

S4YE

Insights from the Private Sector

Nov 20, 2019 | 9:00am – 10:30am | WebEx

Welcome

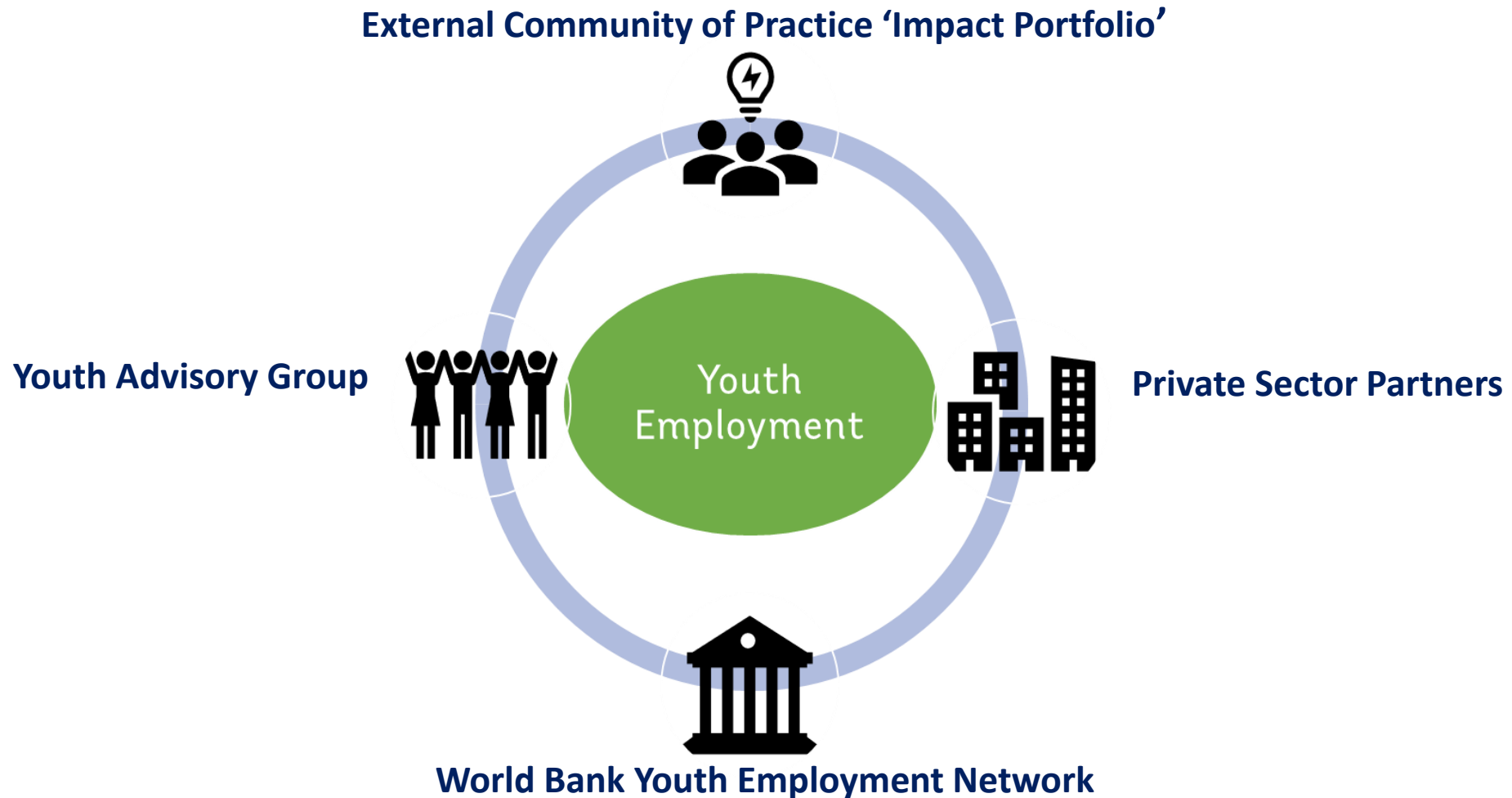
Namita Datta, Coalition Manager, S4YE

 accenture AUSTRIAN
DEVELOPMENT
AGENCY BMF
FEDERAL MINISTRY
OF FINANCE BASHKIA
TIRANË Department
for International
Development Federal Ministry
for Economic Cooperation
and Development ILO international
youth
foundation mastercard
foundation Microsoft Norad PLAN
INTERNATIONAL RAND
CORPORATION Office of the
Secretary-General's
Envoy on Youth Sida
SWEDISH INTERNATIONAL DEVELOPMENT
COOPERATION AGENCY The
ROCKEFELLER
FOUNDATION WORLD BANK GROUP ybi | Youth
Business
International

Solutions for Youth Employment (S4YE) is a vibrant multi-stakeholder coalition based in the World Bank that brings together:

- ✓ 44 innovative youth employment projects
- ✓ 25 private sector companies and associations
- ✓ Youth
- ✓ Foundations, Donors, Bilateral and Multilateral organizations.
- ✓ 150 youth employment projects of the World Bank
- ✓ Part of World Bank Multi Donor Trust Fund with:
 - United Kingdom – DFID
 - Norway – Ministry of Foreign Affairs
 - Austria – Ministry of Finance; Austrian Dev. Agency
 - Germany- Federal Ministry, BMZ.
 - Sweden – Swedish International Dev. Agency (SIDA).

We bring together multiple stakeholders to advance youth employment





**Promote peer to peer
learning , sharing ideas and
best practices**



**Combine the strengths of
private sector (innovation,
growth) with that of World
Bank (scale, technical
expertise, policy dialogue)**



**Facilitate deeper engagement
and partnership between the
private sector and the World
Bank on major corporate
initiatives**



- ❖ Launching a monthly webinar series showcasing the work of each of our private sector partners
- ❖ A deep-dive profiling Private Sector led Youth Employment initiatives
- ❖ Invitees include colleagues at the World Bank and IFC as well as S4YE's partner network (*150 WB youth employment projects, 44 innovative youth employment projects, 25 private sector companies, other bilateral donors and foundations*)
- ❖ Opportunity for the S4YE community to share experiences, ask questions and learn from each other;
- ❖ Save the Date for the next webinar on '*Emerging trends in Agri-preneurship*' featuring Nestlé and IFC on **Dec 2, 2019**

Speakers

- Naria Santa Lucia, Senior Director of Skills and Employability, Microsoft Philanthropy
- Jai Natarajan - VP, Marketing & Strategic Business Development – iMerit
- Davide Strusani, Principal economist – TMT, Disruptive Technology and Funds, IFC



Overview

- This webinar is the first in the 'S4YE-Insights from the Private Sector' series and focuses on the opportunities that Artificial Intelligence could provide for low income and disadvantaged youth.

Agenda

- Welcome and Introduction
- Presentations
 - Artificial Intelligence and jobs; IFC's experience
 - Microsoft Artificial Intelligence Strategy & Initiatives
 - How AI is Creating Jobs for low-income Youth at iMerit
- Q&A
- Closing

Speakers Bio



Naria Santa Lucia - Sr. Dir. of Skills and Employability, Microsoft Philanthropies at Microsoft



As the skills and employability lead at Microsoft Philanthropies, Naria works to manage the company's global philanthropic investments and grant programs in digital skills, computer science education, and career pathways investments to drive digital inclusion and employment outcomes for traditionally underrepresented and under-resourced communities. Naria has also served as the Executive Director of the James B. Moran Center for Youth Advocacy, a juvenile and education law and social work organization in Illinois and the Director of LAW Fund and the Endowment for Equal Justice at the Legal Foundation of Washington. Naria is a graduate of the Law School and the College at the University of Chicago.



Jai Natarajan - VP, Marketing and Strategic Business Development, at iMerit.



iMerit has over 2500 data experts who label and enrich data at scale to help customers get better results from their algorithms. It does so while empowering women and youngsters in underprivileged communities to join the digital economy. iMerit works with leaders across sectors like Autonomous Vehicles, AgTech, Medical Imaging, e-Commerce and Financial Services, with diverse types of image, video and text data. Jai's background is in Computer Graphics and Education.

Before joining iMerit, he founded Emmy- winning animation studio Xentrix, and has previously worked at Lucasfilm and Sony, and also run Marketing for a large chain of animation education institutes. He also serves on the board of Anudip Foundation, a livelihood development non-profit that trains thousands of marginalized youngsters in digital skills.



Davide Strusani – Principal economist – TMT, Disruptive Technology and Funds at IFC



At the IFC, Davide leads the economics team that focuses on telecoms, technology, digital services, venture and equity fund investing. As part of its role, Davide's team assesses the development impacts of investments made by IFC in these industries and undertakes economic research to inform the development of private sector market in developing economies.

Davide is a recognized expert on the role of communications and technology in delivering economic and social growth, having led numerous in-country campaigns aimed at focusing governments and sector regulators on the benefits of ICT.

Davide has over 16 years of experience in development banks and top global consulting firms, working for over 50 large organizations including governments, private clients, industry organizations and NGOs, in 40 countries worldwide. Davide has worked extensively for digital players such as Google, Facebook and eBay. Davide is an expert of mobile connectivity and of telecom regulation and competition, and has studied in depth the evolution of competition policy across the digital ecosystem. Davide featured twice in The Economist as expert of the economic impacts of Hyperconnectivity, and one of his papers on a global study on the economic impacts of mobile broadband on growth has featured in the World Economic Forum Review. Davide is a regular speaker at the GSMA's World Mobile Congress.



Artificial Intelligence and jobs IFC's experience

Davide Strusani – Principal Economist - IFC



Creating Markets, Creating Opportunities

20 November 2019



Creating Markets, Creating Opportunities

- A member of the World Bank Group
- Provides investment, advice, resource mobilization
- AAA credit rating; owned by 184 countries
- Present in nearly 100 countries
- Invested and mobilized \$19 billion in FY19

IFC is the largest global development institution focused on the private sector in emerging markets.

IFC invests in digital and AI startups across multiple sectors globally

Invest through our Venture Capital portfolio

Health

Education

Logistics

B2B
Marketplaces

Cleantech

Invest through our Fintech portfolio

Payments

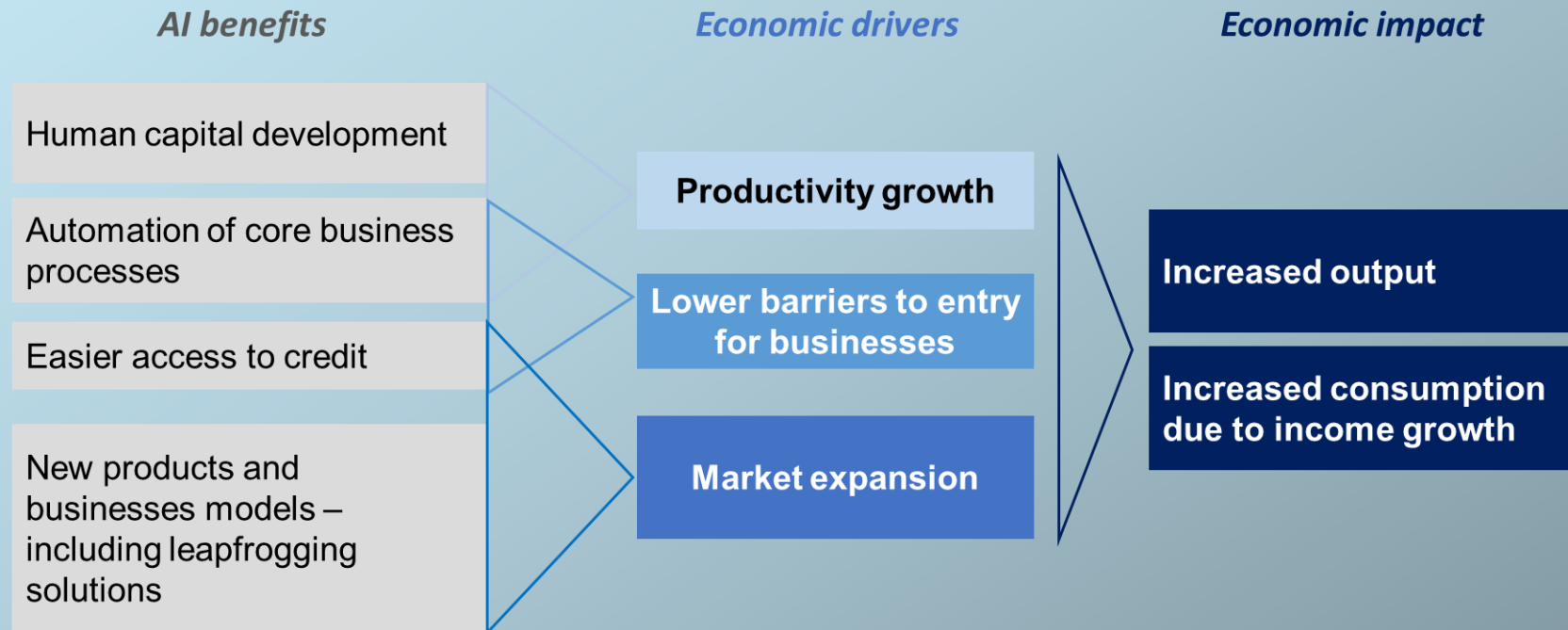
Lending &
Originators

Capital Markets
Infrastructure

Insurtech

The economic case for AI

- **Traditional pathways to a country's economic development are increasingly subject to technology-based disruptions**



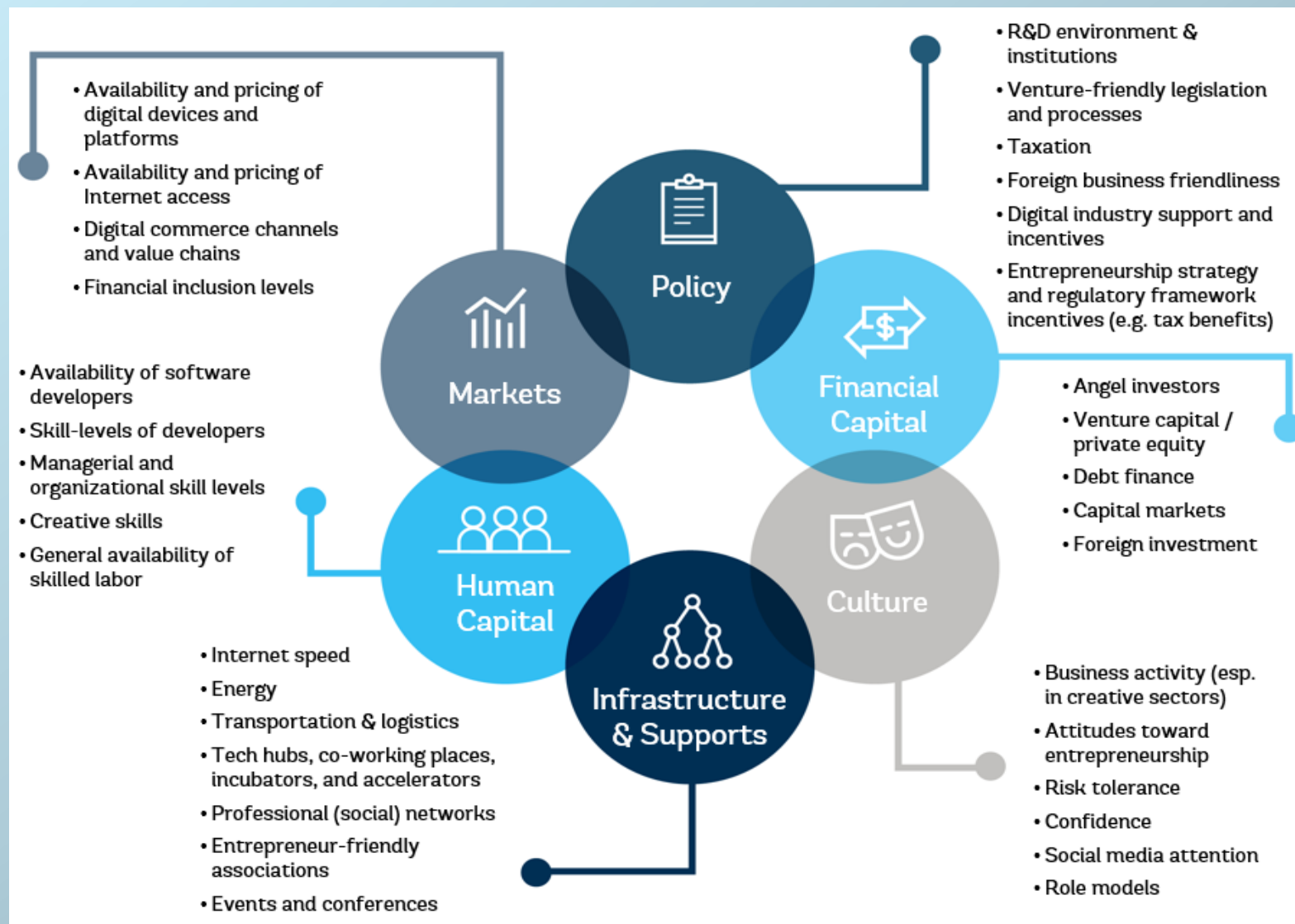
- **Despite the potential risks of AI, failing to take advantage of the opportunities it offers could be even more costly**

What happens to jobs?

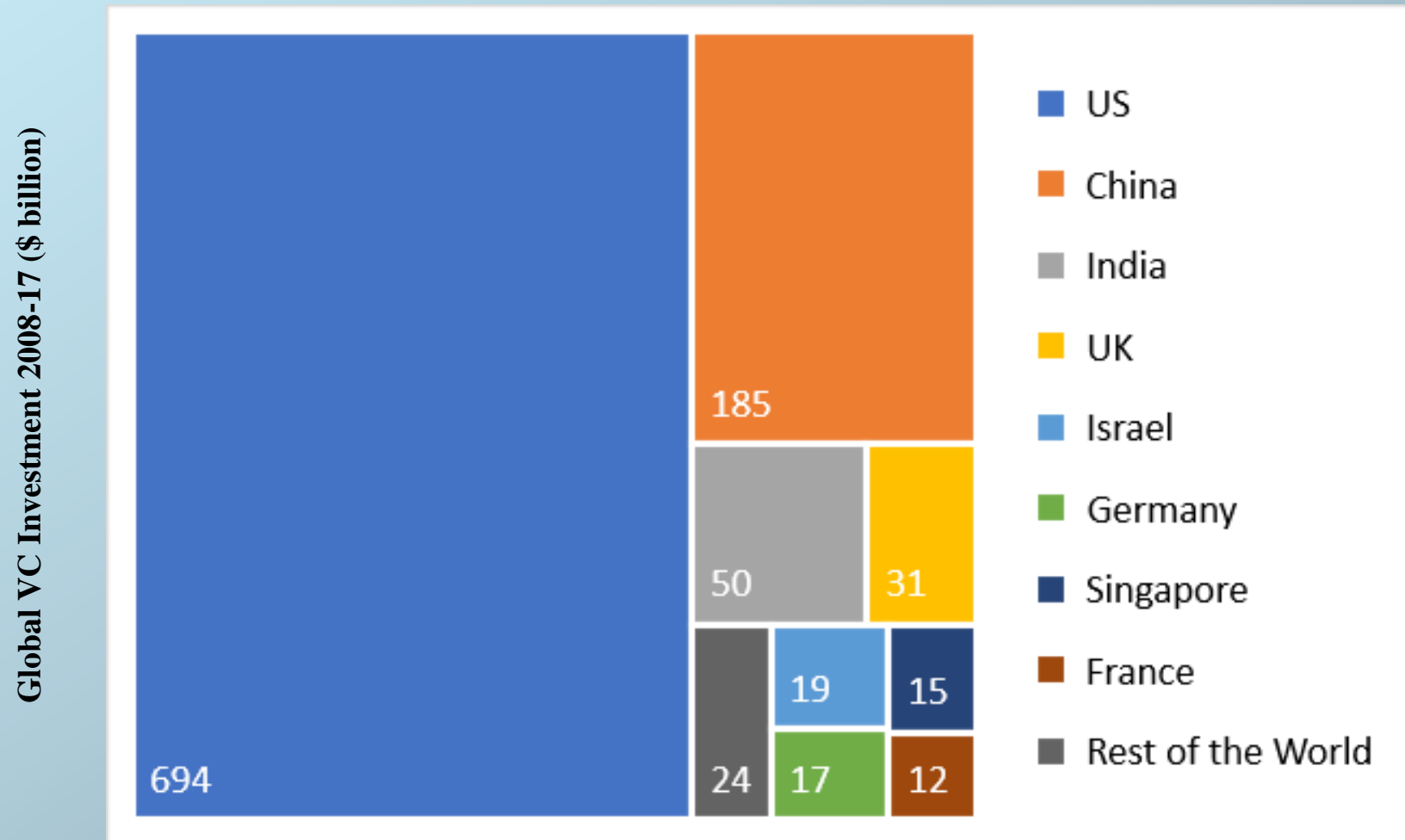
AI offers significant opportunities for job creation in EM mainly through

**entrepreneurship
and innovation**

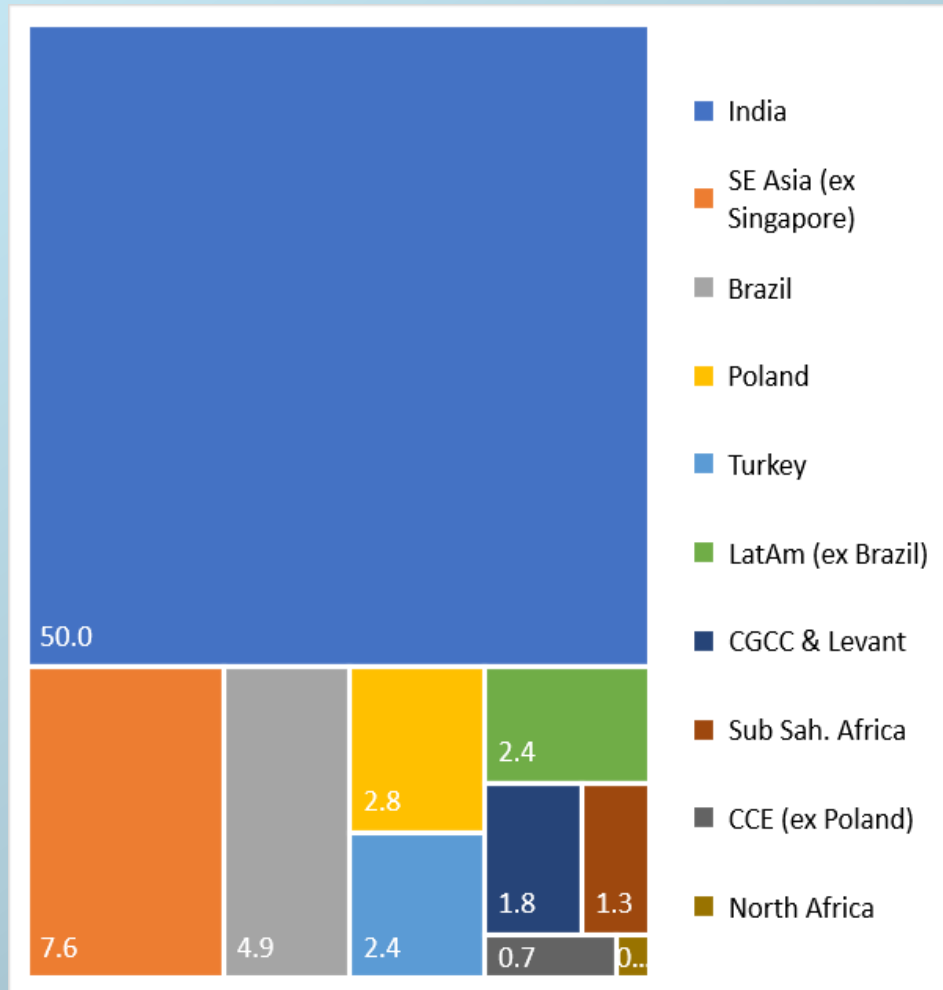
How do we support digital entrepreneurship?



With the exceptions of China and India, emerging markets have received a modest share of global investment in advanced technologies

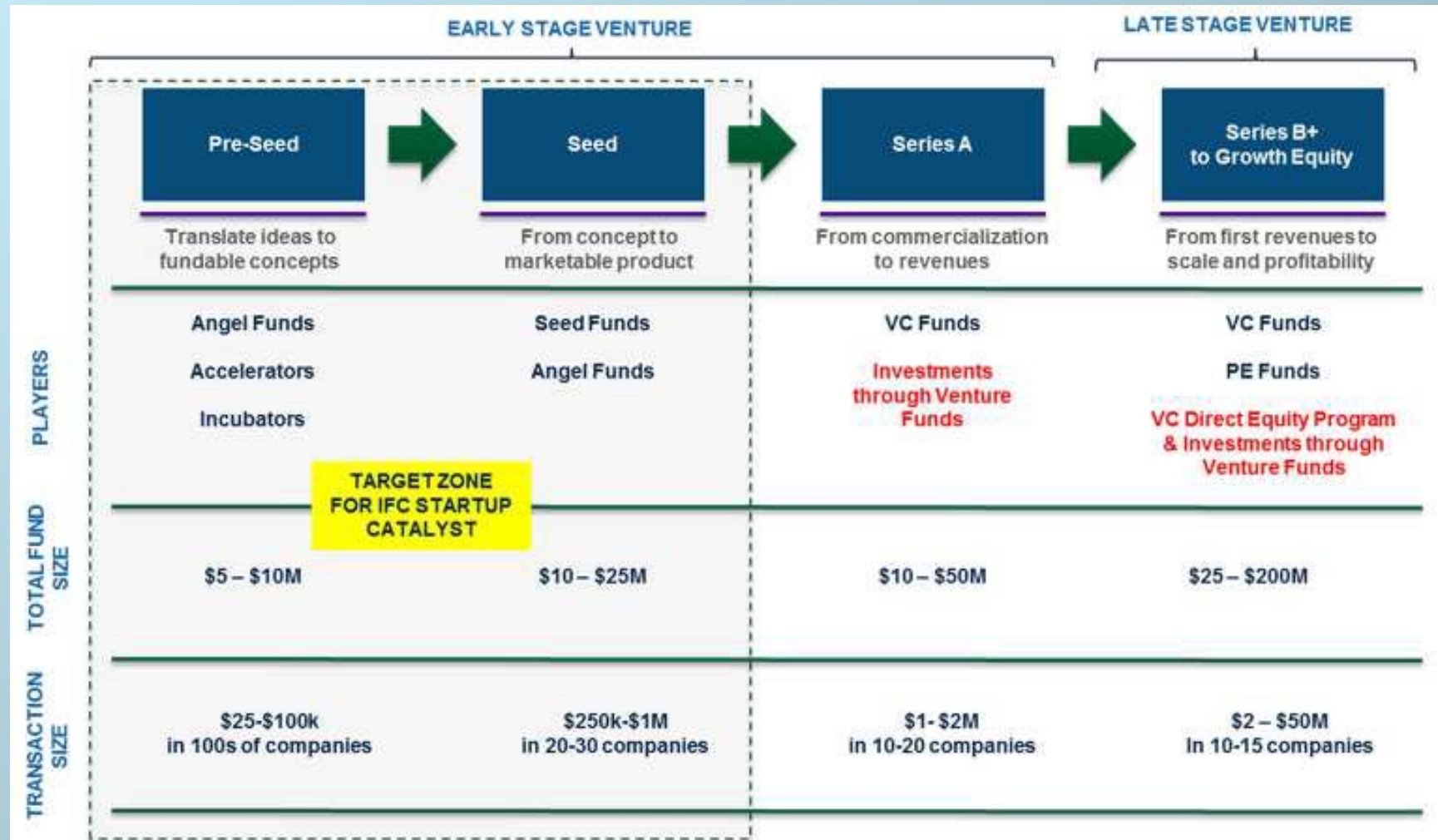


Africa is receiving extremely limited funding – where more jobs are needed and populations are younger



Total VC flows to emerging markets between 2008-2017 excluding China and India was just \$24 billion, compared with global flows to the United States over the same period of \$694 billion

At IFC we see Financial Capital and Professional Skills as critical to build an AI ecosystem



GROWTH PRIVATE EQUITY

Leveraging AI to expand markets delivers the largest opportunities to create sustainable jobs

FINTECH



- Payments
- Credit
- Insurance
- SME business services

RETAIL



- Marketplace and ecommerce
- Enabling services

TRANSPORT & E-LOGISTICS



- Rides
- Last mile delivery
- Trucking
- Freight visibility

Beyond innovation, entrepreneurship and market expansion, AI generates direct activities and indirect opportunities to augment human capital

Direct AI businesses

High-skill talent export

Low-skill talent export

Upskilling and Matching

Labor-matching algorithms

Augmenting human capital

Healthier workforce

Targeted education

What risks need to be managed?

- **Poor job quality**
- **Reduced outsourcing opportunities**
- **Automation of routine activities**
- **Disruption of local businesses**

Questions?



Creating Markets, Creating Opportunities



Microsoft

Philanthropies



Increasing AI Skills and Education for Youth

Naria K. Santa Lucia
Microsoft Philanthropies



Rapid advancement in technology is changing how we live, how we work, and how we learn.



But as technology moves forward, billions of people are at risk of being left behind.

700+ million

Living in extreme poverty, on less than \$2 per day

71 million

Refugees and internally displaced people

49%


Of the world is not using the internet

1 billion

People on the planet with disabilities, but only one in ten has access to the products they need

54%

Of employees will require significant re- or upskilling by 2022

An aerial photograph showing a stark contrast between modern urban development and informal housing. On the left, a modern multi-story building features curved balconies with lush green plants and small swimming pools. Adjacent to it are two green tennis courts with red running tracks. To the right, a dense, sprawling informal settlement with makeshift brick and corrugated metal structures occupies the landscape. A large, dense tree line separates the modern facilities from the informal housing.

“When your technology changes the world, then you bear a responsibility to help address the world that you have helped create and accept greater responsibility for the future.”

—Brad Smith, President of Microsoft

Microsoft Philanthropies Mission:

Empowering communities
and nonprofits to realize
the promise and potential
of technology



We must advance a future that is for everyone



Close the opportunity
gap



Advance technology
for good



Ensure responsible
use of technology

Earn and sustain trust

The AI revolution has created a shortage of AI talent in the world

A study published by the Chinese company Tencent confirms the lack of supply. They estimate that there are ~ 300,000 AI practitioners and researchers worldwide, but there are millions of roles available for people with these qualifications.⁶

MIT technology reviews estimates that the salary of people in the US with these AI Skills could be higher than 300K, and even go higher than \$1M for the right set of skills. The majority of organizations outside the tech industry do not have the money or salary structure to hire/retain/attract this talent, we need to consider that 300K is double the average salary of a CEO in the US.⁷

The average salary for a Chief Executive Officer (CEO) is \$158,428.



Outside the tech industry, organizations do not have the capacity/structure to hire AI talent

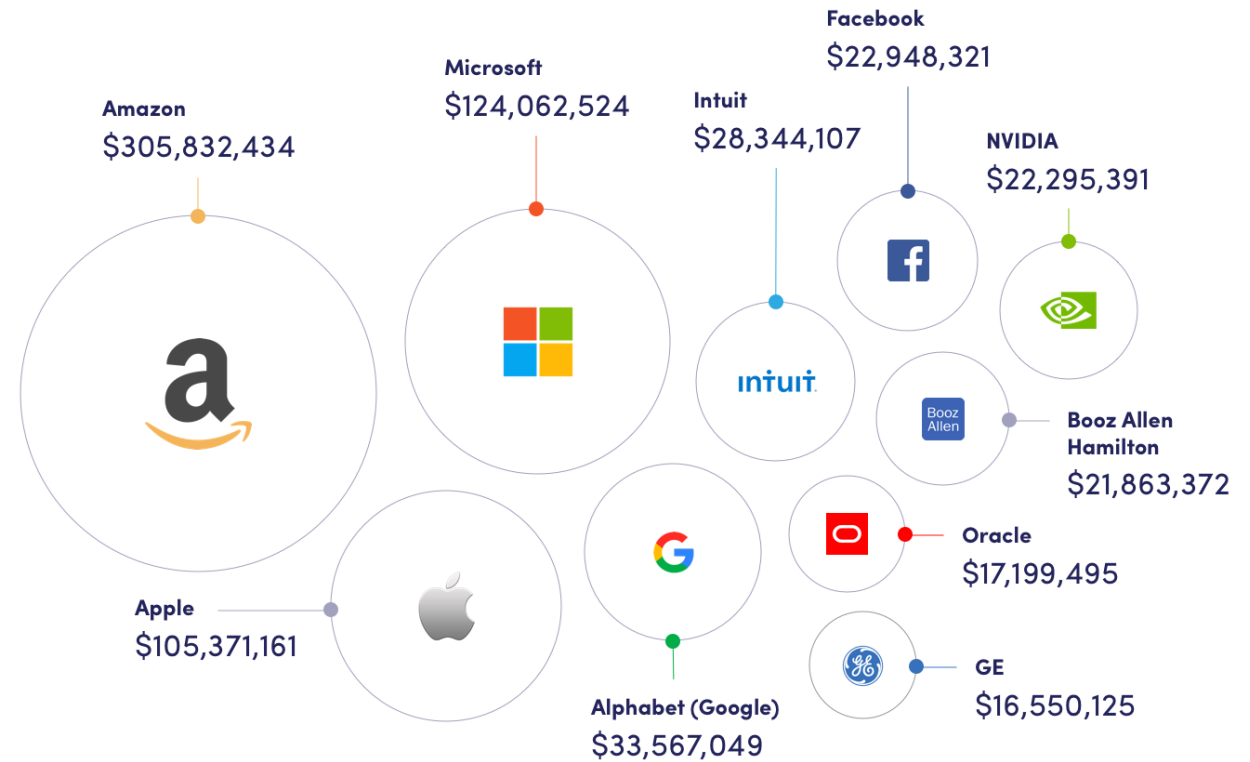
Using LinkedIn data, we observe that the top companies employing AI talent are mainly in the tech industry and education. **The Tech industries alone account for 44.5% of AI talent** in the US, although Tech industries only account for 10% of the workforce*.

Companies with more AI talent

Google
Amazon
Microsoft
Facebook
Apple
Intel Corporation
IBM
Stanford University

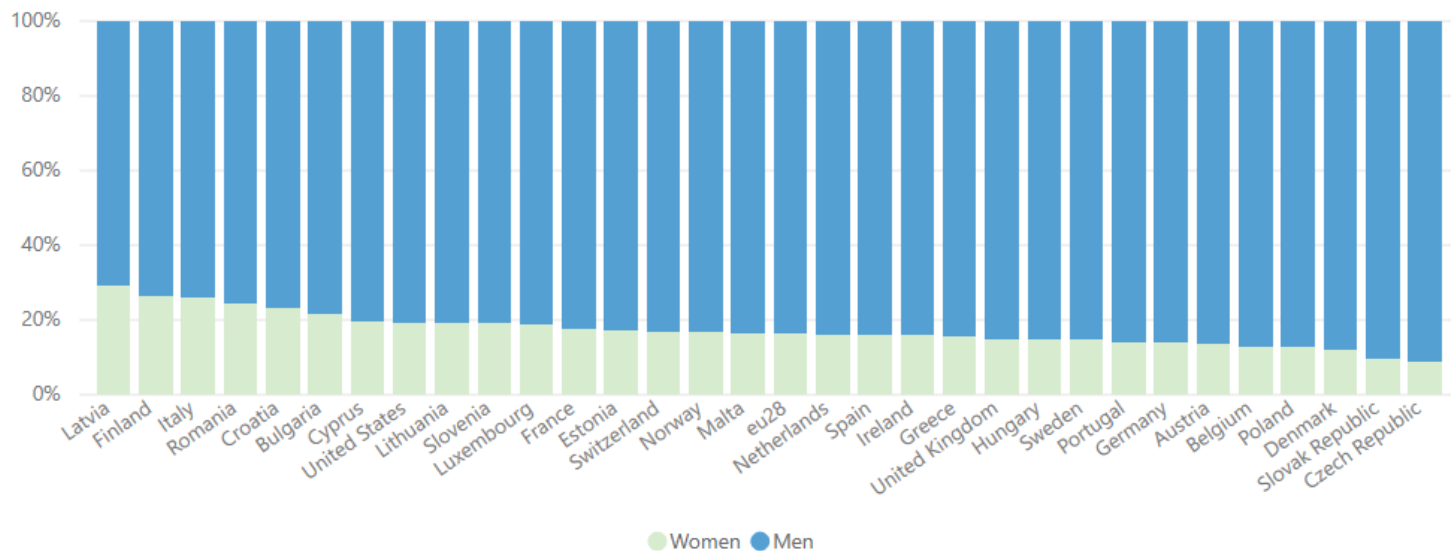
Carnegie Mellon University
Georgia Institute of Technology
Uber.com
Lockheed Martin
LinkedIn
Qualcomm
Cisco
Boeing

The companies that are investing the most in AI talent across all industries are:



Important that creators of AI come from diverse groups

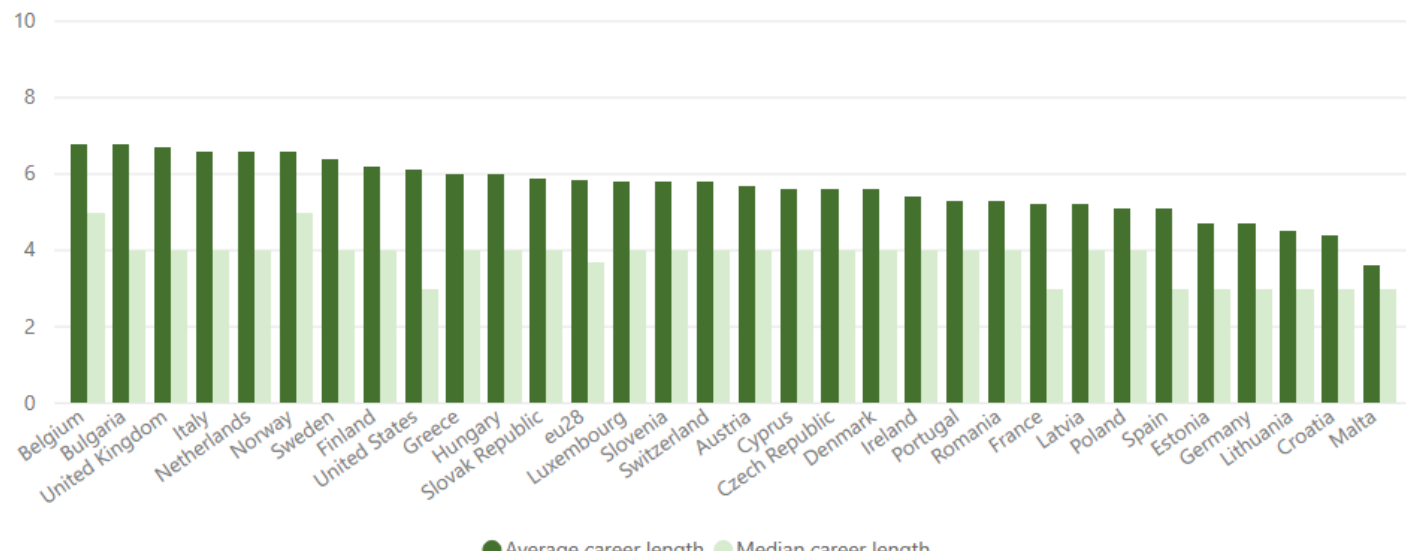
Gender gap among AI professionals



Gender Gap

In the European Union overall, **only around 16% of all AI workers in the EU are women**. This is comparable to the U.S., where less than 20% of AI workers are women. And despite some variations across Europe, the share of women in the AI workforce never exceeds 30% in any EU member state. The **low level of female AI talent is a pressing issue**. Diverse representation among emerging technology workers is crucial for the sector, and **especially important for AI products given the potential for bias against members of diverse social, economic, or political groups**.

Career length (year)



Focus on AI skilling to close the opportunity gap

By 2025, 10 million people unreachable or displaced by technology will be equipped with the computing and AI skills to be employed in the digital economy.



Focus on AI Skilling to close the opportunity gap

Emerging Markets //

Developed Markets //

Build foundational digital literacy skills

Provide access to high quality, inclusive computing and CS training and education

Equip people with AI skills and education



Training and Credentials



Capacity Building



Policy and Collective Action

Provide employment in the digital economy

AI Offerings for Youth and Young People

- FarmBeats School Kits
- DigiGirlz AI
- Imagine Cup Junior AI Challenge
- Minecraft AI Tutorial
- Microsoft AI School



Thank you

naria.santalucia@microsoft.com



How AI is Creating Jobs for low-income Youth

Jai Natarajan, VP



We are iMerit

iMerit is a **tech-enabled data services** company that leverages human intelligence in data, content, and machine learning.

We deliver high-quality, managed services while effecting
positive social and economic change.

Our data experts work **full-time onsite** at our secure delivery facilities.

2,700+
employees

SOC 2
certified

130+
clients

200 M+
data points
delivered

9
centers

< 5%
attrition

24x7
operations

Data Annotation – Flash Cards for AI



An AI algorithm is a blank slate: it is trained using data that we feed into it.

Data labeling is the act creating **flashcards** for AI to learn more efficiently. It relies on human judgement.

The **AI** learns iteratively from thousands of flashcards

The best things about NOLA are the waitstaff and the atmosphere. It's a lovely space, and whoever trains the staff is a pro: they are friendly and very efficient. The food is just average. I ordered a crab cake, it was virtually flavorless and the cornbread was dry as dust. A standout for us was desert: delicious bread pudding and turtle pie. We will be coming back for the ambiance and deserts.

Positive

Neutral

Negative

Experience and Expertise



- Autonomous Vehicles - Images + LiDAR
- Named Entities in Financial Documents
- Peril Assessment for Property Insurance
- ID tumors and lesions in medical scans
- Baseball, golf, soccer video analysis

The AI Workforce



Young, mostly millennials
or Generation Z, 18-30

Born Mobile

Mindset Digital, Online

Not defined by
conventional degrees or
fixed qualifications



*Leap-frogging into digital
jobs using blended and
self-learning*

iMerit – Sourcing Model



Inclusion Dashboard

- 2700+ employees
- 80 % from low income backgrounds
 - < USD 100 per month family
 - Sporadic livelihoods
- 52% women
 - All women's center (Metiabruz)
 - Recently launched center for rescued women from trafficking
- 2.5-3x income growth over 3-5 years
- 140 Inclusion employees have become team leads, PMs or trainers



Lessons Learned

Future of Work - How, Not What

Market-Aligned Skills Training

LEADERSHIP DEVELOPMENT

DOMAIN SPECIALIZATION

CONTEXTUAL UNDERSTANDING

ENGLISH ENHANCEMENT PROGRAM

ON JOB TRAINING

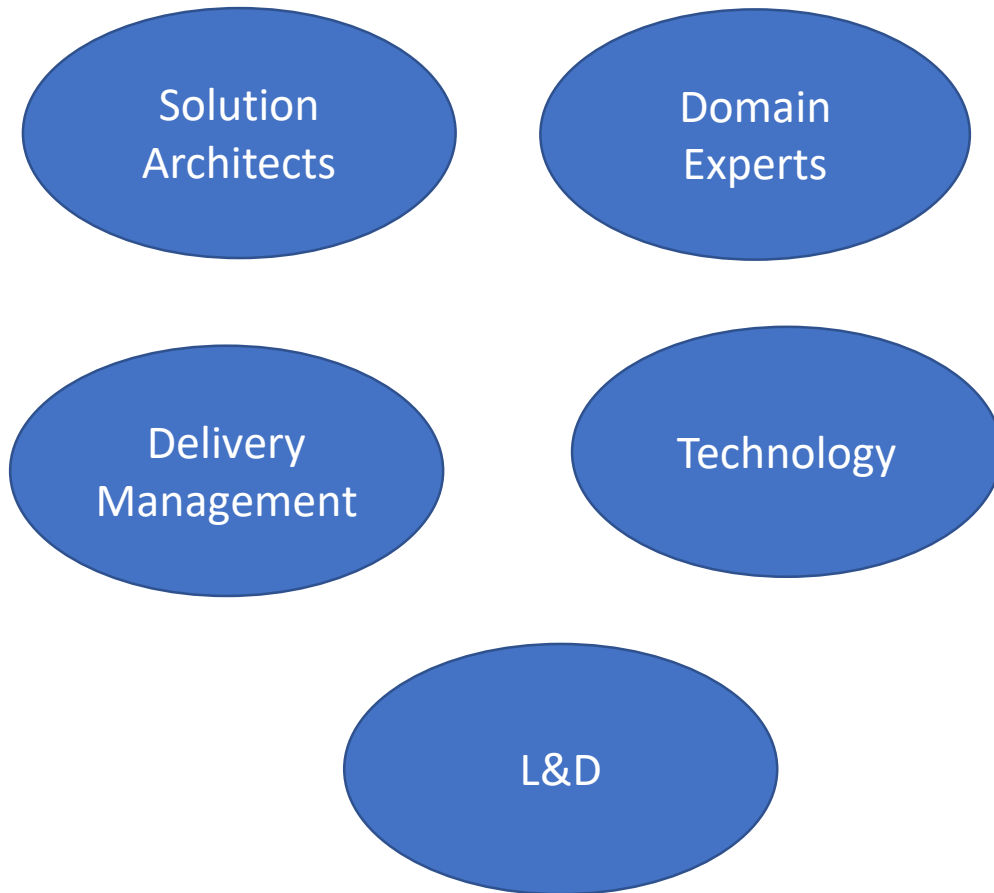
AGILE

NUANCED

CUSTOM-SKILL

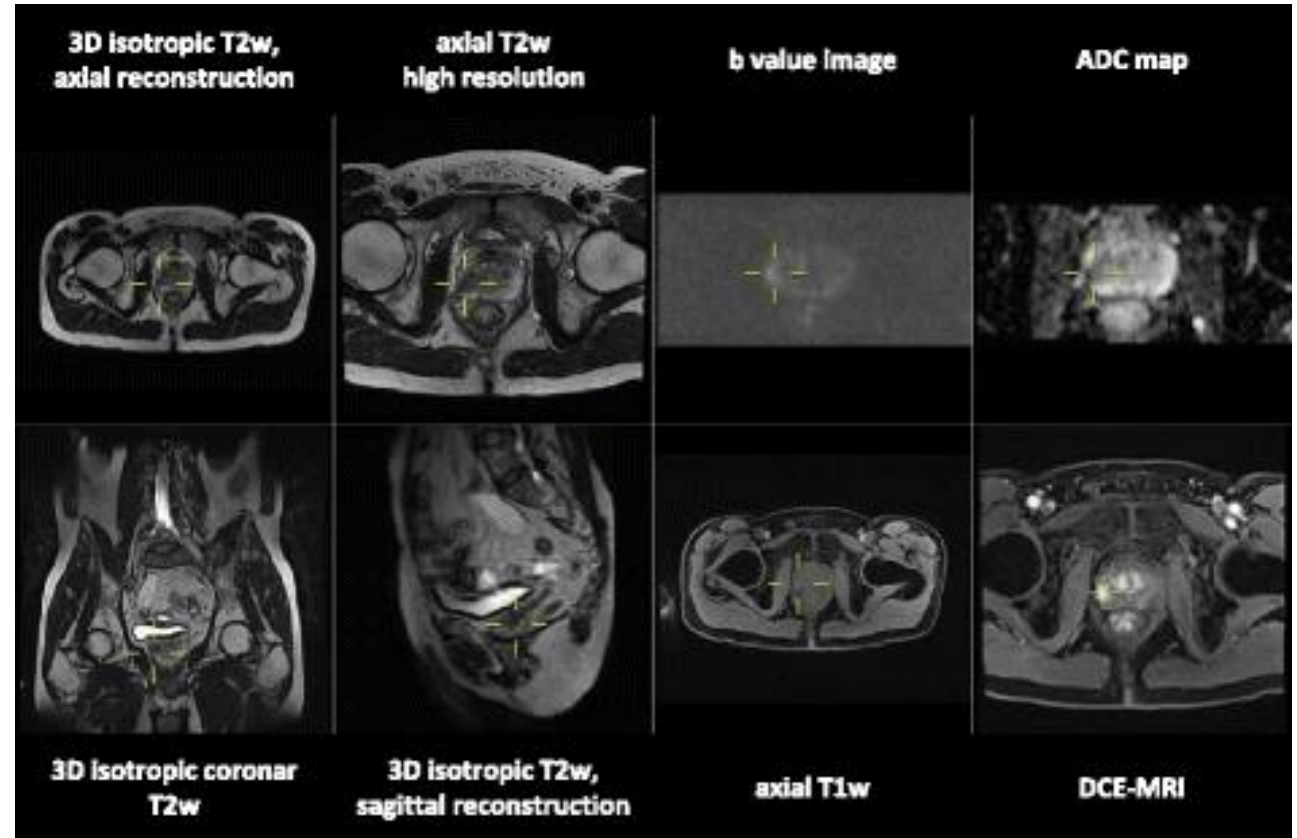
MICRO-RESKILL

Hybrid Approach



Deep and Narrow Learning

- “Para legals”, “Para medics”
- Context
- Learn by example
- Learn by doing



Lead with Capability

“We like iMerit for its Advanced Workforce”



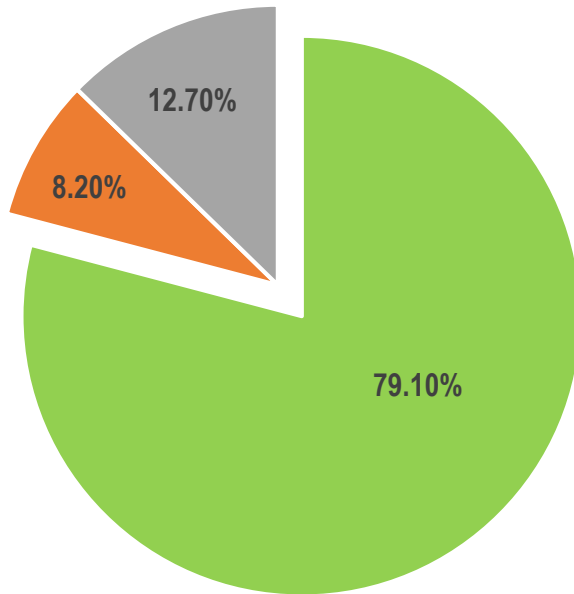
Thank You !



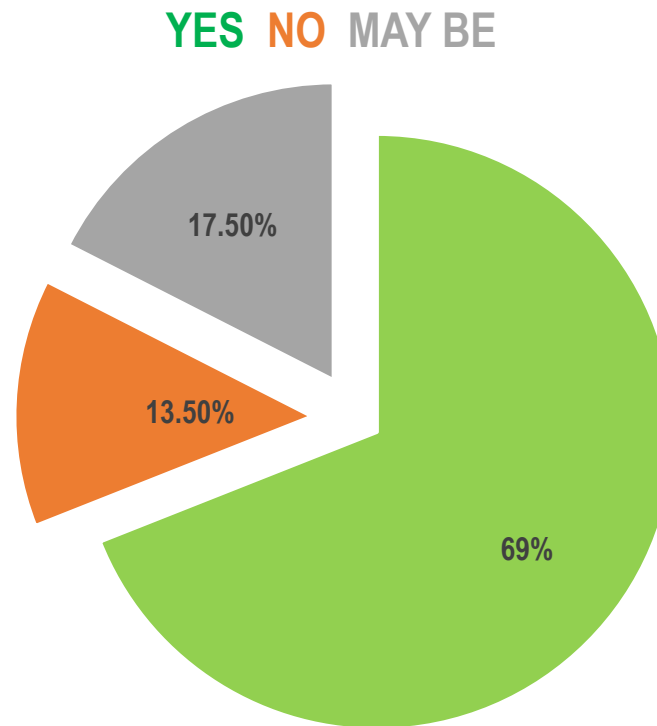
Profiles

Independent views

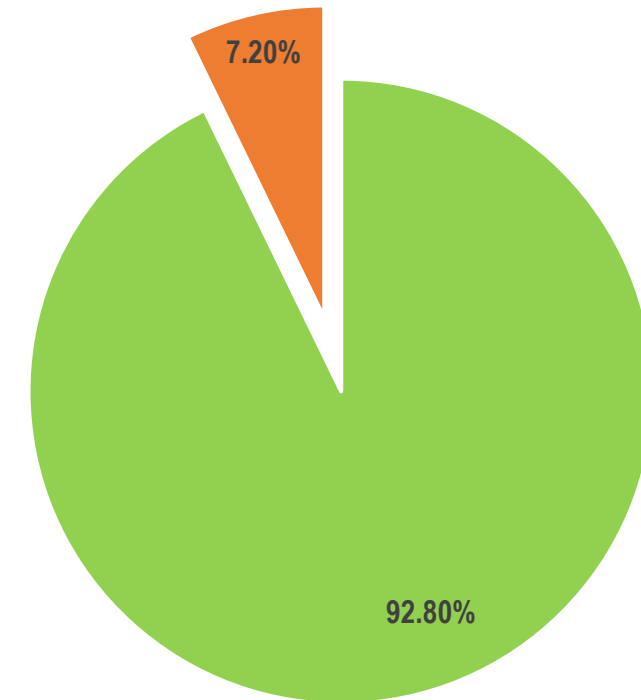
Do you think you are making a difference to society through your work ?



Do you feel that your opinion in family matters are considered with more importance after you started working with iMerit ?



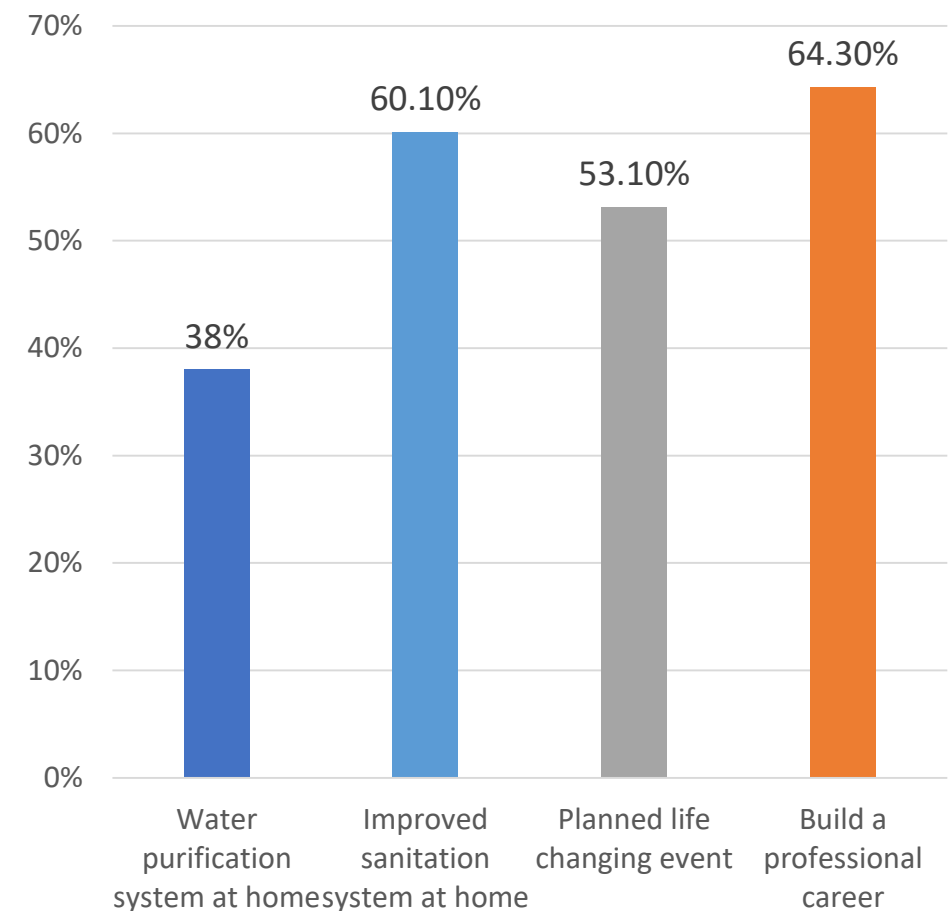
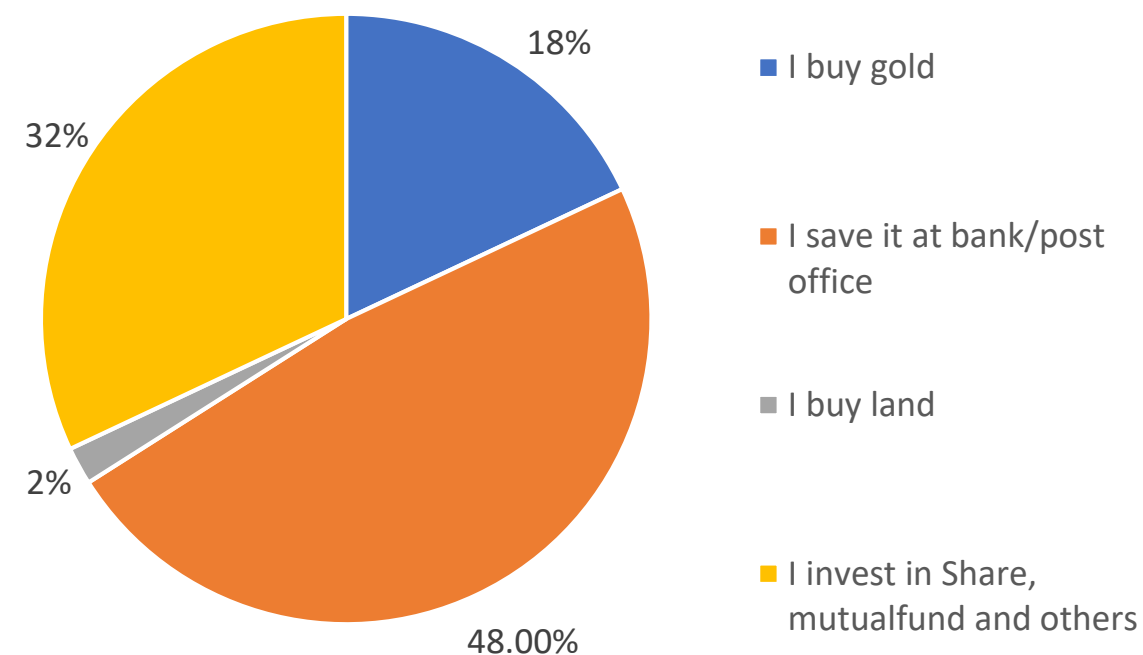
Do you think joining iMerit have brought some positive changes and raised your income status, standard of living?



**iMerit Employee Survey, Q4 2018*

Straight from the heart

- How do you invest your savings?



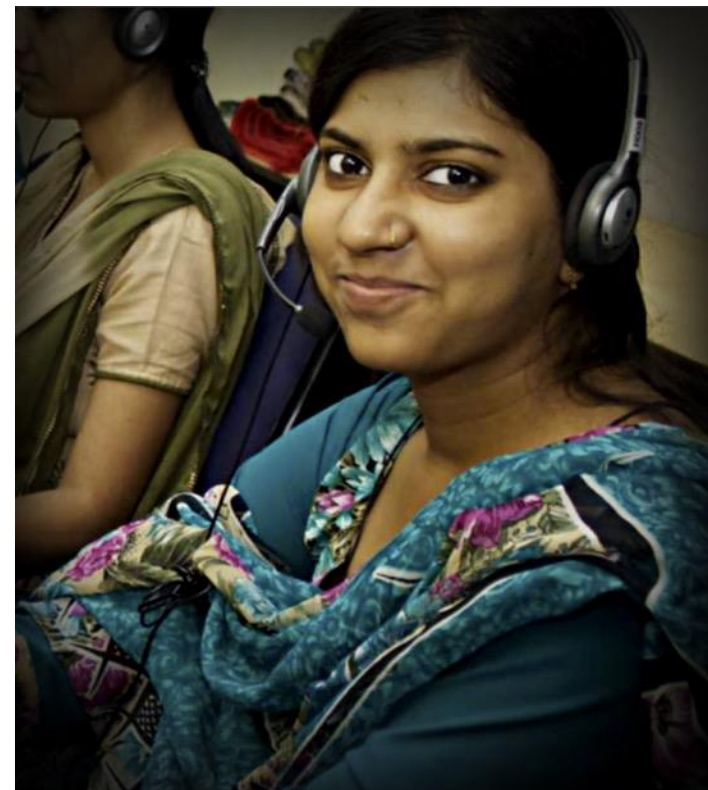
**iMerit Employee Survey, Q4 2018*

FARIA

Completed her Anudip MAST training and began working for iMerit as a Data Entry Operator. After a few years in this role, she was selected to be part of the Catholic Relief Services team and received several months of up-skilling to meet the technological requirements of the project. Today, she excels in her role.

Initially, when Faria completed her Anudip training, her parents did not want her leaving the community each day to work, a common theme in many households in the community. iMerit's presence in Metiabruz allows Faria to work in a professional environment, support her family, and keep with community customs.

She is now financially independent and is able to pay her school fees as well as spend time with friends on the weekends.



RAJ KISHOR

Raj comes from a tribal village in Jharkhand hidden from the hustle and bustle of modernization and urban lifestyle. Terrorism and Maoism lurk in the daily existence of Raj and his family.

When he lost his job at an NGO due to an unforeseen shutdown, Raj signed up for the MAST program at the Anudip Foundation and became one of the first employees at iMerit's Ranchi delivery center. He is now a social influencer for his community, close friends, and family.

Raj is a Sr. Team Lead focusing on image classification projects. As an experienced team member at iMerit, he works closely with his team to overcome challenges they face. It is imperative to guide his team members, spending time with them to improve their skills to maintain iMerit's standards for accuracy and quality and delivering projects effectively.



SUNITRA BEHERA

She is from a village called Ali in the district of Kendra Para in Odisha. She studied from a small school in her village and currently pursuing her graduation in Arts. Her Father is an Auto Driver and Mother is a housewife. She has got two sisters and a brother. Her father's income was not enough to fulfill all the needs of the family.

She has always had a curiosity about computers and technology, having a dream that one day she will get an opportunity to work in that domain and when she got the opportunity to work with iMerit Technology Services Pvt. Ltd., her dream came true. It has been over a year now and she believes that she is living her dream. Her economic condition has also improved and she is helping her father financially as well.

Sunitra is a dedicated worker focusing on natural language process. As an experienced team member at iMerit, she works closely with his team to overcome challenges they face. She is a quick learner and is always curious about learning new ways of doing her work more efficiently.



SURYAMANI ROUTRAY

She is from Sanapadar, a remote village in Khordha district of Odisha. She studied in a small village school and later did her graduation from Bhakta Vihar College which is far away from her home. Her Father is a Mason and Mother is a housewife.

It has been a tough life for her and she had struggled through the initial years of her life due to poor financial condition of her family. Her first real break came when she got selected in an interview to work for iMerit Technology Services Pvt. Ltd. She has been working here for a year now executing her job with responsibility and dedication.

- . She has a lot of determination and wants to go up in the organization hierarchy moving ahead. She is a dedicated worker focusing on natural language process. According to her, life has changed after joining iMerit as she is now getting exposure to a world which is much different from her previous one. Also, her income is helping her and her family to lead a better life than before. It has been a change which has given her life a new meaning and an opportunity for further development.



Q&A

Webex Chat

Email: rsilva3@worldbank.org

S4YE LinkedIn

Thank you and we look forward to working together!