

Digitalizing Laos

Improving Government Transparency, the Business Environment, and Human Capital

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THE ISSUE

- **The Covid-19 pandemic has spurred the government of Laos and some businesses to adopt digital reforms, but Laos's digitalization lags compared to the rest of Southeast Asia** due to the high cost of the internet, the urban-rural divide, and the lack of a regulatory architecture.
- **Digitalization can simplify many of the current barriers to conducting business in Laos by increasing government transparency and eliminating convoluted regulatory processes.** It also can increase access to resources for students and teachers, raising Laos's quality of education and human capital.
- **To generate a more favorable business environment and a workforce better prepared for a digital future, the U.S. Agency for International Development (USAID) and development partners can assist the Lao government in a number of areas,** including harmonizing government platforms, formalizing the workforce, rolling out digital payment systems, expanding internet protection rights, and incorporating digital literacy curriculums.

The Covid-19 pandemic has exposed the mass digital divide in Southeast Asia and prompted many countries in the region to embark on the path toward digitalization. As a result, these countries have experienced accelerated growth of e-commerce, online financial services, and digital government-to-people (G2P) payments. Digital transformation has the means to improve transparency and public-service delivery for governments while making it easier for firms to register, pay taxes, and carry out transactions in the formal economy. This is especially applicable to Laos, one of the final frontiers for digitalization in Southeast Asia.

Moving toward a **digital economy** can help Laos address some of its bureaucratic inefficiencies that hamper economic and business growth, as well as introduce and enhance services such as online banking, e-government, and e-commerce. This, in turn, allows important drivers

of the economy (e.g., agriculture, transportation, and tourism) to expand their business and reach. Digitalization can also increase transparency in a business environment characterized by significant government involvement, leading to increased foreign direct investment (FDI) and private sector growth. It is necessary to buttress Laos's digital ecosystem in order to better connect the economy to the region's production networks and, by extension, global value chains.

THE CURRENT STATE OF DIGITAL TRANSFORMATION AND THE BUSINESS ENVIRONMENT IN LAOS

Since Laos began to transition to a free-market economy 30 years ago, it has undertaken efforts to improve its business environment. Since 2008, the Lao government has hosted **annual business forums** to discuss ways to improve this

environment and encourage foreign investment. In 2018 and 2020, then-president Thongloun Sisoulith **signed orders** to simplify steps to obtain business licenses; as a result, the process for corporate registration decreased from **a couple of months to 15 days**. More recently, Prime Minister Phankham Viphavanh, sworn in March 2021, has pledged to make good governance and transparency key pillars of the government's national development plan.

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Despite some of these advances, a lack of transparency, procedural hurdles for investors, and high costs of doing business persist in Laos. Multiple laws require companies to notify the Lao government of transactions, mergers and acquisitions, and investments—which, in practice, are often misconstrued as applications for regulatory approval. Such lack of administrative transparency can obscure the distinction between regulatory approvals and regulatory notifications, leaving the impression of government overreach and thus slowing or discouraging private sector growth.¹ Meanwhile, national and local-level regulations often differ, and those investing in large FDI projects **often choose (or are required) to partner** with domestic firms or local entrepreneurs—or to give the government partial ownership—in order to overcome time-consuming bureaucratic requirements. Many potential investors say bribes are still necessary to **approve or expedite business applications**. While Laos has passed several anti-corruption laws, it has largely failed to enforce them.

These business shortcomings are reflected in the country's low ranking in several global indices:

- The World Bank's **Doing Business 2020** report ranks Laos 154 out of 190 countries.
- Transparency International's **2020 Corruption Perceptions Index** ranks Laos 134 out of 180 countries.
- The World Intellectual Property Organization's **2021 Global Innovation Index** ranks Laos 117 out of 132 countries.

- The World Economic Forum's **2019 Global Competitiveness Report** ranks Laos 113 out of 141 countries.

Digitalization can play an important role in reducing some of these inefficiencies. However, it is also important to acknowledge that digital tools are not perfect and do elevate security and privacy risks for individuals, companies, and governments alike. They are prone to privacy and cybersecurity breaches, system failures, and the possible exclusion of individuals. Technology can also be subjected to misuse and abuse by bad actors who engage in identity theft, financial fraud, and **digital authoritarianism**. In the case of **Laos**, for example, the National Assembly (the country's parliament) has experienced significant disruptions in its digital network, which raised questions about data integrity. Concern has also emerged over the security of mobile payment apps such as the Banque Pour Le Commerce Extérieur Lao Public (**BCEL**) OnePay network.

Moreover, Lao digital infrastructure is very reliant on Chinese hardware (including from Huawei and ZTE), raising questions about data privacy given Chinese information and communications technology (ICT) laws. Laos's first satellite, the **LaoSat 1 spacecraft**, was financed, constructed, and launched by China. Not only has China constructed a new **\$6 billion high-speed railway** connecting Kunming and Vientiane, providing a transportation link between the two countries, it has also installed fiber-optic cables across Laos.

Despite investments in digital infrastructure, the country lags behind in digital adoption compared to the rest of East and Southeast Asia. In 2020, just **43 percent** of the country's population had access to the internet, compared to **70 percent** of people in the East Asia and Pacific region. In addition, there are 61 **mobile phone subscriptions** per 100 people in Laos, while there are almost 126 subscriptions per 100 people in the East Asia and Pacific region. In 2019, the **World Economic Forum** ranked Laos 108 out of 121 countries when it comes to ICT readiness.

There are several obstacles to digital adoption. Affordability is one main barrier: many Lao still cannot pay for the high cost of internet, **\$53.41** per month for fixed broadband on average. In comparison, neighboring Cambodia and Thailand have average internet rates of **\$33.17** and **\$23.30** per month, respectively. Rural communities, often isolated

¹ For example, multiple provisions in the **2013 Laos Enterprise Law** have caused delays for businesses trying to sell or buy shares. Ambiguities in the **2016 Law on Investment Promotion** have meant initial investors in state concessions undergo considerable scrutiny, but a new investor inheriting such shares is not subject to the same review.

by Laos's mountainous terrain and a lack of paved roads, experience **large technology gaps**: just 0.3 percent of these households have fixed broadband, 2 percent have computers, 49 percent have television, and 15 percent have radios.

At the same time, legal and regulatory architectures need to be strengthened for the **digital economy** to develop further. This includes legislation to safeguard personal data, provide consumer protection, and use electronic signatures. New companies trying to digitalize currently do not know what privacy laws to follow or how to proceed with data collection.

Finally, an underlying obstacle to digitalization is the poorly performing education sector and its disconnect from digital skills. Especially at the tertiary level, there is no focus on equipping youth with the knowledge and skills to become the managers and digital developers of the near future.

THE ROLE OF DIGITALIZATION FOR BUSINESSES

Laos has a large informal economy; a **survey** conducted by the International Labor Organization found that **73 percent of men and 87 percent of women** in the country are self-employed. In 17 out of 18 provinces, more women than men are employed in the informal sector. The agricultural sector, which makes up **61 percent** of Laos's labor force, informally employs **75.5 percent** of these workers. **Informal workers** are frequently subject to low wages, poor working conditions, and lack of access to social protection schemes such as unemployment insurance or healthcare. As a larger share of this workforce, women were hit especially hard by the Covid-19 pandemic.

Digital tools can help Laos improve its business outlook by simplifying business registration and streamlining operations (such as paying taxes and hiring workers) while providing an avenue for greater formalization. Multiple enterprises in Laos have **cited** current informal practices as hindering their development. Informal small and medium-sized enterprises (SMEs) usually have lower productivity and do not contribute to tax revenue.

In a country where **80 percent** of people work for SMEs, an estimated **100,000** of these enterprises operate informally.

Many businesses do not formalize because of the **time, fees, and paperwork** associated with registering. Studies show that informal enterprises are more likely to register if there are **incentives** such as tax relief, soft loans, and government support for technology and human-resource development. In addition, many SMEs **struggle** to access loans because they lack capital and cannot afford high interest rates. Lao business owners may not have the literacy, business plans, or business licenses to meet stringent loan conditions or requirements from formal financial institutions. Compounding this issue, Laos is one of the last countries in the Association of Southeast Asian Nations (ASEAN) yet to introduce a credit-guarantee facility. Creating pathways for businesses to obtain bank loans through registration could support a major backbone of the economy and help local businesses grow. If the Lao government can make processes more efficient and lower registration costs, firms may be more compelled to formalize.

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The Covid-19 pandemic spurred the digitalization of a small percentage of Lao **businesses**, and there are ample opportunities to ramp up. For example, only an estimated 10 to 15 percent of enterprises in the tourism sector have a license and are registered, but an increasing number of businesses in the tourism, hospitality, retail, and commercial spaces are listing and selling on online platforms such as Airbnb, Booking.com, and new local start-ups.² The use of such formalized online platforms encourages businesses to become formalized.

Digitalization will promote the formalization of the Lao economy by instituting greater transparency, simplifying registration processes, easing tax collection, and providing stronger legal frameworks and social protections for workers. If the Lao government can collect taxes from a broader base of companies, they can also consider **lowering**

2 The Laos 2020 Economic Census indicates that 26 percent of trade and retail firms and 34 percent of hotel and food/beverage services in Laos are registered, but the tourism supply chain goes beyond these two subsectors, lowering the total percentage of registered enterprises to around 10 to 15 percent. See Asian Development Bank, *Southeast Asia: Recovering from the Pandemic* (Manila: Asian Development Bank, forthcoming 2022).

tax rates without hurting overall revenue. Considering the government's budgetary deficit and burgeoning debt, formalization through digitalization can be a win-win for companies looking to register and for the government looking to ease its fiscal constraints.

DIGITAL DEVELOPMENT AND ITS IMPACT ON HUMAN CAPITAL

The Covid-19 pandemic has further exposed the shortcomings of Laos's digitalization with regard to human capital and the education system. When the pandemic broke out in early 2020, Laos shut down schools for two months, affecting 1.4 million students. Approximately 78 percent of urban children and 87.5 percent of rural children **could not access schooling** because they did not have the necessary technology nor teaching and learning materials for remote education. School closures directly contributed to Laos's 2.6 percent decline in the UN Human Development Index in 2020, with its education subindex dropping **7.8 percent** that year.

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In response to the absence of learning during the Covid-19 pandemic, the Lao Ministry of Education and Sports partnered with the United Nations Children's Fund (UNICEF), the European Union, and the Global Partnership for Education to launch the country's first digital education platform, **Khang Panya Lao**. The platform is modeled after UNICEF's Learning Passport education tool, wherein users can access content through an Android app or on the web. Together with other donors, USAID contributed learning materials to the platform, which provides digital textbooks for students and training resources for teachers adapting to hybrid in-person and online teaching. Khang Panya Lao has already seen some success; 30,000 users registered between April and October 2021.

Digitalization can play a critical role in developing human capital in Laos (see Box 1). Initiatives such as Khang Panya Lao are only the first of many digital tools to improve the

quality of education for students and teachers alike. While Laos builds its digital capabilities and businesses open online, the education system also needs to incorporate digital literacy into its curriculum to prepare the next generation to be competitive in the workforce. Finally, digital literacy could be expanded through technical and vocational training.

HUMAN CAPITAL IN LAOS

Human capital, defined by the World Bank as "the knowledge, skills, and health that people invest in and accumulate throughout their lives, enabling them to realize their potential as productive members of society," is a critical component of building the future of Laos. However, the **Human Capital Index 2020**, which measures the human capital of a child when they reach 18 years old, found that Lao born today will only be 46 percent as productive as they could be if they received more robust education and healthcare. When education is adjusted by what children actually learn, Lao students experience a mere 6.3 years of schooling. In tests that measure educational achievement on a scale of 300 to 625, Lao students score a very low 368. The government spends just 2.9 percent of its GDP on education, which is inadequate compared to regional averages (4.7 percent) and those of other lower-middle-income economies (4.5 percent).

Quality of education has been a particular area of concern for the government. According to a **2017 World Bank study**, an alarming percentage of students struggle with basic math and literacy skills, including addition, subtraction, multiplication, division, and reading. The skills gap increases for rural students and those who do not speak Lao as their mother tongue. Such low levels of learning prompt significant dropout rates: **98.7 percent** of Lao children enroll in primary school, but **around half** of students drop out by the end of primary education. Quality of teachers is also a major problem. Surveys reveal many teachers are not proficient in their own language and basic math, making it difficult for them to educate students; some are also chronically absent, leaving children without consistent schooling and curriculums. Finally, many schools do not have adequate lighting, sanitary conditions, electricity, or drinking water to support students in classrooms.

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SUPPORTING LAOS'S DIGITAL TRANSFORMATION

Similar to many developing countries, Laos aims to use its post-Covid-19 recovery to integrate and accelerate **digital** connectivity within society. In July 2021, the Ministry of Technology and Telecommunications partnered with the UN Development Programme to launch the **Digital Government Transformation** project. According to the announcement, this initiative “will contribute to the development of [a] Digital Government Master Plan, Standards Framework of Digital Government as well as the pilot initiatives on Digital Government services . . . which will become a significant tool for ministries and government organizations to digitalize their administration and services.” Meanwhile, the Lao government and development partners should build on the existing **e-Government Center**, which could serve as a hub to provide services, knowledge, and human capital for people who want to adapt their businesses to the digital era. Development partners can continue supporting the Lao government in its digital transformation efforts to improve the business environment and strengthen human capital.

In this regard, USAID's 2020–24 **Digital Strategy** and its **Digital Ecosystem Framework** are important tools that can facilitate Laos's digital development. Areas in which USAID can provide technical assistance include digital literacy and lowering the barriers of entry to internet access. At the same time, the legal and regulatory **environment** for digital transformation remains inconsistent and underdeveloped; USAID could also assist with such matters. Proper frameworks and controls are necessary to safeguard digital systems from exploitation by bad actors and government misuse. Communications networks, including the internet, face risks of system failure and cyberattacks. There need to be appropriate technology-based safeguards, governance, and accountability measures to address and mitigate these risks.

It is critical for the United States to continue investing in a wider digital development ecosystem abroad. In this regard, Laos is no exception. Working with the donor community and the private sector, the U.S. government can help shape Laos's digital architecture to ensure ethical and responsible use of these technologies. Among other key actions to support the country's digital transformation, the U.S. government should:

- **Assist the Lao government with simplifying bureaucratic procedures by creating digital platforms to register businesses online, link social-security payments, and access accounts.** USAID could support the expansion of existing digital government-payment systems into more districts in Laos. Some commercial banks already offer online platforms for paying road, land-use, value-added, corporate, and personal income taxes. However, these facilities are not available throughout the country.

USAID has had experience in other Southeast Asian countries with creating digital payment systems. In early 2021, USAID wrapped up the Philippines' **E-PESO project**, which digitized the Bureau of Internal Revenue's systems and helped local governments open “online and mobile payment platforms for property taxes, building and business permits, and other fees and charges.”

USAID and development partners could help the Lao government create online platforms, especially mobile applications, where businesses and citizens can make tax payments, register businesses, or view the status of their transactions and requests. Using existing infrastructure such as the Lao e-Government Center as a model, these platforms should ensure that apps and payments are secure but user-friendly so that citizens and businesses feel confident in using them. Such sites and services can also improve transparency and business operations by streamlining interactions with the government.

- **Harmonize existing government platforms into one, cohesive digital platform.** It is critical to create a single platform with clear information for businesses and people rather than perpetuate Laos's current business environment, which is plagued by an inconsistent application of laws and regulations. USAID and development partners should assist the Lao government in creating unified standards and regulations across all provinces, as well as in other ASEAN countries. USAID should consider helping the Lao government harmonize platforms for the 16 government ministries and create simpler portals for citizens and businesses to access information, digital identity documents, and social security. The private sector can play an important role by providing services through agreements or government contracts. Public-private partnerships will allow the private sector to manage and develop digital platforms that promote long-term sustainability. This should

be an ongoing process to ensure that initiatives and technology are regularly integrated and adapted in a more strategic manner.

- **Conduct government workshops on digital transformation, working with other development partners on the ground.** Such workshops will provide a space to overcome the ongoing lack of communication among ministries. All 16 government ministries have projects they want to develop, and workshops will allow them to foster greater coordination between projects.
- **Share best practices on building trust with consumers, including by strengthening cybersecurity.** USAID can help design relevant consumer-protection laws so that consumers feel confident that their data is managed in ways that protect their rights and privacy. In May 2020, the Ministry of Post, Telecommunications, and Communications issued the [Decision on Protection of Consumers Using Telecommunications and Internet Services](#), the first decree of its kind to protect consumers. This law provides mechanisms to settle disputes between service providers and customers and limit unsolicited commercial phone calls.

However, there are many more actions that should be taken to ensure the digital rights of consumers, including the overhaul of the current Telecommunications Law, which may, inter alia, provide for a more detailed licensing regime to encourage adequate financial, technical, and operational resources for licensees. With a relatively small consumer base, Laos has struggled to attract and retain foreign investment in the ICT sector, and a more exacting licensing regime could encourage better-resourced investors.

- **Support the next generation of entrepreneurs by incorporating digital literacy into curriculums and increasing access to online learning tools.** USAID has extensive experience in the education field and can utilize its knowledge to support the sector by incorporating digital literacy into Lao curriculums. Moreover, USAID can also provide training for public employees to improve their digital skills.
- **Support the development of an affordable digital infrastructure network through portfolio infrastructure**

investments that encourage service providers to reach remote areas. Bringing together [USAID's Development Credit Authority in Asia](#) and specialized finance agencies (such as the UN Capital Development Fund) could unlock domestic finance and promote cross-border joint ventures to expand web access and connectivity between Laos, Thailand, Vietnam, and Cambodia.

CONCLUSION

Bureaucratic inefficiencies and convoluted regulations have significantly slowed the development and growth of the business environment in Laos. On top of this, the Covid-19 pandemic has left the Lao government fiscally stressed for the next few years. USAID and other donors can encourage the government to implement initiatives promoting formalization and digitalization. As China's Belt and Road Initiative and Digital Silk Road efforts extend Beijing's influence in the Southeast Asia region, development practitioners should also ensure that digitalization is done in a sustainable manner.

USAID's Digital Strategy and its digital ecosystem approach can play a pivotal role in promoting digital transformation in Laos. U.S. conversations with the Lao government should be centered around mobilizing domestic resources, growing international investment, and enabling more inclusive growth for women, rural communities, and migrant workers hit particularly hard by Covid-19. ■

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