Partnership Snapshot: Fusemachines
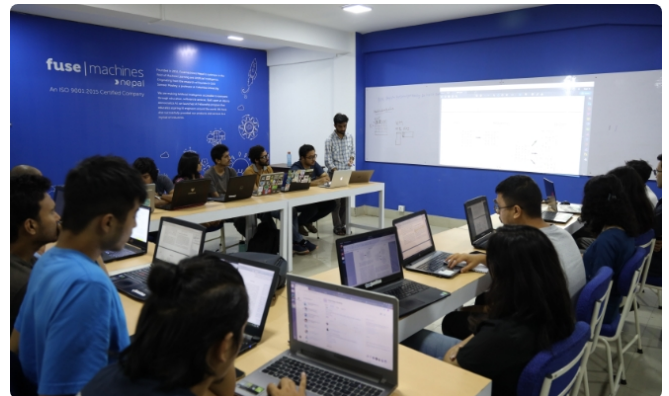## *AI Shikshya for Nepal*

Fusemachines is on a mission to democratise Artificial Intelligence (AI) by providing access to AI education and resources on a global scale. Fusemachines trains students from underserved communities in AI and build teams from the best graduates to work on cutting edge AI products and AI services for companies globally. These students are then hired by Fusemachines and/or converted into globally-employable AI Engineers. The company currently has offices in New York, Canada, Dominican Republic, and Kathmandu. Launched in July 2019, UKaid Skills for Employment Programme's (सीप's) partnership with Fusemachines is enabling accessibility to world-class, affordable AI training, certification and high-value jobs via the state-of-the-art Fuse AI Center for Research and Training in Kathmandu, and through partner colleges, with focus on applicants from Province 2 and Province 5.

During the pilot, Fusemachines is testing, iterating, and refining its training delivery approach and modules – six-month curriculum tied to a Micromasters, a more comprehensive 1-year curriculum tied to a Micromasters Degree from its Fusemachines AI Center in Kathmandu, and a six-month Foundations in AI course from partner colleges – as needed to maximise impact and scale. This speaks to the overall vision and ambition of the company to introduce quality, affordable AI training in Nepal. To date, with support from UKaid सीप, a total of 225 students are enrolled in AI Courses, following which successful students will be guaranteed placements in Fusemachines or other IT employers in Nepal. By the end of 2020, Fusemachines aims to skill, certify, and place 500 Nepalis – with focus on applicants from Province 2 and 5 – in highly skilled, high-value jobs. This partnership has the potential to reach and empower about 4,500 youth by 2022.

Summary of Activities

- State-of-the-art Fuse AI Center for Research and Training launched in Kathmandu and delivering AI Micromasters Degrees. New cohorts being inducted on a quarterly basis. Two curriculums being delivered:
  - o Six-month curriculum tied to a Micromasters' Degree (comprising of Machine Learning & Deep Learning modules).
  - o A more comprehensive 1-year curriculum tied to a Micromasters' Degree (comprising of Machine Learning, Deep Learning, Computer Vision and Natural Language Processing modules).

Machine Learning class in session at the Fuse AI Center for Research and Training, Hattisar Kathmandu

- Partnerships in place with four ICT colleges in Kathmandu, and a six-month Foundations in AI course being delivered from these colleges. More colleges in the process of being onboarded, with priority to colleges from Province 2 and Province 5.
- Girls in Tech Nepal Province 2 Chapter launched in collaboration with Genese Solution with the aim of educating and onboarding more women in AI Courses, especially from Province 2. Scholarships for Fusemachines AI Courses available for girls of Province 2. Girls in Tech Nepal Province 5 Chapter launch planned when COVID-=situation eases (online launch also being explored).
- Employer engagement (ICT and non-ICT) ongoing to ensure students complete the Fusemachines AI Courses are placed in jobs. Formal agreements and MOUs will be signed with Nepalese companies towards this purpose.

SUMMARY OF OTHER KEY PARTNERSHIP ELEMENTS

Key Achievements:
- Set up state-of-the-art FUSE AI Centre
- Developed the Fuse MicroMasters in AI Curriculum
- Capacity building through ToT to Fusemachines staff to better deliver the courses
- Developed the Foundation in AI Course
- Partnerships with 3 colleges to deliver the Foundation in AI Course
- 226 students enrolled in AI courses

Innovations Generated and Applied:
- Curriculums adapted from the industry-leading Columbia University MicroMasters Program in AI
- Course modification and adding AI Foundation Courses to expand training pool
- Collaboration with Girls in Tech Nepal to onboard more women and GESI target groups in AI courses
- Conversations ongoing with Laxmi Bank Ltd. to co-develop a training loan

Enabling Sustainability and Scalability:
- By partnering with colleges, Fusemachines has successfully reached a larger audience, which is expected to result in more revenues over the long run
- Revenue model up and running and working well by providing resources for teaching as well as getting the colleges to pay for the courses
- Aggressively partnering with college groups for increased rollout in more colleges across Nepal

Inclusion and Safeguarding:
- 107 women and DAGs currently undertaking AI training courses
- 100 scholarships available for deserving students, especially those from Provinces 2 and 5
- Partnership with Girls in Tech Nepal to onboard more GESI groups and shortlist potential scholarship candidates especially in Provinces 2 and 5

Ensuring Value for Money:
- *Economy*: Ensuring procurement at best rates
- *Efficiency:* Partner is the leading AI Firm in Nepal
- *Effectiveness*: 58% co-investment, 226 students in AI courses till June 2020
- *Equity:* Total DAG (including women) in AI courses – 107 (47%)

Risk and Challenges:
- COVID-19 an immediate challenge for physical trainings. Classes successfully moved online
- Course fees discouraging some students from enrolling in MicroMasters course. Loans for trainings and scholarships being utilised to address affordability
- Uptake of AI relatively lower in Provinces 2 and 5. GIT being utilised to create buzz around AI and AI courses to ultimately onboard more students from those Provinces.