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Learning to code in the mother tongue

If millions can learn to code in their own languages, they will be able to create livelihood options for themselves in the same way that affordable mobiles and data did

Pranjal Sharma February 21, 2021 Last Updated at 21:45 IST

In a country where the language or dialect changes every 500 kilometres, it does not appear practical to teach in just one language. Not just for general schooling, the issue of language is important for technology learning too. The demand-supply gap and high unemployability have led to several new ideas being considered by educators in the industry.

Nikhil Malhotra, Global Head of Makers Lab, Tech Mahindra, is leading an effort to ensure that India learns in its own language. This impactful initiative could transform the lives of millions once it achieves its potential. "The objective is to ensure that prospective IT students can code in their own language, in their own way," says Malhotra. "There is a need that India codes in the language of choice and not necessarily English.

"What they lack is a seamless mechanism to translate English-based programming / software codes in their local dialect so that they understand and respond to concepts better."

The TechM team has created the Bharat Markup Language Editor or BHAML which can be downloaded by any student to code in their own language. Effectively, students will be able to code in 27 mother tongues and 1,645 languages once the project reaches its maturity. This is an open source project which will allow anyone to download and deploy. The programme is being promoted through Atal Incubation Centres and Atal Tinkering Labs.

Innovative approaches like BHAML can help India reach mass-level learning in the shortest possible time. If millions can learn to code in their own languages, they will be able to create livelihood options for themselves in the same way that affordable mobiles and data did.

TechM has also enhanced its internship programme not just for its own needs but for the larger technology ecosystem. In accordance with Apprenticeship Rules of the government, the internship programme will also focus on communication and professional behaviour training.

While technical skills are important, students and young professionals will require many other skills to be able to conduct themselves in a company. Moreover, such skills allow them to understand how business works, in the process inspiring them to turn entrepreneurs themselves.

"With machine learning, automation and data analytics emerging as the future drivers of the industry, learning new skills and developing fluency on new-age technologies have become imperative. Our technology focus needs to assimilate customer experience and emerging technology verticals as key enablers for Digital India opportunities," says CP Gurnani, managing director and chief executive officer, Tech Mahindra.

"India, today, is home to one of the largest digital talent pool which continues to grow at 30 per cent CAGR and is working towards grasping this opportunity to emerge as the digital talent hub of the world in emerging technologies."

Industry has to change its mindset and move away from legacy qualifications. Short-term courses for upskilling are more relevant than degrees and diplomas which are either outdated or irrelevant for today's needs.

Helping students and prospective IT professionals learn in their language and to upskill will have a deep impact on India. Such skilled professionals will be able to find work and contribute to virtually every sector, since most companies are now adopting digital models. Moreover, the rising use of technology in the government will create tremendous opportunities for work.

Various departments at state and regional level are using technology for delivery of basic services. An army of skilled professionals will boost awareness and utilisation of digital services.

Technology-based learning cannot be limited to a few institutions or defined only by degrees. Business leaders and policymakers must encourage innovative new ideas to make learning a mass movement.