

# Alberto Lemma (ODI) | Making Firms Work Series | Harnessing the power of digital technology in Nepal: CloudFactory

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*This blog is part of our 'Making Firms Work' series. Read other blogs in the series: on [textile manufacturer A to Z](#) and [Kenyan garment firm Hela](#).*

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CloudFactory is a remarkable example of a multinational digital firm. Operating from Nepal, it has 2,000 well-paid jobs worldwide, with around 1,300 workers in Nepal itself. This firm shows how digital technology can provide a lifeline and a link to the global economy for some of the most remote places in the world if they have appropriate skills and internet access.

## ***Growing digitalisation is an opportunity for Nepal***

Digitalisation is playing and will continue to play a crucial role in Nepal's economic transformation process. As a landlocked and resource-limited country, Nepal's economic activities are constrained by limited transport links with India to export its manufactured goods. However, digital goods and services do not have such limitations.

Development of a digital economy requires a stable and fast-enough connection to the

internet, a workforce that can speak global languages (e.g. English, etc.) and appropriate skills. Nepal already has these ingredients, which, combined in the right way, can help promote a high-value services sector in the country.

This will not only provide benefits in terms of jobs and exports but also promote productivity across other sectors. For example, a recent [SET study on digitalisation and the future of manufacturing](#) highlights the need for developing countries to invest in digitalisation to help their manufacturing sectors improve productivity. If they fail to do this, they will be left behind and face a growing global digital divide, making it harder for them to promote sectors that are increasingly dependent on digital processes.

### ***CloudFactory: harnessing the potential of digital technology***

Some Nepalese firms are already taking part in this process. A remarkable example is CloudFactory, an information and communication technology business process outsourcing (ICT-BPO) company that provides services to enterprises worldwide. CloudFactory uses a cloud-based platform (hence its name) to allocate various tasks that firms around the world require to teams of workers based in Nepal and Kenya.

Software developer Mark Sears founded the company in 2008, training young Nepali computer engineers and developing web applications for start-up companies around the world. As the company grew, it seized the opportunity to create a platform to connect the technical routine data-oriented work that various companies demanded with the untapped pools of human capital that Nepal had in supply.

Human resources are crucial. The workforce strategy is based on the traditional assembly lines Ford introduced more than 100 years ago. Rather than having a few highly skilled workers completing one large complex task, the task is broken down into several simple reproducible steps that low-skilled workers can work on. Essentially, CloudFactory has created a virtual assembly line where workers can contribute to tasks that used to be limited to individuals with advanced programming degrees. Each day, CloudFactory employees process over 1,000,000 tasks. These include:

- Document transcriptions, whereby physical documents such as receipts, business cards and financial statements are scanned and sent to workers to turn into digital files;
- Recognition work – that is, helping software automatically recognise faces, printed words and inputs for algorithms to improve automatic chat-bots; and
- Commercial data aggregation and analysis, such as financial report analysis and real estate information aggregation and analysis.

CloudFactory shows great promise for Nepal for several reasons.

The first is the fact that it now employs over 2,000 workers, who are paid, at the least, two and half times the local minimum wage rate. Although these are contract-based staff (hence not permanent employees), the sheer number of them has already made CloudFactory a success story in terms of employment creation in high-value and high-

productivity services in Nepal. This is the kind of employment that Nepal needs if it is to grow into a middle-income country, as discussed in a previous [SET study on skills in Nepal](#), which pointed to ICT as a key driver of economic transformation in the country.

Second, the firm plans to expand to open more offices across the country. The fact that its employees could be spread out across the country, requiring only simple infrastructure such as a computer and an internet connection, will eliminate the geographic barriers that limit access to employment for workers in disadvantaged (or resource-constrained) areas. This is very significant for a country with mountainous and remote areas like Nepal. Employing people in remote areas can help stimulate the local economy without putting pressure on larger urban centres such as Kathmandu. Workers also have the freedom to choose their work hours through flexible scheduling that allows them to devote time to other areas of their life, such as education and family. Upskilling is also an important part of the employment process. In 2015, the company provided 837 hours of training to its employees, [reporting](#) that 27% of the workforce gained new technical skills and 47% new management skills.

Finally, CloudFactory has become an international organisation. The firm does not operate just in Nepal. In 2013, it expanded its operations to Kenya, with plans to cover other locations too. The company also has a sales office in the US and a new corporate office in the UK. This expansion, five years after it first opened in Nepal, shows that developing country ICT-BPOs can evolve into successful global production networks based on the human resources rather than the physical attributes of the country. These networks benefit Nepal as they foster greater trade flows between countries, further boosting growth and improving the economic resilience of Nepal as it expands into a more diversified export basket.

### ***How Nepal's ICT sector can be developed***

The ICT sector faces a [serious challenge retaining staff in Nepal](#), with high constant turnover rates, fuelled by employee migration, limiting the capacity of Nepalese ICT firms like CloudFactory to grow. If Nepal is serious about its commitment to the ICT sector, as the Government of Nepal's [Investment Board](#) states, it needs to look at some policy shifts to help local ICT firms further integrate into the global market. While some great strides have been taken to fortify the country's ICT infrastructure, considering investments in local data centres could help increase data security and access speeds for local firms and improve security perceptions for international investors.

At the policy level, three key moves could help the sector evolve. Reforms to capital account systems could incentivise international investors to set up regional ICT-BPO hubs in Nepal and, at the same time, help local firms strengthen links to the global economy by facilitating international transactions. Allowing more talent into the country can, conversely to logic, help keep workers in the Nepalese market. Some key skills are still in short supply in the Nepalese ICT sector (marketing, high-level managerial skills, etc.); allowing local ICT firms to recruit from abroad can only help strengthen them, promoting firm growth, better wages and the retention of local workers. Finally, the promotion of healthy state–business relations could prove invaluable for the sector. If businesses can promote their growth and employment potential and highlight the challenges they face to the Nepalese government,

through business associations such as the Computer Association of Nepal, issues could be rapidly addressed and opportunities harnessed to ensure the ICT sector, like tourism, becomes a pillar of exports for the country.

*Photo credit: A Nepalese young man works on a computer in a small photo lab in Kathmandu on May 2, 2011. © ILO/ Pradip Shakya.*