47x	Romania
CoGrammar	Developer of a technology education platform dedicated to closing the global tech skills gap. The company's platform scales asynchronous or synchronous code reviews affordably and integrates it into LMS or ATS to provide on-demand feedback to hiring managers, developers or students in minutes, enabling individuals and businesses to grow and procure talent.	19-Feb-2021	25.86	1.28	20.17x	United Kingdom
Yuanfudao	Developer of an online educational platform designed to provide online tutoring services for Chinese students. The company's one-stop online tutoring platform provides elementary school, junior high school, and high school students with various lessons that cover all subjects, enabling students to know their learning weaknesses and conduct targeted learning by leveraging big data analysis.	31-Mar-2020	7,800.00	506.54	15.40x	China
17zuoye	17 Education & Technology Group Inc is an online tutoring company. It is an education technology company that delivers data-driven teaching, learning and assessment products to teachers, students and parents across over K-12 schools.	04-Dec-2020	1,972.59	142.60	13.83x	China
Coursera	Developer of an online education and learning platform designed to offer courses to empower learners around the world. The company's platform offers online courses that include recorded video lectures, auto-graded and peer-reviewed assignments as well as community discussion forums, enabling learners to choose from a variety of courses in areas like business, computer science, data science and public health to achieve their career, educational and personal enrichment goals.	20-Jul-2020	2,570.00	200.00	12.85x	United States
Duolingo	Developer of a language-learning platform designed to help people to read, listen, and speak multiple languages. The company's platform uses bite-sized lessons that feel like playing a game to keep learners motivated and collects data insights on how people learn to use this data to constantly improve the effectiveness of the platform, enabling users to self learn different languages for free.	18-Nov-2020	2,435.00	200.00	12.17x	United States
BYJU'S	Operator of an online learning platform intended to deliver high quality, engaging, and accessible education. The company's platform makes use of original content, watch-and-learn videos, rich animations, and interactive simulations that make learning contextual, visual, and practical, enabling individual students to receive a personalized educational experience.	24-Nov-2020	12,000.00	1,000.00	12.00x	India
Course Hero	Developer of an online learning platform designed to facilitate students with access to course-specific study resources contributed by a community of students and educators. The company's platform offers a free and subscription membership that includes access to practice problems, study guides, videos, class notes, and step-by-step explanations for every subject from economics to literature, biology to	26-Aug-2020	1,180.00	100.00	11.80x	United States

	history, accounting to psychology, thus enabling students to get access to all valuable resources for their sustainable development.					
Coding Ninjas (Educational and Training Services)	Developer of an online teaching platform intended to train the next generation of developers and to transform the delivery of technological education. The company's platform offers the Teaching Assistant model which provides almost real-time doubt support, thereby enabling students to receive a personalized educational experience and become a certified coder.	11-Feb-2020	20.81	2.11	9.86x	India
Code Of Talent	Developer of micro-learning platform designed to integrate learning and provide content and training management. The company's platform is featured with mobile and web presence, multiple languages availability, peer interaction facility, gamified interface and real time reporting and analytics, enabling users to get a stand alone digital learning environment to educate themselves in an engaging way.	15-Apr-2020	3.82	0.39	9.75x	Romania
Pluralsight	Pluralsight Inc operates as an enterprise software company. It primarily offers technology skill development solutions through its cloud-based technology learning platform that is broadly accessible. The platform is powered by Iris, the company's proprietary machine-learning driven skill assessment algorithm and recommendation engine, which enables businesses to more effectively quantify and develop skills across technologies. Pluralsight offers courses across a range of technology subject areas, including cloud, mobile, security, information technology, and data. The company has geographical footprints in the United States, Europe, the Middle East and Africa, and other foreign locations. It generates a majority of its revenue from the United States.	13-Dec-2020	3,500.00	375.69	9.32x	United States
Mathway	Operator of an educational website committed to offering unique mathematics education to students. The company focuses on providing students with extensive range of maths problems including basic math, trigonometry, algebra, calculus and statistics along with imparting relevant tools to understand and solve the problems, enabling students to experience consistent math assistance as per needs.	04-Jun-2020	115.96	13.00	8.92x	United States
Shape Robotics	Shape Robotics AS is an educational technology company. It has developed Fable, a modular robotic system that makes it easy and fun for students to build and program their own robots. Fable motivates students to do hands on problem-based learning activities with robotic technology to learn both traditional subjects and skills.	25-Jun-2020	10.07	1.18	8.57x	Denmark
Noodle Partners	Developer of an online platform intended to reinvent how higher education happens online. The company's platform helps colleges and universities to set up an online degree program and offers instructional design for courses within the program, as well as recruiting, tech support, and measuring student engagement services along the way to the course completion, enabling students to receive certificate and degree programs online.	16-Nov-2020	224.98	27.30	8.24x	United States
Mintra Group	Mintra Holding AS is engaged in providing workforce management systems for safety critical industries. Its services include Training Portal, Outsourcing and Online courses among others. The company offers solutions to various industries including Maritime, Construction, Oil & Gas and Renewables.	05-Oct-2020	195.41	23.88	8.18x	Norway
Instructure	Developer of a cloud-based learning management platform designed to make teaching and learning easier. Its software is used as a learning management application for the education market and for the corporate market to enable its customers in developing, delivering, and managing face-to-face and online learning experiences.	23-Mar-2020	2,000.00	258.47	7.74x	United States
Varsity Tutors	Operator of a live learning platform intended to connect experts and learners in any subject, anywhere, anytime. The company's platform connects students with personalized instruction to improve academic achievement, enabling students to meet their individual needs and stand behind their satisfaction with a money-back guarantee.	29-Jan-2021	1,700.00	240.00	7.08x	United States
Educa Reality	Developer of educational products intended to make learning and education fun through the use of new technologies. The company's educational technology platform include augmented reality and virtual reality-based educational products and services, books, consulting and editorial production, enabling both teachers and students to create and view content in a simple and interactive way.	01-Oct-2020	1.77	0.25	7.07x	Spain
Aulab hackademy	Provider of professional training intended to offer coding courses for developers, software houses, technological coworking. The company's training includes frontend and backend development, database management, and cloud server provisioning, agile methodologies applied to software development with Laravel Framework, PHP, MySQL database, and Linux Nginx server, enabling digital professionals to create applications and software with necessary skills.	16-Jun-2020	3.00	0.47	6.40x	Italy

Learning Technologies Group	Learning Technologies Group PLC, along with its subsidiaries, offers a wide range of e-learning services and technologies to corporate and government clients. The company operates in three reportable segments: the Software and Platforms, the Content and Services and the Other. Geographically, it operates in the United Kingdom, Mainland Europe, the United States, Canada, Asia Pacific and Rest of the World. The company largest end market by revenue in the United States.	29-May-2020	1,048.49	165.65	6.33x	United Kingdom
Alelo	Developer of an effective e-learning platform designed to help people acquire knowledge, develop new skills and improve their performance. The company's platform provides virtual role-play simulations that combine innovations in software technology, social science and learning science to provide personalized learning, enabling clients to acquire knowledge, develop new skills and improve their performance.	08-May-2020	10.77	1.85	5.82x	United States
Eleva Educação (Editora Eleva Platform)	Online teaching platform for K-12.	23-Feb-2021	107.27	18.76	5.72x	Brazil
Sketchy	Developer of an online education platform designed to change the way the health sciences are taught. The company's learning platform helps to change the way people learn medical microbiology, pharmacology, and pathology through fun, and informative video sketches, enabling students to take advantage of the power of visual learning.	02-Dec-2020	40.00	7.00	5.71x	United States
Jiean Hi-Tech	Zhengzhou Jiean Hi-tech Co Ltd formerly, Zhengzhou J&T Hi-Tech Co Ltd is engaged in the development of multimedia technology and the application of three-dimensional digital virtual simulation technology in various industries. The company provides systematic professional virtual reality simulation design and training solutions, software development, system integration, microcomputer measurement and control and other multi-directional services.	22-Jun-2020	229.10	44.41	5.16x	China
Meritnation	Operator of an education portal intended to offer training and learning programs for students online. The company's offerings, right from a basic to a moderate level of difficulty, include live classes, multimedia tutorials, interactive exercises, practice tests, conceptual videos across all educational boards, thereby helping students prepare for their competitive exams through collaborative learning methods.	03-Jan-2020	21.28	4.92	4.32x	India
Rosetta Stone	Rosetta Stone Inc is an education technology software company that develops language, literacy and brain-fitness software. The company offers courses in 30 languages across a range of formats, including online subscriptions, digital downloads, mobile apps, and CD packages. It provides intuitive, learning programs that are available online and via digital download or CD. It offers mobile apps for both tablet and smartphone use to enable learners to continue their lessons on the go. It operates through three segments such as Literacy, Enterprise and Education Language and Consumer Language. The Rosetta Stone Kids products provide technology-based learning solutions for children's that aims at early childhood language and literacy.	15-Oct-2020	792.00	188.52	4.20x	United States
NovaKid	Developer of an English learning platform designed to provide interactive programs created by and taught by native-speaking teachers. The company's platform offers game-based classes that are focused on education and the psychological characteristics of children with engaging homework assignments, pre-lesson vocabulary, and grammar activities, enabling parents to save time and money on traveling to offline schools and tutors.	01-Dec-2020	30.25	8.20	3.69x	United States
MedCerts	Provider of online training services intended to prepare students for national health care and information technology certification programs. The company delivers certification and career training through HD-quality video-based instruction, virtual simulations, games and animations and on-the-job training through experiential learning solutions, enabling military and their families, career changers and the under- and unemployed to pursue the skills they need for gainful employment.	17-Nov-2020	70.00	20.00	3.50x	United States
Outschool	Developer of an e-learning platform designed to offer live online classes for kids aged between 3 to 18. The company's platform connects motivated learners, parents and teachers together and helps in conducting classes by independent teachers for small groups over a live video chat directly to parents, enabling families to choose their teachers and classes for group learning based on their needs and interests at a lower price point than private tutoring.	18-Sep-2020	188.22	54.00	3.49x	United States
Spark Education	Provider of an educational platform intended to offer personalized math education resources for children. The company's platform offers	24-Jan-2021	1,500.00	434.24	3.45x	China

	interactive classrooms and games, enabling improvement of student's spatial, logical and computational thinking.					
getBridge	Developer of Learning Management System (LMS) intended to help employees and managers transform their organization through connected learning, performance alignment, and career growth. The company offers performance, engagement and career development tools, enabling companies to deliver a unique, employee-centric experience for development and productivity, all integrated into a single, easy-to-use, SaaS-based platform.	15-Feb-2021	50.00	15.65	3.19x	United States
Drops(Educational Software)	Operator of a game based learning application intended to enrich life with powerful skills. The company's application helps users to learn new vocabulary through fun, fast-paced games with simple mnemonic images, offers new words and phrases with beautiful, mnemonic illustrations, enabling users to get access to an innovative tool and learn in an interactive way.	23-Nov-2020	31.00	10.00	3.10x	Estonia
WhiteHat Jr	Developer of an online live teaching platform designed to connect kids with coding. The company's platform teaches fundamentals of coding, logic, structure, sequence and algorithmic thinking, enabling kids to generate creative outcomes like websites, animations and application designing.	21-May-2020	350.00	150.00	2.33x	India
IC Axon	Developer of e-learning clinical and sales training platform designed to provide science-driven training for pharmaceutical and life science customers. The company's platform engages in the design and development of clinically focused education and training programs, enabling healthcare industries to conduct live event training programs that include new hire training, product launch training and sales meetings.	25-Sep-2020	28.00	12.50	2.24x	Canada
MDBriefCase	Provider of online continuing medical education programs intended to help healthcare practitioners enhance their professional practice and stay at the forefront of the latest evidence and protocols. The company offers multimedia, interactive and accredited learning programs, developed by leading specialists and peer-reviewed by experts at respected institutions, custom tailored for specific international markets and available on a convenient online platform.	29-Jan-2021	22.37	10.30	2.17x	Canada
eThink	Developer of an e-learning platform catering to institutions, industries and organizations. The company offers cloud hosting, unlimited storage, a learning management system, online learning platforms, fully-managed e-learning solutions and ERP integration, thus aiming to provide a dynamic and customizable platform to meet specific institutional and organizational needs.	04-Dec-2020	20.00	9.50	2.11x	United States
Global Knowledge Training	Developer of an information technology and professional training platform based in Cary, North Carolina. The company offers various IT and business skills courses and certification programs by providing access to subject-matter experts and delivering authorized and industry-leading instruction through multiple delivery formats in order to help technology providers, enterprises, and governments to accelerate their success by closing their skill gaps and continuously developing their talents.	13-Oct-2020	233.00	133.00	1.75x	United States

Appendix #.4: About Frost & Sullivan

Frost & Sullivan* is a leading global consulting, and market & technology research firm that employs staff of 1,800, which includes analysts, experts, and growth strategy consultants at approximately 50 branches across 6 continents, including in Herzliya Pituach, Israel. Frost & Sullivan's equity research utilizes the experience and know-how accumulated over the course of 55 years in medical technologies, life sciences, technology, energy, and other industrial fields, including the publication of tens of thousands of market and technology research reports, economic analyses and valuations. For additional information on Frost & Sullivan's capabilities, visit: www.frost.com. For access to our reports and further information on our Independent Equity Research program visit: www.frost.com/equityresearch.

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What is Independent Equity Research?

Nearly all equity research is nowadays performed by stock brokers, investment banks, and other entities which have a financial interest in the stock being analyzed. On the other hand, Independent Equity Research is a boutique service offered by only a few firms worldwide. The aim of such research is to provide an unbiased opinion on the state of the company and potential forthcoming changes, including in their share price. The analysis does not constitute investment advice, and analysts are prohibited from trading any securities being analyzed. Furthermore, a company like Frost & Sullivan conducting Independent Equity Research services is reimbursed by a third party entity and not the company directly. Compensation is received up front to further secure the independence of the coverage.

Analysis Program with the Tel Aviv Stock Exchange (TASE)

Frost & Sullivan is delighted to have been selected to participate in the Analysis Program initiated by the Tel Aviv Stock Exchange Analysis (TASE). Within the framework of the program, Frost & Sullivan produces equity research reports on Technology and Biomed (Healthcare) companies that are listed on the TASE, and disseminates them on exchange message boards and through leading business media channels. Key goals of the program are to enhance global awareness of these companies and to enable more informed investment decisions by investors that are interested in "hot" Israeli Hi-Tech and Healthcare companies. The terms of the program are governed by the agreement that we signed with the TASE and the Israel Securities Authority (ISA) regulations.

For further inquiries, please contact our lead analyst:

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Appendix #.5: Team Biographies

Dr. Tiran Rothman is the head of Frost & Sullivan Research & Consulting Ltd., a subsidiary of Frost & Sullivan in Israel. He has over 10 years of experience in research and economic analysis of capital and private markets, obtained through positions at a boutique office for economic valuations, as chief economist at the AMPAL group, and as co-founder and analyst at Bioassociate Biotech Consulting. Dr. Rothman also serves as the Economics & Management School Head at Wizo Academic College (Haifa). Tiran holds a PhD (Economics), MBA (Finance), and was a visiting scholar at Stern Business School, NYU.

Almog Josef Sokolik is an Analyst and Consultant at Frost & Sullivan Research & Consulting Ltd., a subsidiary of Frost & Sullivan in Israel. He has experience in valuation of public and private firms, research and market analysis obtained through positions at the Ministry of Finance - Department of the Chief Economist, and Ben-Gurion University - Laboratory for Judgment & Decision Making as research analyst. Almog holds a BA in Economics and Psychology.

Disclaimers, disclosures, and insights for more responsible investment decisions

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Endnotes

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