

## Building Best Practices to serve Women and Girls

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### Abstract:

*Digital Divide Data (DDD) believes talent has no boundaries and opportunities shouldn't either. In 2001, we saw the need to bring tech skills and living-wage work to men and women in underserved communities in Asia. It was here that DDD helped plant the seed for a socially responsible outsourcing practice known as impact sourcing. From this early work, DDD built a proven work-study methodology to train, support and employ talented individuals around the world, and thereby provide high quality, competitively priced ITO/BPO services to customers.*

*Today, DDD continues to thrive and work towards a world where everyone – regardless of location or background – has the opportunity to reach their full potential. Since 2001, DDD's program has increased lifetime earnings for youth in Cambodia, Laos and Kenya by a projected total of more than US\$350 million.*

**Keywords:** Social impact; Education; Women; Work-study

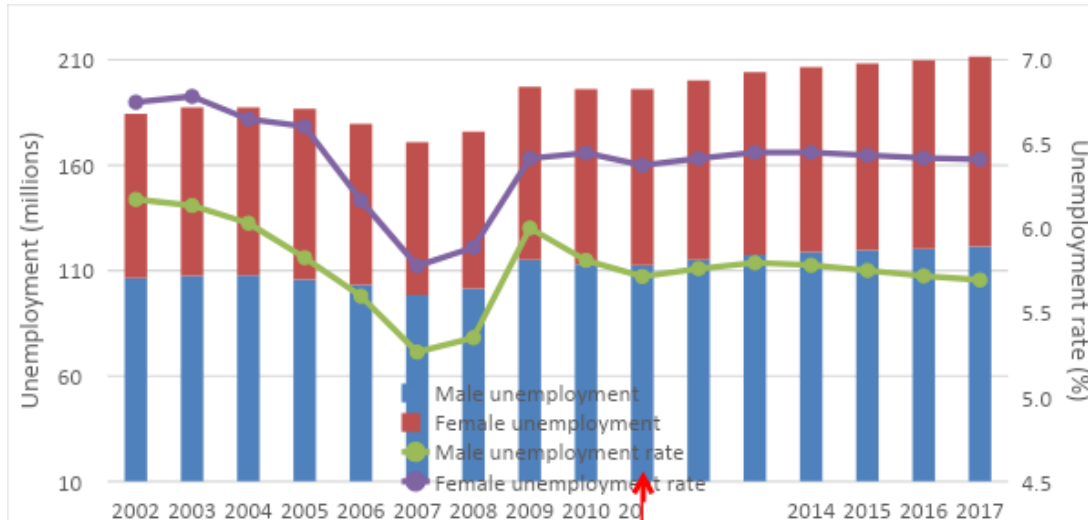
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## 1 GLOBAL WOMEN IN INFORMAL EMPLOYMENT

60% of the world's workers earn their livelihoods from informal jobs. That translates to over 2 billion women and men working in the informal sector, lacking decent working conditions, government oversight and regulation.

According to ILO Trends for women 2018 report [3] not only are women less likely than men to participate in the labour force, but those who do are also less likely to find employment. As of 2018, the global unemployment rate of women, at 6 percent, is approximately 0.8 percentage points higher than that of men. This translates into a ratio of female-to-male unemployment rates of 1.2 in 2018. By 2021, this ratio is projected to remain stable in

developed countries and to increase in both developing and emerging countries, mirroring the deterioration in the relative position of women in terms of global unemployment observed over the past decade. Education makes a difference and can decrease the percentage of women employed in the informal sector.



## 2 WOMEN EDUCATION ISN'T MEASURING UP

Sub-Saharan Africa and Southeast Asia have the lowest educational attainment in the world. Private intensive training programs are often too expensive for low-income students. 96% of Kenyan youth, 87% of Cambodian, and 82% of Lao youth are not enrolled in higher education.

## 3 DEMAND FOR SKILLED HIGH-TECH WORKERS

There is an estimated global shortage of 2 million high tech professionals, and the skills needed for these formal jobs are increasing in complexity. According to ISACA [1], job candidates are often not qualified and don't have the necessary skills. 55% of managers say that practical hands-on experience is the most important qualification for a job candidate; 70% of companies require technical certifications for positions. Furthermore, employers say [2] that 69% of current employees lack sufficient problem-solving skills, 70% lack sufficient technical skills, 67% lack basic technical training, and 60% lack necessary math skills.

There is a pronounced mismatch between the skills of women and the skills that employers require. As the world economy becomes more technologically advanced, youth in Africa and Asia need relevant education and training, combined with employment opportunities.

## 4 SOCIAL IMPACT SOURCING AT DIGITAL DIVIDE DATA

Digital Divide Data (DDD) is a social enterprise, founded in 2001 with the mission to create better futures for disadvantaged young women, enabling them to find a lifetime of opportunity through education and work experience. DDD's innovative social model delivers digital solutions to global clients while training and employing underserved youth in tech skills as a stepping stone to professional jobs and out of poverty.

This model of delivering outsourcing services to clients with social impact is known as “Impact Sourcing.” In the past 18 years, DDD has helped over 3,000 young people in Cambodia, Laos and Kenya with its proven work-study model: (1) recruitment of talented but disadvantaged youth in Cambodia, Laos, and Kenya, (2) training and education, (3) a 4-year work-study program with loans and scholarships for local universities, and finally (4) graduation and job placement.

DDD partners with secondary schools and other organizations that serve youth and women in the community. While working with these partners, DDD identifies motivated high school graduates whose families are trapped in poverty. They come from remote villages in the province or slum areas in the city. We commit to hiring young women as half of our recruits – an additional 10% are youths with disabilities.

A comprehensive training and education program starts prior to associates’ on-boarding and continues while working at DDD. It is designed to provide a work foundation at DDD and lifelong marketable skills. Trainees undergo intensive job-readiness training for 2 to 3 months to develop skills in business, English, technology, and soft skills.

DDD makes a long-term commitment to all staff. Those who successfully complete the training are hired as DDD associates. They work in our office, developing essential work experience. Attrition is well below the industry average as workers have a unique opportunity for personal and professional development. The associates work 6 to 8 hours a day performing digital work for local and global clients. DDD supports the associates in choosing their school and field of study. Associates pay a portion of their tuition from their own earnings which DDD supplements with partial scholarships and loans.

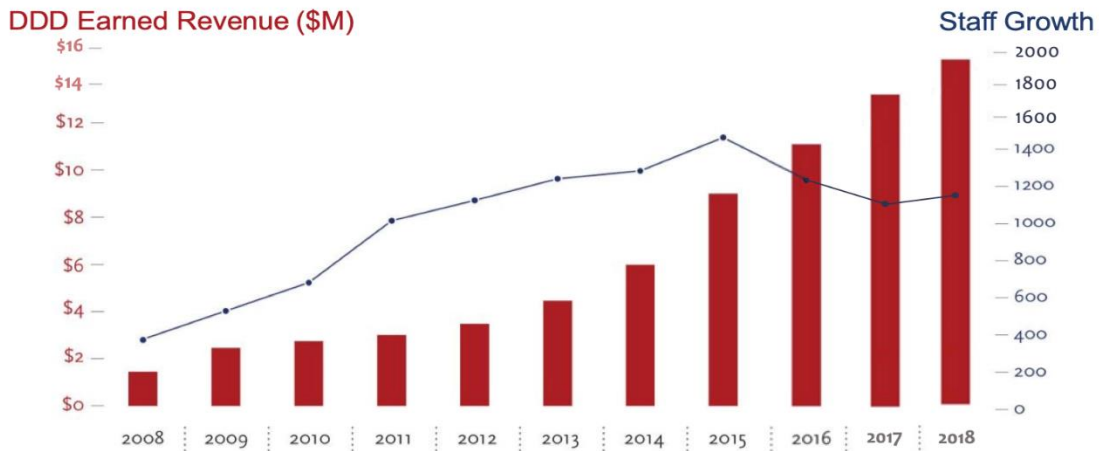
Associates stay at DDD for an average of 4 years. While DDD retains the best staff – and provides them with additional training – most youths leave DDD as graduates and move on to professional jobs, earning more than six times the average local salary. DDD tracks where they go, what they do, and how much they earn in an annual survey. DDD outplacement services helps associates find career opportunities outside DDD while high-performing associates are internally promoted to management positions. For instance, DDD Executive Vice President - Impact is a woman, as well as a graduate of the DDD’s social impact program.

## **5 SOCIAL IMPACT SOURCING IN THE USA**

While DDD’s largest offices are in developing countries (Cambodia, Laos, and Kenya), its social impact programs can be used anywhere. In 2014 DDD opened its first US-based operation, Liberty Source, offering jobs and opportunities to US military spouses and veterans. To extend its mission to train and employ underserved populations, DDD employs over 200 military spouses and veterans and has created a culture that cultivates the unique talents of military spouses and veterans. Liberty Source delivers competitive on-shore business services including finance, accounting, human resources, and other industry-specific processes.

**Staff:** 1100+ worldwide  
**Type:** hybrid for-profit/non-profit model

**Revenue:** \$15m earned revenue in FY18  
**Office Locations:** Cambodia, Laos, Kenya, USA



## 6 UN SUSTAINABLE DEVELOPMENT GOALS

DDD has committed to 3 UN Sustainable Development Goals (SDG) as follows:

**SDG 4:** To ensure inclusive and quality education for all and promote lifelong learning.

- By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

**SDG 8:** To promote inclusive and sustainable economic growth, employment, and decent work for all.

- Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, innovation, and encourage the formalization and growth of micro-, small and medium-sized enterprises, including through access to financial services.

- By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

**SDG 10:** To reduce inequality within and among countries.

- By 2030, progressively achieve and sustain income growth of the bottom 40 percent of the population at a rate higher than the national average.
- By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, economic or another status.

## 7 DDD GRADUATES

The discussion above shows that DDD's social impact programs (with focus on youth and young women) are effective, but only when one sees the difference these programs have made in graduates' lives is its effectiveness undeniably apparent.

### 7.1 Doeurn Ton: From DDD Operator to Disability Advocate

Welcome to a day in the life of Doeurn Ton, a DDD program graduate: At 9 AM planning meeting for a UN Convention on the Rights of Persons with Disabilities summit, a data report submission at 2 PM, and phone calls and emails from colleagues in Thailand and Laos in between. The pace is intense, but the 32-year old Cambodian is not complaining. She is Project Officer at the Phnom Penh-based Cambodian Disabled People's Organization (CDPO). Doeurn spearheads the advocacy and lobbying efforts of the NGO working to build a network of organizations that fight for a life of dignity for this disadvantaged population.

Working at CDPO is not just a job for Doeurn; it is a personal mission. Like those she serves, Doeurn has a disability: she finds it difficult to move her left hand due to polio. However, the disease she acquired when she was only one year old has only inspired her to reach beyond other people's perception of her potential and to help others do the same. "I am able to assist people like me to know their rights and fully participate in society," she explained.

Doeurn juggles the demands of working in an NGO and applies the skills she learned at DDD to accomplish the more challenging tasks. A former data entry operator, she makes good use of her computer and English skills in her present role: she conducts research and analyzes data; and facilitates forums and workshops with government ministries, private companies, and international and local NGOs in attendance.

Doeurn hopes to create greater impact for people with disabilities. She aspires to pursue a master's degree in gender and disability studies, to complement her bachelor's degree in accounting. In the near future, she plans to establish a small social enterprise, where she will train and hire young women with disabilities to sew cloth to earn a living. She knows that when people with disabilities are given equal opportunity, they can contribute to society - a lesson she learned at DDD

### 7.2 Thongkhoun Luangphaxay: From Shy Operator to Confident Educator

The students of Souksavath college in Vientiane, Laos listen intently as Thongkhoun Luangphaxay carefully pronounces a new English word. The 27-year old teacher was not always this confident in his English abilities: he was rather shy until he found his passion and the right opportunity to break out from his quiet nature.

In 2008, while Thongkhoun was a third-year Education major at the University of Laos, a friend convinced him to apply to DDD to earn money to continue his education. Thongkhoun was accepted to become an operator at DDD. Soon after, he was promoted to do quality assurance. However, English posed a challenge for him. "Whenever we start a new project, I was anxious to speak with our foreign colleagues," he explains. When the office announced a vacancy for an operations trainer position, he challenged himself to apply. He knew that the role would enhance his confidence and English skills and provide good practice for a teacher-in-training. Thongkhoun successfully held this position until 2011 when he graduated from university. He felt accomplished seeing operators apply the computer and technical skills he instilled in them. The fresh graduate had a newfound confidence in his skills and college diploma. "I knew that having a college degree would make it easier for me to find a job," he recalls. And he was right. He was immediately hired as an English teacher at Souksavath College.

Today, Thongkhoun juggles two roles at the college: a teacher and an accountant in the administrative department, and two roles at home: a husband and a father to a young daughter. The time management skills he learned at DDD have helped him balance work and family. “I earn more than \$300 per month from work, which is enough to support my family,” he claims. Now certain about his capabilities, Thongkhoun aspires to earn a master’s degree in Education and to move up to a management role to better finance his daughter’s education. “I want her to have the opportunity to have a college degree and a better life, just like I did.”

### **7.3 Maureen Chebet: A Trailblazer, Female cloud engineer**

Prior to joining DDD, Maureen grew up in a rural village about six hours from the Kenyan capital. As a school chef, Maureen’s mother cooked for the students but she wasn’t able to feed her own family. Family salaries went to pay for Maureen and her siblings to attend school. By the time Maureen was 18, she was working in retail to pay for her and her siblings’ school fees, but college was just too expensive. As a young girl with big dreams, she comes from a village where men are given first priority to education. She saw some of her friends being married off but she resolved not to go down that road. To avoid this, she began working in shops selling clothes to make ends meet.

After learning about DDD from her siblings, Maureen was accepted and began working as a data operator. She was taken through typing tests sessions and transcription training that was needed to perform the tasks. A year later she joined a university and was also able to support her family from her monthly salary. Like all youth who join DDD, Maureen was first trained in DDD’s proven curriculum of Business, English/Employability, Soft skills, and Technology (BEST).

Since joining DDD, Maureen has been able to work in various projects requiring different technical skills, which included data entry, data conversion and clerical work. DDD further supports its employees with scholarships and loans to attend local universities and pursue the degree of their choice. Upon graduation, youth are supported to pursue careers in the local economy or advance to management positions within DDD. In Maureen’s case, she was selected among the pioneers of DDD’s Kenya Cloud Academy.

The Cloud Academy was launched in January 2017, with the goal to train underserved youth in cloud competencies and skills that are globally credentialed and certified - thereby providing a pathway towards next-generation, sustainable jobs in cloud computing and certification program, mission and impact numbers. Even at this point, DDD’s focus was to have at least 50% of the academy as women.

The Academy was recognized (December 2017) at the world-famous AWS re:Invent conference in Las Vegas, Nevada. This was an opportunity for Maureen to travel abroad for the first time and an eye-opening moment for her to meet and interact with people having the same interest as herself. Maureen has overcome social barriers in Kenya to pursue her dreams of an IT career and help support her family.

Now a Cloud Computing Engineer, she is responsible for providing cloud computing expertise to clients that require the deployment of their workloads in the cloud. She says, “Technology industry is male-dominated, but we all have potential and capacity regardless of gender”. We need to widen our empowerment channels to support women who want to venture into technology.

## **8 A TRIPLE BOTTOM LINE: THE IMPACT OF OUR BUSINESS**

As an Impact Sourcing company, DDD delivers work to socially responsible customers who value-creating social impact. In many cases, our work products themselves have an impact, beyond the benefits to the youth in our program. Below are just a few examples.

### **8.1 African Law Library**

The African Online Library on Law and Governance ([www.africanlawlibrary.net](http://www.africanlawlibrary.net)) is an innovative online portal available free of charge to all those interested in African law and governance. The library is a product of the African Innovation Foundation and it aims to be the leading online source for African law and governance and to improve access to modern and customary law texts, other legal documents plus secondary sources in the continent of Africa. The website focuses on visibility, access, knowledge, education and consolidation of the systems of law existing in African countries. It does this by putting online downloadable, printable, multilingual-legal texts, selected court decisions and secondary literature for free.

DDD partnered with the African Innovation Foundation through Globethics.net Foundation based in Geneva, Switzerland, which serves as the implementing partner for the African Law Library. Globethics.net specializes in sharing information on ethics especially for developing and emerging countries. DDD's role was to digitize the laws and other documents from different countries in Africa so that they are ready to post in the library. DDD is proud to play a key role in making this information freely available to all.

### **8.2 AWS Cloud Academy**

In order to provide information technology (IT) training to underserved Kenyan youth, DDD collaborated with Amazon Web Services (AWS) to facilitate upward economic mobility and promote gender equality in the region. As part of this relationship, AWS provides certifications to graduates of which 50% are women.

The AWS cloud Centre has qualified a team of 30 SysOps and DevOps Engineers to take care of high availability, scalability and security for client's Infrastructure and Applications. DDD is now the only AWS accredited training partner in the East & Central Africa region.

DDD also partners with AWS Managed Service Providers (MSP's) to extend their delivery capabilities with access to high quality trained and certified engineers at scale and de-risk their service model at a very low total cost of operation.

### **8.3 Tuol Sleng Genocide Museum**

The Tuol Sleng Genocide Museum, a Cambodian high-school-turned-prison by the Khmer Rouge in 1975, is a memorial and educational center. The Museum's Archives are the largest and most complete record of the Khmer Rouge actions against the citizens of Cambodia during the reign of Pol Pot. The Tuol Sleng Genocide Museum (TSGM) Archives were inscribed into UNESCO's Memory of the World Register in July 2009.

The museum wanted to preserve and digitize their collection of over 400,000 documents, containing hand-written notebooks and photographs. UNESCO and the Korea International Cooperation Agency (KOICA) provided funds to digitize the Museum's archives. With oversight of preservation experts at UNESCO, DDD undertook an extensive project to (1) preserve the collection, assessing and improving conditions for optimal digitization, (2) digitize and index the collection, (3) create a database in English and Khmer, (4) build the

website to host and disseminate educational resources, and (5) capacity building to train the museum staff to continue preserving the collection. This unique archival collection of materials is mostly paper-based with the main exceptions being the photograph and negative collections along with the microfilm reels, which are themselves a copied rendition of documents and photographs. The Archives are located in rooms where previously prisoners were held and there is evidence throughout the digitization room of its former prison state including cell numbers on walls. Throughout the digitization project, there are stories being told: a story of a prison and a dark period in Cambodian history; a story of a digitization project and its team in a developing country; and within in the digitized materials, stories of thousands of souls.

The challenge was to create a digitization capture and processing solution that was both high quality yet straightforward and simple enough for a team with no skills in digitization or preservation to learn. A Canadian preservation expert was engaged to train the team on the most critical skills in order to achieve maximum quality and production results in a very short time.

Cultural heritage digitization is a link that brings past, present, and future together; and this TSGM Archives digitization project is about exactly that. When it is finished, a website for hosting the TSGM Digital Archives will be created with some form of crowd-sourcing capability. In Cambodia, where about 70% of the current population is below 30 years old, the culture is more future-oriented. The TSGM Digital Archives website will help involve Khmer people, especially the younger generation, to be actors of their history as “citizen archivists”.

#### **8.4 National Museums of Kenya**

The National Museums of Kenya (NMK) hosts the largest record of human cultural evolution in the world, including over 5 million artifacts dating back to 3 million years old. NMK sought to preserve, digitize, and educate the world about its unique collections.

DDD, Amazon Web Services (AWS), and Intel undertook an extensive project to (1) digitize and index the archive by scanning and uploading 3D images of museum artifacts, (2) create a database of the technical metadata for a digital archive, and (3) build and host a virtual museum experience for the public, while providing access to the rarest of materials and artefacts to the research and academic community. So far, NMK has digitized 10,000 artefacts and can provide access to its digital collections to anyone anywhere in the world who is interested via an engaging virtual experience. The virtual museum in that sense serves as an education outreach platform.

#### **KEY LEARNINGS**

Based on our 18-year experience in South East Asia and 9 years of experience in Kenya, here are a few of the lessons learned:

While many organizations are attracted to the social enterprise model for the potential to reduce reliance on donors and to be more sustainable – and this is a strong advantage – there are other even more powerful advantages.

- By working in a business, young women learn the skills they need to succeed – teamwork, quality and deadlines – in a live environment and see the impact of their actions. It’s also important to equip them with life skills which will help them in and out of the workplace with problem-solving and teaches them responsibility and



accountability. Through ongoing mentorship, coaching and alumni follow-up, they become more confident in the program and beyond.

- The organization's model is constantly subject to the market's feedback: are we teaching skills and producing services that are valuable to our customers? Through constant feedback, we will ultimately be valuable in the marketplace for our employees and generate more impact.
- For us to make an impact and attract young women, we need to keep up with cutting-edge technology and encourage innovation throughout the organization. It's for this reason that we have expanded our services to cloud computing, machine learning and artificial intelligence.
- The focus on women cannot be overemphasized. Having more skilled working women has proven not only to bridge the skills gap but also to boost the economic situation of their families, communities and country as a whole as such the impact is felt and becomes sustainable
- A market-dependent business also has challenges. There will be ups and downs as client demand increases and reduces, and as employees learn while working.
- There is a lot the private sector can learn from social enterprises especially with regards to women empowerment: while a company only has to focus on its financial bottom line, a social enterprise has to balance often competing goals – financial success and social impact. Handling complex challenges affecting young women such as domestic violence and mental issues – and often contradictory goals – is a core skill needed for success in making an impact.

## CONCLUSION

As a mission-driven social enterprise, DDD's aim is to create meaningful employment opportunities to help young people unlock their potential, develop their skills – and create better futures for themselves and their families. DDD frequently reflects on how it can best help the youth it serves.

While creating jobs is essential, providing work alone is not enough to support young people in moving out of poverty. DDD's young employees need a path to develop themselves, a means to build skills and capabilities for the long run. DDD offers an intensive work-study program that allows youth to grow as they learn basic skills, develop technical capabilities and earn degrees that enable them to secure professional jobs when they graduate from its program. As a result, they and their families emerge from poverty. DDD has increased the projected lifetime income of the youth with whom it works by more than \$200 million. DDD's Impact Sourcing model is clearly successful – many other organizations champion this model, including a nearly \$100 million initiative by the Rockefeller Foundation, called Digital Jobs Africa.

With more than 18 years since DDD was founded, DDD recognizes and celebrates the achievements of women at DDD and hope to further dissolve barriers to socio-economic gains for motivated, driven and intelligent youths in regions that lack the opportunity for them to realize their potential. DDD continues to track the progress of the young women who have graduated from its program. These young women are moving up the career ladder, occupying middle and top management positions and earning more in professional jobs

beyond what they ever imagined. They are leaders in their own right and an inspiration to their communities.

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