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## Podcast: Global challenges – Global solutions

### Transcript for:

### *The digital divide: Can we narrow the gap?*

## Interview with Professor Balaji Parthasarathy of the International Institute of Information Technology in Bangalore, India, and Matteo Sostero of the European Commission's Joint Research Centre

### Introduction by host:

Welcome to the ILO Employment Policy Department's podcast series, Global challenges – Global solutions: The future of work. I'm your host Tom Netter.

In many ways, digitalization has made the world of work a better place. Rapid developments in technology have spurred enormous growth in productivity and incomes, and big improvements in many people's lives.

Digital technologies have advanced more rapidly than any innovation in history – reaching around 50 per cent of the developing world's population in only two decades and transforming societies. Technology can help make our world fairer, more peaceful, and more just. It can also support growth and productivity, create jobs, and generate income so individuals can earn a decent living.

But we also face a paradox. Many groups of workers, in particular, those who are disadvantaged and marginalized such as women, older persons, and persons with disabilities, face challenges associated with unequal access to digital technologies that are compounded by the lack of capacities to use them.

This lack of access to modern technologies has been even more pronounced in lower income countries, rural areas and emerging economies. Other factors such as digital literacy and skills levels may further widen the gap.

This episode examines the digital divide, identify who's benefitting from it and who's not, and hopefully offers some solutions for closing the gap.

Joining me today to address this are Professor Balaji Parthasarathy of the International Institute of Information Technology in Bangalore, India, and Matteo Sostero of the European Commission's Joint Research Centre. Balaji, Matteo, welcome to the programme.

**Tom: My first question is whether the spread of technology has been consistent across the globe. Can you provide some insights on this situation, especially regarding the impact on vulnerable groups, such as women, the elderly, persons with disabilities and residents of impoverished or remote areas? Can you assess the impact of the COVID-19 pandemic, Balaji?**

**Balaji:** Thank you. Technology does not spread naturally, in any sense of the term. The spread of technology really depends on how we take advantage of it, through various social and economic means. Digital technology, in that sense, is no different.

Here, when we talk about social and economic means, we're really talking about, who are the dominant groups in society and so on.

As a consequence of that, we do have physical places, social groups who tend to get left out, who are not seen as necessarily being as relevant to the dominant groups. It's about issues of power.

Thus, you have people who are historically vulnerable, get left out. And then even when we talk about regions that are remote, the remoteness does not necessarily have to be in a distant jungle or a desert.

But, even in dense cities, you find pockets left out of various kinds of infrastructure. It might be water supply, the internet and so on, simply because they're not seen as being particularly relevant.

As a consequence, the answer is an emphatic no. The digital technologies have not spread uniformly or ubiquitously, as were often claimed. You do have people who are left out.

As far as the COVID-19 pandemic is concerned, it was just sort of a double whammy on the most vulnerable people and the remote locations. This is something that nobody anticipated, necessarily, but I think it made a bad situation worse.

**Tom: Balaji, thank you very much for that response. Matteo, can you give us some of your insights?**

**Matteo:** Well, I agree with Balaji, that across the globe, it's certainly the case that large shares of the population, including the economically disadvantaged, the elderly and marginalized socioeconomic groups, may not have reaped the full benefits in their quality of life that technology can provide.

Even within the EU, we see that there remain relatively wide gaps, in terms of digitization. For instance, according to the Digital Economy and Society Index, which is a set of indicators collected by the European Union, in some member states, over 20 per cent of the adult population reports not having used the internet in the previous three months, whereas the EU average is around 10 per cent.

In most places, this figure, not having used the internet in the previous three months, is higher for women than men and certainly higher for the elderly.

Now, the COVID pandemic has acted, certainly as an incentive to increase the spread of digital technology. But in many domains, like for instance, even online access to government services, it may be too early to tell whether the effect is permanent or not.

More importantly, I think the pandemic has also accelerated some changes in the patterns of work, which we may discuss later.

**Tom: Okay, Matteo, let's continue. Now in terms of the future of work, new technologies are also creating new forms and patterns of work, making some obsolete and leading to broad changes in societies. What are some of the new forms of work emerging?**

**Matteo:** Well, I would say that technology has enabled, rather than created new forms and patterns of work.

I mean, there's also been concerns that technology, writ large, including robotics and artificial intelligence, may lead to large scale displacement of certain jobs.

Personally, I believe that such concerns are a bit overblown. I mean, there is little evidence of that happening and certainly not on a large scale, as our research has shown.

What we do tend to see, is that technology can increase the productivity of work. If this happens because people use tools that help them in their daily life and work, that is certainly welcome.

Also, we saw that technology has enabled the rise in the remote work or telework. So, in our research, we have shown that as much as a third of the EU's population may, in principle, work remotely.

This change has certainly been accelerated by the COVID-19 pandemic, which has led to the first remote work experience for many employees.

Of course, this pattern of digital work is not available to every type of job, which could further exacerbate the so-called digital divide.

But I would say that the most salient form of work enabled by digital technology is the rise of digital labour platforms, where people can buy and sell many on-demand services, such as ride hailing, deliveries, but also creative freelance work.

**Tom: Okay. Thank you. Let's go to Balaji. What are your views on this question?**

**Balaji:** Yeah. I mean, new technologies have always led to new work patterns and new occupations. As a result, certain older ways of doing things have always become obsolete.

If you take a step back and think about why it happens, it has to do in part because of our very different... or it even changes our perceptions of space and time.

Let's say, what are some of the new occupations that we're talking about today? 50, 60 years ago, you wouldn't have had things like a web designer or even a Python programmer, as being part of the mainstream labour market.

So, you have a whole bunch of these new occupations that are starting to come in. How we connect to different parts of the world to get work done, either through global supply chains or through outsourcing, offshoring, et cetera, has gone through a significant change in the past half century.

Because digital technologies are what are called general purpose technologies, besides being a new sector, they're also affecting existing sectors, for example, education, healthcare, or how we deal with the government and the state.

But, I think like Matteo said, sometimes the predictions tend to be overblown. They seem to be made in very binary terms. Like, it's either all digital or nothing.

But, actually speaking, if you take a domain, like say education, yes, you have the arrival of MOOCs and such like, which can play a very useful role in expanding educational opportunities for a number of people.

But when people start to make arguments by saying that this completely renders the old form of education, universities or schools, obsolete and that they will all vanish, I think it's very, very highly exaggerated.

We're going to see new forms of work, new patterns of work, new occupations, which will actually require us to think about how to effectively take advantage of the potential that these new technologies offer, along with the original purpose of some of these activities, whether that be education or healthcare.

**Tom: Okay. Well, in this context, Balaji, I wonder if you could address the matter that the rise of digital labour platforms or web-based platforms on the one hand, may be a good thing, but on the other hand, may be accompanied by several challenges. What are some of these challenges? Who stands to gain? Who's at risk of being left behind?**

**Balaji:** Yeah, thanks. This is a burning question today. I'm doing a lot of work here in India, on how these platforms affect particularly blue collar workers.

White collar workers are in a better position, thanks to education and a variety of other social resources, to take advantage of the rise of web-based platforms and the platform economy.

However, when it comes to blue collar workers in local labour markets, the story can be quite different.

Really, you have these platforms which are run by a small group of people, who are essentially, call them a managerial elite, who, in, turn employ a large blue-collar workforce, whom they refer to as partners or entrepreneurs, even.

Now, to some extent, these platforms in a place like India, where there's widespread under- or unemployment, are providing new avenues for the delivery of certain kinds of services and so on.

Unfortunately, this so-called partnership is a very unequal partnership, between platforms that have deep pockets, phenomenal technological might and a relatively undereducated or uneducated workforce, with limited social resources.

It's an atomized workforce, because many of these guys are working on their own, as individuals. So, they often tend to get exploited. They work long hours, without necessarily the monetary rewards. The work conditions can be quite appalling, in the sense that they have to do their deliveries or ride their cabs or whatever it is, in very harsh conditions. There's little to no collective bargaining because they're all operating as individuals.

There's also another issue that is of growing concern in all of this. These technology platforms are able to aggregate, not just customers and these supplies or these services. They also aggregate significant amounts of data about the workers, the customers and so on.

We are still not in a situation where we have clear-cut regulations, at least in a county like India, as to what is this that we're able to do, or what is it that we're going to do with all this data?

This is opening up a number of difficult and hard questions. Who owns the data? What happens when a person works on a platform and then goes away in six months, because he or she's just a partner?

So, there are questions about the work conditions that many blue-collar workers are facing. There are questions about what is going to happen to the data that is being collected about them.

The lack of regulation is probably the most disturbing thing. I know across the world these concerns are sort of universal. And in parts of the world, there have been some battles that have been won. But for the most part, I think there are many hard questions that we need to answer.

**Tom: Thanks for that quite interesting response. Now, Matteo, what's your perspective on these challenges?**

**Matteo:** I agree with Balaji. In general, the flexibility enabled by digital technology has given rise to the so-called gig economy, which denotes a trend towards a more casual form of work. Now, this trend has benefited some workers, for instance, the freelance professionals who can reach a broader set of clients, across the world.

Even when goods and services are delivered in person, such as ride hailing, delivery or on location services, some people who didn't previously participate in the workforce, use digital labour platform to find occasional work.

However, there's a big caveat, that we have also seen that this new form of work risks undercutting the legal framework, concerning pay, working hours, privacy and the security of workers.

My colleagues at the Joint Research Centre have been at the forefront of measuring the extent and variety of platform work in Europe, through several editions of the COLLEEM survey.

This type of evidence has informed the European Commission, to develop regulation on digital labour platforms.

Lately, we're also concerned that some of the business practices developed in the platform economy, which can feature somewhat intrusive levels of digital monitoring and surveillance of workers, can expand to traditional workplaces. In particular, we are researching the extent and variety of so-called algorithmic management.

**Tom: Matteo, I think that brings us to the final question, which is, in order to narrow the digital divide, how can policy help support this transformation? Can digitalization and new technologies be the great equalizers?**

**Matteo:** I think there's several dimensions to the spread of technology and in particular, digital technology. The first one is obviously physical infrastructure, like broadband and mobile access, but also the spread of affordable and powerful connected devices, like smartphones and tablets.

But what matters, ultimately, is what people are able to do with technology. That depends, both on their level of digital literacy and skills across different population

groups, but also on the progress in design and user interfaces of software itself, which makes it more accessible to a broad set of users.

This enables people to buy goods and service online and to receive public services from the state.

Last but not least, as we have discussed, there's the use of technology at work, including digitalization of processes in enterprises and the creation of new business models and forms of work.

Now, I think that public policy can help in all of these areas, with the goal to reach universal access to digital tools and services.

Now, technology, as is often said, is neutral or rather, depends on how it's been implemented.

In order to ensure that digital technology has an equalizing role, there is scope for regulation, to guide the development of digital services and devices.

This should be done with a goal to ensure that digital technology is not used to undermine personal rights, including privacy, autonomy, and the personal dignity at work.

**Tom: Thanks Matteo, very much, for that question. Now, Balaji, can you share your insights on policy issues?**

**Balaji:** I think it'll be good to start off with a couple of misconceptions that we seem to have about what policy can do or what it is doing. I don't know who used the term, but a scholar who used the term access doctrine. Where there's an obsession with saying, get the technology out, and then people will figure out what to do with it. Their lives will improve, et cetera. Right.

But as Kentaro Toyama, a professor at the University of Michigan famously put it, technology only amplifies existing inequality. So even if you get it out to the people, get them access, it's not necessarily going to solve anything.

Instead, I think what we need is to build institutional capacity. Because this whole notion of a digital divide, really is the most recent manifestation of a whole set of other divides and inequalities.

For example, in India, you can think about it in terms of cast, religion, and class, and of course, gender, physical disability and so on and so forth. In other words, these preexisting inequalities and divides, simply manifest themselves differently with a new technology.

What this also means is that, if you need to overcome the so-called digital divide, we have to start right there.

As I mentioned earlier, when we talk about existing sectors, like education or healthcare or governance, where technology is bringing about certain changes, it is built on existing ways of doing things. And when people, because they're on the wrong side of divide, have not had access to education and so on, to merely expect that digital technologies automatically provide them access is, I think, wishful thinking.

Really, what we need to be doing is to understand and attack some of the underlying problems. By all means, make use of the potential that digital technologies have, but don't expect it to be automatic, in some sense.

If we do, overcoming or bridging the digital divide, if I may say, will simply prove to be a bridge too far.

**I'd like to thank you both for your insights and comments, which are extremely interesting and relevant. From our interviews, it's clear that technology has vast potential to improve people's lives. But there's a risk that what should be a force for social good can become a force for social exclusion and worsen existing inequalities.**

**What we do know is that we're going to need new policies that help us keep up with rapidly evolving digitalization and new technologies. Can we leapfrog the hurdles to realizing this goal, and harness the potential of digital innovation so it works for all? From what we've just heard, it seems that with the right approach we can start to narrow the digital divide.**

**I'm Tom Netter, and you've been listening to the ILO Employment Policy Department podcast series "Global challenges, Global solutions: The future of work." For more information go to [www.ilo.org/employment](http://www.ilo.org/employment). But for now, thank you for your time.**