Building a **bridge between talents and opportunities**

Microverse has helped 3,000 people from across the world acquire the skills they need to secure well-paid coding jobs

Executive Summary

Rather than migrating across the world in search of better-paid jobs, skilled people can increasingly use connectivity to work remotely from their home country. By offering full-time web development courses, Microverse is helping students in the developing world acquire the communication and coding skills they need to work in well-paid roles for employers in the developed world.

The start-up has used a mixture of advanced technology and peer-to-peer learning to enable 3,000 people from 150 countries to complete a year-long course in web development. To make the education affordable and accessible, Microverse doesn't charge its students anything upfront. They only pay back the US$15,000 cost of the course when they get a sufficiently well paid job.

Since Microverse began advertising for students in 2018, about one million people around the world have applied to join the programme.

Each student participates in team-based activities each weekday morning using video calls. These activities are monitored by Microverse's software, which checks when students join, how actively they participated and whether their contributions were on topic. As well as teaching the students to code, the course is designed to help them practise how to run very efficient meetings, how to communicate well with others, how to give and receive feedback to each other, while working remotely.

Backed by almost US$20 million in funding, Microverse is now considering how best to scale up its infrastructure, resources, and support systems. While it conducts this review, Microverse has paused the enrolment of new students until 2024.

The start-up is exploring whether it can offer shorter courses, in addition to the year-long programme, to give students more flexibility and help software engineers in existing roles secure better paid roles. It may also begin offering courses in other subjects, such as cyber security, design, product management or digital marketing. Its overarching mission is to help talented people in the developing world to realise their potential.

Historically, millions of capable people have migrated from developing countries to North America and Europe in search of better paid work. But this kind of migration is damaging for the economies they leave behind and the individuals concerned generally have to live away from friends and family.

As connectivity improves, opportunities are opening up for many more people to continue to live in their home countries, while working for employers based elsewhere. Start-up Microverse is helping to make that happen by providing people with the communication and coding skills they need to work in well-paid web development roles.

Microverse has used a mixture of advanced technology and peer-to-peer learning to enable 3,000 people from 150 countries to complete a full-time year-long course in web development.

"Our job was to create a type of education and equality level that could compete with the type of education you get if you were in the US or in Europe, but to make it affordable and accessible so that people in any corner in the world could afford it," explains Ariel Camus, Founder & CEO of Microverse, who has worked in San Francisco, Boston, Argentina, Spain, Vietnam, and Indonesia. "This can only be great for companies, economies and the entire humanity."

Microverse believes it can level the global playing field by providing a quality education to people from all backgrounds, no matter where they live, and enable them to build successful international careers in remote working environments.

To make the education affordable and accessible, Microverse doesn't charge its students anything upfront. They only pay back the US$ 15,000 cost of the course when they start earning a salary that is far better than that available locally. "That's how we truly know that they got to these life-changing roles," Ariel Camus says. "That's how we know our incentives are aligned with their incentives. It means as a company, we have to do whatever it takes to put

these people into amazing jobs." Microverse claims to be the only educational institution in the world that offers an income share agreement worldwide. It has raised almost US$20 million in funding.

Since Microverse began accepting students in 2018, about one million people around the world have applied to join the programme. Microverse filters these applications to ensure that the candidates can devote the time required to complete the course, are sufficiently motivated, have the necessary technical or logical thinking capacity to become a developer, have strong communication skills and are good learners.

The latter two factors are particularly important. "In the age of AI, where the technical element of the job will eventually become more and more automated, the human side of how you communicate and how we work as a team and how we learn, how we adapt, that's going to be everything," notes Ariel Camus.

As well as completing a technical challenge, applicants work in teams with other applicants who then rate each other on collaboration, communications skills, punctuality, professionalism and the stability of their Internet connection. They are also asked whether they would want to work with each of the applicants as part of a team. "No one lies to that question because they think they know that if they say yes, they might get an assignment with that person," Ariel Camus says.

> That's how we know our incentives are aligned with their incentives. It means as a company, we have to do whatever it takes to put these people into amazing jobs.

Ariel Camus - Founder & CEO of Microverse

The admissions process is also designed to check that the student has the necessary English skills and Internet connectivity to complete the course successfully. The Internet connection needs to be reliable over time, so the admissions process checks it over several days. If the quality of a connection is going to present a problem, students have an opportunity to fix it, which could involve changing their Internet service provider or fixing electricity supply issues by installing solar panels or an electricity generator.

Although it can be expensive and/or difficult for students to ensure they have a reliable Internet connection across the working week, there is no point in bending the rules on these requirements. As Ariel Camus notes, students will have to address these issues to work remotely in a paid job.

Being taught by smart technology and peer review

All the data points generated by the admissions process are fed into Microverse's systems, which then selects students to join the programme. Both the recruitment process and the course itself is structured to reduce the notoriously high drop out rates associated with remote learning programmes.

Each student is assigned to small teams of five or six people. They have team-based activities each weekday morning using video calls. These activities are monitored by Microverse's software, which checks when students join a session, how actively they participated and whether their contributions were on topic. The course covers new developments in coding, such as the role of generative AI, and how students can use such tools to become more productive.

The teams regularly complete coding tasks working to deadlines that are designed to mimic an actual coding job. If a student misses a deadline, for whatever reason, they have to repeat the relevant week. "If you're distracted, if you have issues of any

kind or if you're struggling with the material, you have this weekly repetition system that gives you both the accountability and pressure to perform every week," explains Ariel Camus. "But it also gives you the flexibility to adjust to whatever is happening in your life and your own personal learning needs and difficulties."

As well as teaching the students to code, the course is designed to help them practise how to run very efficient meetings, how to communicate well with others, how to give and receive feedback to each other, while working remotely. As they progress through the programme, students can apply to become a code and project reviewer for which they are paid a small fee. Students that take on this role learn how to provide feedback to more junior students, which is likely to be an important skill in their future careers.

As the students work with peers from many different countries, they need to learn how to accommodate and work through cultural differences, which can result in students being more or less direct in their delivery of negative feedback. In a similar vein, different cultures have different attitudes towards punctuality and overt displays of emotion in a work context. "50% of the training is technical coding skills, but the other 50% is how to work remotely in a multicultural team," says Ariel Camus, highlighting how students benefit from interacting with each other. "We are the only school in the world that has scaled peer-to-peer learning."

The end-goal: a well-paid job

Towards the end of the programme, the students prepare for job applications by reviewing each other's resumes and conducting mock interviews with fellow students. If and when they are offered a job, Microverse staff can help them negotiate an appropriate salary and working conditions, if necessary.

Once they start work, the students pay 15% of their salary to Microverse until they have covered the US $15,000 cost of the course. In practice that means they only pay for the course once they have earned US$ 100,000, which is more than many people in the developing world will earn in their lifetime. "Normally they end up paying back the entire amount in two to three years, because the average salary increase of our graduates is 300%," says Ariel Camus.

Ariel Camus says the default rate is lower than in the US consumer credit market. Of the 3,000 students who have completed the course, only one has been subject to legal action from Microverse. Assuming they pay for the cost of the course, employed graduates can continue to benefit from access to Microverse's network of hiring partners and career coaches. Microverse's software tracks its graduates' careers via LinkedIn. It says a graduate typically increases their salary by 40% when they move from their first job to their second job.

The start-up raises dedicated funds to finance its students' education. Investors in the first of the three funds are on track to receive an internal rate of return (IRR) of between 10% and 15%, Ariel Camus says. "We're trying to also keep an upside there. For example, once we are above a 10% IRR, the rest is split between Microverse and investors," he adds. "So, that way, Microverse always has an incentive to make sure that those students keep on getting great jobs, growing their careers."

Although Microverse is not yet generating a positive cash flow, Ariel Camus says that the unit economics "are very profitable" and as students work their way through the course and earn jobs, it should make a good return.

Refining the operating model, broadening the proposition

Microverse is now looking for ways to scale up its infrastructure, resources, and support systems. That is likely to involve streamlining its operating model, which currently encompasses five typically distinct businesses – selecting talent, education, job placement, collecting payments and raising finance. It is considering commissioning a third party to handle the income share aspect, for example.

To serve a wider group of people, Microverse is also exploring whether it can offer shorter courses or blocks of learning, in addition to the year-long programme. That would give students more flexibility. It may also expand into other domains by offering courses in cyber security, design, product management or digital marketing, for example.

Another option is to provide support for existing software engineers in developing countries that are trying to make the leap from working for a local company to a major global employer. "If they've only worked locally and on an old tech stack, they may lack confidence, or their English is not fully polished, or they don't know how to present and sell themselves, lacking communication skills," notes Ariel Camus. "Working for a local company, their average initial salary is US$700 to a US$1,000 a month, whereas the average earnings of a Microverse graduate is US$2,500."

One of the key challenges in the education sector is how long it takes to validate new concepts, but Microverse has learnt a great deal since it was founded in 2018. "We are applying the last four or five years of learning to how we solve all these things, simplify our model and make it as impactful as it could be," notes Ariel Camus.

While it conducts this review, Microverse has temporarily paused the enrolment of new students to its full-stack web development program. It plans to relaunch enrolments in 2024 and remains wedded to its broader mission to help talented people in the developing world to realise their potential.

Ariel Camus is convinced that remote working is a vital bridge between talents and opportunities in the world. "The number of people working remotely, and also working internationally today, is 10 times higher than it was five to ten years ago …and I have absolute conviction that it will only increase because we have so many problems and challenges that we have to fix, and we have so much wasted human potential. So it's inevitable that that disconnection will somehow be fixed."

> The number of people working remotely, and also working internationally today, is 10 times higher than it was five to ten years ago

Ariel Camus - Founder & CEO of Microverse

About the GSMA GSMA

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal challenges, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events.

GSMA is a membership-led organisation where members collaborate with industry peers and stakeholders, engage in influential discussions, and drive industry-wide initiatives that address the most pressing industry challenges and opportunities. As a GSMA Member, you'll have a seat at the table where decisions are made, specifications are developed, and the future of mobile telecommunications is shaped. Join a global community of like-minded professionals and organizations who share a common goal of advancing the mobile ecosystem for the benefit of billions of people worldwide.

Find out more: gsma.com/membership

For more information, please visit the GSMA corporate website at gsma.com

Follow the GSMA on Twitter: @GSMA.

About the GSMA Foundry GSMA Foundry

The GSMA Foundry is the go-to place for cross-industry collaboration and making positive change happen, supported by leading technology organisations and companies. By bringing together members and key industry players, engaging, and unifying the end-to-end connectivity ecosystem, the GSMA is solving real-world industry challenges.

Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. This enables the mobile industry's mission: to connect everyone and everything to a better future.

Find out more, or submit a new project idea, at gsma.com/Foundry

About Microverse ⋈ microverse

Microverse is an online school for remote software developers where students learn collaboratively with peers around the world. Microverse believes the place where people are born shouldn't determine their opportunities in life and provides access to global opportunities by offering world-class education. At Microverse, students learn to work remotely with people worldwide. More than 3,000 students from 150 countries have joined the program since its launch.

Learn more at www.microverse.org.

About this case study

This case study is for information only and is provided as is. The GSM Association makes no representations and gives no warranties or undertakings (express or implied) with respect to the study and does not accept any responsibility for , and hereby disclaims any liability for the accuracy or completeness or timeliness of the information contained in this document. Any use of the study is at the users own risk and the user assumes liability for any third party claims associated with such use.