### PROJECT INFORMATION DOCUMENT (PID)
#### APPRAISAL STAGE

Report No.: PIDA4693

<table>
<thead>
<tr>
<th><strong>Project Name</strong></th>
<th>JM Youth Employment in Digital and Creative Industries (P148013)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td>LATIN AMERICA AND CARIBBEAN</td>
</tr>
<tr>
<td><strong>Country</strong></td>
<td>Jamaica</td>
</tr>
<tr>
<td><strong>Sector(s)</strong></td>
<td>Public administration- Education (25%), Information technology (25%), Other social services (50%)</td>
</tr>
<tr>
<td><strong>Theme(s)</strong></td>
<td>Other social development (50%), Social Inclusion (50%)</td>
</tr>
<tr>
<td><strong>Lending Instrument</strong></td>
<td>Investment Project Financing</td>
</tr>
<tr>
<td><strong>Project ID</strong></td>
<td>P148013</td>
</tr>
<tr>
<td><strong>Borrower(s)</strong></td>
<td>Government of Jamaica</td>
</tr>
<tr>
<td><strong>Implementing Agency</strong></td>
<td>Ministry of Science and Technology</td>
</tr>
<tr>
<td><strong>Environmental Category</strong></td>
<td>C-Not Required</td>
</tr>
<tr>
<td><strong>Date PID Prepared/Updated</strong></td>
<td>28-Mar-2014</td>
</tr>
<tr>
<td><strong>Date PID Approved/Disclosed</strong></td>
<td>02-Apr-2014</td>
</tr>
<tr>
<td><strong>Estimated Date of Appraisal Completion</strong></td>
<td>25-Mar-2014</td>
</tr>
<tr>
<td><strong>Estimated Date of Board Approval</strong></td>
<td>22-May-2014</td>
</tr>
</tbody>
</table>

**Decision**

The Appraisal of the proposed Youth Employment in Digital and Creative Industries Project was held on March 25, 2014. The appraisal of this Track 1 operation was conducted in accordance with guidance and decisions conveyed at the Quality Enhancement Review of February, 20, 2014. The appraisal was completed satisfactorily with no major changes to the project. The appraisal of the project demonstrated a high state of readiness. The fiduciary assessments have been completed and no particular issues were raised regarding the Procurement Plan.

## I. Project Context

### Country Context

Jamaica, the largest English speaking country in the Caribbean with a population of 2.7 million (2011), is an upper middle income country with a long history of low growth and high public debt. The country’s progress on poverty reduction and shared prosperity has been hampered in the recent past largely due to economic shocks that were amplified by structural weaknesses in the economy. For the past 30 years real per capita Gross Domestic Product (GDP) increased at an average of just one percent per annum, making Jamaica one of the slowest growing economies in the world.
Nevertheless, Jamaica made significant progress in poverty reduction during the early part of the past decade. Between 1997 and 2007 the poverty rate fell from 19.9 to 9.9 percent, and while overall inequality remains relatively low compared to the rest of the region, people at the bottom 40 percent of the income distribution have suffered more than the average household. Recent years, however, have witnessed the erosion of these earlier gains in poverty reduction and rising inequality with poverty sharply increasing to 17.6 percent in 2010 (see Figure 1). In the Kingston Metropolitan Area (KMA), poverty rates doubled in two years, from 7 percent in 2008 to 14.4 percent in 2010. Unemployment has also substantially increased (from 9.7 percent in 2007 to 16 percent in 2013). Youth unemployment is particularly worrisome, as 38 percent of young women and 25 percent of young men were unemployed in 2010.

Economic difficulties in Jamaica disproportionately affect the bottom 40 percent of the population, where food consumption accounts for over 50 percent of expenditures. The consumption level of the bottom 40 percent of Jamaica’s population, which had improved from 16.7 percent to 17.8 percent between 2001 and 2007, fell slightly to 17.3 percent in 2010. Jamaica was hit hard by the global economic crisis, as tourism and bauxite revenues plummeted, foreign direct investments and remittances declined and the economy contracted by 1.2 percent on average per year between 2009 and 2011. As in many other small open economies, economic recovery has been subdued. Moreover, Jamaica faces extreme difficulties in improving its debt situation.

In the current economic environment, Jamaica faces several important challenges to reverse the recent surge in poverty levels and ultimately eradicate extreme poverty and boost shared prosperity. Committed to restoring growth and building an inclusive prosperous Jamaica, the Government of Jamaica prepared and garnered local and international support for a comprehensive program of fiscal adjustment and structural reforms. In May 2013, the Government of Jamaica embarked on an ambitious reform program which obtained the support of the International Monetary Fund (IMF) through an Extended Fund Facility for Special Drawing Rights of 615.4 million (about US$932.3 million) for the period of April 2013 to March 2017. The Program, which supports debt restructuring, fiscal consolidation, and financial sector reforms, has remained on track, with the third review successfully completed in March 2014.

In spite of what may at first appear as a grim scenario, the animation industry, the online labor market and the boom of the app economy can generate significant employment opportunities for Jamaican youths. Over the past three years, the World Bank has been engaged in Jamaica through initiatives such as Digital Jam and KingstOOn, catalyzing a number of players and creating a momentum for the development of the digital and animation industries. Concrete results from these initiatives have already started to emerge, including a number of important contracts signed by Jamaican animation studios. The expansion of production pipelines requires significant numbers of professional people to be employed immediately in such studios, providing new job opportunities for youths. Similarly, Digital Jam 2.0 and 3.0 has seen the emergence of new tech startups in the app economy (MeAGo, Pothole Positioning System, Trivial) and the hiring of many of the winners by local companies.

**Sectoral and institutional Context**

Notwithstanding the recent global crisis, the “app economy”, the “virtual labor market”, and the animation industry have been growing and continue to grow substantially. According to leading international animation companies, there is a demand gap of about 30,000 animators in the
outsourcing of animation production – of which about 5,000 could possibly be sourced in the
Caribbean. Jamaica has a comparative advantage in both the digital and creative industries vis-à-vis
other global competitors. It is close to major markets, it can operate in the same time-zone, English
is the working language, and cultural norms and tastes are close to those of consumers in the large
markets of the Western hemisphere. Finally, the large youth population presents a great potential,
especially given the high levels of creativity they have demonstrated in multiple fields.

The virtual economy offers new opportunities for unemployed and underemployed youths in
Jamaica. Jamaica’s unemployment is driven by slow economic growth rather than lack of skilled
labor. In fact, a large percentage of unemployed youth have high school and college degrees. The
online market presents a unique opportunity for Jamaicans and a “safety net” from local economic
instability. Via the virtual economy youths can access employment opportunities globally, a
solution that is attractive for small island states where the size of the local market hinders growth
and job creation. Online employment provides opportunities for both high and low skilled youth.
Such opportunities have been growing in the form of “crowdsourcing” (online collaboration to find
solutions for large projects launched by companies, often involving tasks that are broken into
component parts), “microwork” (a crowdsourcing platform where users, often in emerging markets,
do very simple small tasks for which computers lack aptitude for low amounts of money), and “e-
lancing” (professional services offered via online portals for clients around the world). The number
of Jamaicans currently participating in global online work is significantly below its potential.
Addressing barriers to entry (particularly access to methods of payment) and exposing Jamaican
youth to the various global platforms for online work will bring in additional foreign exchange and
desperately needed jobs. By taking advantage of new opportunities in the virtual economy, and
leveraging its strengths, Jamaican youth can bypass limitations of national labor market boundaries
and access the global market place.

Opportunities in the animation industry. At an annual growth rate of roughly 9%, the global
animation industry is valued currently at roughly US$220 billion. As animation skills are
transportable, any individual with animation skills can service clients remotely. Leading companies
in the industry (Disney, Nickelodeon, Sony Imageworks, Film Roman, and Bento Box) focus on the
Pre-Production (script, character development and storyboarding) and Post-Production (music, final
editing) phases of the pipeline, while the Production phase (animation) is outsourced to countries
like India, the Philippines and Korea. The growing middle classes in these countries demand more
and more locally developed Intellectual Property [IP] content and products. The local animation
industry has consequently shifted its attention to the development of local content to the detriment
of production outsourcing for large overseas clients. This provides an opportunity for countries like
Jamaica - with its language, cultural affinity and close proximity to western markets - to fill this gap
and assume an important role in the outsourcing of animation.

Jamaica’s animation industry is attracting attention from global players. Jamaican companies have
received an increasing number of expressions of interest for contracts from international companies.
With the appropriate training (for many tasks, just 3 months will suffice) and infrastructure
(physical space, hardware or software), a large number of youths with creative talent are easily
employable. Given the low entry barriers into the profession, a significant number of youths can be
from Inner-City communities (corresponding to the bottom 40% in economic and social terms). In
fact, roughly 80% of animation work today is based on 2D platforms which do not require formal
degrees. Graduates with stronger backgrounds will have the opportunity to participate in the
growing field of 3D animation and special effects, requiring more sophisticated training and
offering more lucrative salaries.

Animation is labor intensive and provides a good fit with youth aspirations. A typical series involving 26 episodes, each with 22 minutes production, requires about 100 staff over a six month period in as many as 40 different skills areas. Data from the Overseas Examinations Commission reveals that between 2008 and 2012 over 2,500 students in Jamaica have received grades in the Visual Arts that would qualify them as entry level potential trainees for animation studios. Extending the age range to include persons up to 30, the number swells to close to 8,000 people. Industry leaders have expressed regret that only a handful of these thousands of qualified potential employees receive the appropriate training, and have stressed that if appropriate resources were spent on training, a high number of these potential young animators can be employed immediately. Paradoxically, some studios may have to resort to hire animators outside of Jamaica in the short term to fulfil contractual obligations with their global clients.

In June 2013 the KingstOOn initiative brought to the fore the potential of the animation industry in Jamaica. Such potential has been recognized by a multiplicity of partners in the national and international private sector, the financial sector, and the media world. Important initiatives have followed the realization of KingstOOn and are delivering concrete results on the ground in terms of new contracts, training opportunities, collaboration with international players, and new jobs for youths.

The startup ecosystem in Jamaica is in its early stages of development and it is predominantly dominated by tech entrepreneurs. Companies such as Connectimass and Slashroots have been pioneering this field by organizing periodic events such as Kingston Beta, Caribbean Beta, and more recently Startup Weekends. With Digital Jam 2.0 in 2012, that community has become significantly bigger (at Digital Jam 2.0 alone 450 youths submitted concepts for the mobile app competition), and is increasingly incorporating non-“techies”. More recently, the Bank in collaboration with the Government of Jamaica, the Caribbean Development Bank and the OECS Secretariat launched Digital Jam 3.0. The initiative included an app development competition with 720 people from across the Caribbean enrolled. Sixty-eight teams competed in the final stages, and attracted the interest of investors and large ICT companies in the region. In particular, recent consultations with private sector companies and high net-worth individuals in Jamaica have demonstrated the willingness to establish a formal network of “angel investors” to provide capital to tech startups. A first roundtable discussion on this issue was held at Digital Jam 3.0 in March 2014, and it represented a major move for the development of a viable ecosystem in the tech entrepreneurship world.

Opportunities to develop Science and Technology Innovation. Structural shifts in the global economy have given rise to the need to harness both technological and non-technological innovation for economic growth. The critical role of Science, Technology and Innovation (STI) is further underscored in the light of the Millennium Development Goals which are considered attainable as a consequence of the leap frog effect which STI affords. Jamaica has a commendable history of providing scientific and technological research for use in both local and international industries. However, commercializing STI remains a challenge and even more so developing a culture of STI entrepreneurship. Jamaica faces the challenge of creating more linkages between R&D+I actors and investors in order to leverage the commercial potential of innovations.

In order to address the pressing unemployment rates Jamaica is experiencing, the proposed
operation will be implementing a double-strategy of: 1) improving skills for accessing opportunities in the virtual global economy to foster employability and entrepreneurship, and 2) supporting the growth of a viable ecosystem for youth-led startup enterprises with a focus on the digital and animation industries. Employment, in the context of this operation, will be thus defined as more than “jobs,” including various forms of online work (e.g. by task, part-time, etc.) as well as self-employment. New income opportunities for youths will translate also in poverty alleviation for their families, especially those coming from underserved areas (such as inner-cities environments) where employment options are very limited.

This operation will also impact Jamaica’s economy in terms of growth, business development and competitiveness improvements. Startups would inevitably require an increasing level of services including legal, accounting, software design, IT support, security, and construction/maintenance of physical space. A proposed downtown location for the new Startup Jamaica Hub will complement the Government of Jamaica’s efforts of revitalizing this key section of Kingston, and will have spillover effects into the local economy (for example: visit to local restaurants, shopping, transportation, and the presence of people in the streets through the late hours, providing a stronger sense of security).

II. Proposed Development Objectives
The Proposed Development Objective for this operation is support youth employment in the digital and animation industries in Jamaica.

III. Project Description

Component Name
Skills and capacity to enhance employability and entrepreneurship

Comments (optional)
This component will build capacity and skills of Jamaican youths to improve employability in the growing animation industry and in the global online labor market, and provide critical skills to young tech entrepreneurs to bring ideas to market.

Component Name
Establishment of Startup Jamaica Hub

Comments (optional)
This component makes provisions for the establishment of a physical hub to strengthen a viable tech entrepreneurship ecosystem. The physical structure and the connectivity aspects of the hub will be provided by private sector companies that have offered such contributions free of charge for the life of the project. MOUs will be signed with the Jamaica National Bank (JNBS) and LIME respectively. In addition, this component will be implemented in partnership with OASIS500 - an accelerator based in Amman, Jordan – that will provide seed funds for startups accepted into the accelerator program. An MOU will be signed with OASIS500 to that effect.

Component Name
Early stage investment for tech startups

Comments (optional)
This component will double the annual amount of private sector investment in early stage growth companies by: 1) establishing and supporting the growth of a vibrant angel investor network; 2) studying and promoting the use of royalty-based equity loans; 3) studying and supporting the establishment of pre-purchase and equity crowdfunding platforms; 4) establishing a government
sidecar fund to co-invest with private sector early stage investors; 5) a public awareness campaign on early stage investments; and 6) a targeted program to build trust networks among investors and early stage companies.

**Component Name**  
Support to Science, Technology and Innovation  
**Comments (optional)**  
Activities under Component 4 focus on supporting researchers with entrepreneurial aspirations who have developed an R&D+I applications that have a commercial potential. This support will be provided by identifying the potential entrepreneurs through calls for innovations and by incorporating the selected applicants into the incubation and acceleration services (Stages 2& 3) of the hub.

**Component Name**  
Project Administration  
**Comments (optional)**  
This component will support program management through inter alia: a) carrying out the financial management and procurement requirements under the project; b) monitoring and evaluation of project activities; c) providing equipment and training for the Project Implementation Unit (PIU); d) hiring a dedicated management team that includes a project manager, and two technical specialists (animation and tech entrepreneurship); and e) financing operating costs.

### IV. Financing (in USD Million)

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Project Cost:</strong></td>
<td>20.00</td>
</tr>
<tr>
<td><strong>Total Bank Financing:</strong></td>
<td>20.00</td>
</tr>
<tr>
<td><strong>Financing Gap:</strong></td>
<td>0.00</td>
</tr>
<tr>
<td><strong>For Loans/Credits/Others</strong></td>
<td></td>
</tr>
<tr>
<td>Borrower</td>
<td>0.00</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development</td>
<td>20.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>20.00</td>
</tr>
</tbody>
</table>

### V. Implementation

**Institutional and Implementation Arrangements**  
The implementing agency for this project will be the Ministry of Science, Technology, Energy and Mining (MSTEM). MSTEM, has a good track record in implementing an on-going World Bank energy project and has the institutional capacity to adequately address fiduciary issues to meet World Bank and Government of Jamaica requirements. Additional staff will be hired for the purposes of this operation to ensure effective management of an increased portfolio and taking into consideration lessons learned. Additional staff will include: a) a dedicated project manager; b) a technical person with strong skills in the tech and animation industries, c) a procurement specialist; and d) a financial management specialist. These additional professionals will be hired at the beginning of the project, and draft TORs will be finalized by appraisal.

MSTEM has been proactive in working with the Bank to implement innovative solutions for employment generation in Jamaica. The ministry was a key player in the successful implementation of national and regional events such as Digital Jam 2.0, Digital Jam 3.0, and KingstOOn. Through its engagement in those activities, MSTEM demonstrated its commitment to the goals of the
proposed operation and conducted outreach to the more marginal communities.

In addition to MSTEM, the following stakeholders will be associated in the implementation of the proposed operation: Development Bank of Jamaica (DBJ), University of the West Indies (UWI), Creative Production and Training Center (CPTC), and the Human Employment and Resource Training Agency (HEART Trust/NTA). The operation will also be implemented in partnership with private sector entities, including the JNBS Group, LIME, and OASIS500. These private companies will provide in-kind contributions to the project as well as capital to finance startups. A detailed description of each entity and their respective role in the project is contained in Annex 3.

This project will be implemented in collaboration with private sector stakeholders. The physical space for the hub (Component 2) will be provided by the Jamaican National Building Society Group free of charge for the duration of the project. Connectivity at the Startup Jamaica hub will be provided by LIME free of charge for the life of the project. Management services will be provided by the Development Bank of Jamaica for the first year of implementation. These and other smaller contributions from other stakeholders (e.g. furniture) will allow the project to begin implementation immediately after Board approval (estimated implementation beginning in July 2014). Procurement of goods and services for the first year will be limited to some goods (hardware and software licenses), and consulting services under US$ 200,000. These arrangements will facilitate a speedy transition from design to actual implementation of the project and disbursement.

Results Monitoring and Evaluation
Overall responsibility for monitoring and evaluation of the Project will lie with MSTEM, which will consolidate all reports and provide information about the progress and project execution to the Bank, including qualitative and quantitative information on the execution of selected interventions, procurement and contractual decisions, accounting and financial recording, progress of outcomes, outputs and monitoring of indicators, as well as other operational and administrative matters. MSTEM’s Monitoring and Evaluation Unit will be assisted in the overall process by other institutions involved in the execution of the Project; Hub Management, DBJ, HEART, UWI, CPTC and specialized consultants, as required. The Project Operational Manual will provide specific details regarding monitoring and evaluation responsibilities, including data collection requirements, timing and use of the information. The Results Framework is presented in Annex 1 and details on the monitoring and evaluation arrangements are provided in Annex 3.

Sustainability

This project stems from a multi-year engagement with the Government of Jamaica consolidated via the KingstOOn and Digital Jam initiatives. Such initiatives have generated interest in Jamaica, in particular because of the involvement of many stakeholders in the public sector, the private sector, academia, and the media. At multiple times in the last few years the Ministry of Finance (in addition to the MSTEM, MIIC, MYC, DBJ and JAMPRO) has shown support for these initiatives by actively participating in multiple events, and has endorsed this project as an important milestone for Jamaica’s economic growth, job creation and poverty reduction.

Development of a tech entrepreneurship and animation ecosystem: A key aspect to ensure sustainability of this operation will be to set in motion the various components of an entrepreneurial ecosystem (see Annex 7 for definition). This will enable a high ROI for the training elements of this project. In order to develop an enabling environment, the operation will put in place a Startup
Jamaica Hub, the establishment of an Angel Investment Network and a crowdfunding platform linked to the two industries supported by this operation, as well as the institutionalization of training program for aspiring animators at various Jamaican educational institutions. These activities will encourage the organic growth of an ecosystem.

Positioning Jamaica as a regional hub: The Startup Jamaica Hub will put in place enabling mechanisms to allow Jamaica to attract regional and international talent. In particular, the partnership with OASIS 500 will provide an opportunity to attract to Jamaica some of the highest talents from other Caribbean islands as well as beyond the region, and enter world-class networks of mentors and support services to raise the overall quality of tech entrepreneurship on the island and in the region.

Institutionalization of animation training programs. The operation will build on existing programs to teach animation skills and bring those to the necessary international standards and quality. Close collaboration with global animation companies and educational institutions (as already started at KingstOOn) will ensure that training programs are effective in preparing students to the real challenges of animation production, in particular by collaborating closely with existing studios and animation projects.

Engaging key partners. The following stakeholders will be engaged through the life of the project to ensure sustainability of the operation.

- Private Sector companies: the private sector - both as investors and as employers - will be key to the sustainability of this operation. The Startup Jamaica Hub will be managed by a private sector operator, and selected private sector stakeholders will sit on the steering committee for the Startup Jamaica Hub. The Private Sector will also continue to sponsor yearly events and activities.

- Diaspora Community & High Net Worth Individuals: the operation will aim to engage High Net Worth individuals in Jamaica and in the diaspora for the establishment of an Angel Investor Network and a crowdfunding platform.

- International accelerators: the design of this operation has benefited from substantial contributions from world class accelerators including Startup Chile, SkyDeck Berkeley, OASIS 500 Amman, 500Startups and Mind The Bridge in the Silicon Valley, iStrategyLabs in Washington, DC, VentureHive Miami. Collaborative arrangements will be continued throughout the life of the project to facilitate access for Jamaican startup companies to such world-class programs, and to source mentors and trainers for activities to be carried out at the Startup Jamaica Hub in Jamaica. These partnerships will significantly raising the profile of the hub and contribute to its establishment as a legitimate global center.

- International animation companies and universities: key partnerships established during KingstOOn with companies such as ToonBoom, BentoBox, Mattel, as well as with US and Canadian universities such as Sheridan College, Columbus College of Arts and Design, Capilano College and Seneca College will be continued to ensure the highest quality of training programs for professional animators. Again, international partnerships will play a critical role in certifying programs and raising the international visibility of Jamaica in this field.

Sustainability of the Startup Jamaica Hub after project completion. The agreement with JNBS for
the provision of the building free of charge spans the life of the project. At the end of the 5-year period, the Government of Jamaica will have the possibility of renewing the agreement with JNBS. Alternatively, the Government of Jamaica has already identified another physical space (called Machado Building—formerly used as mail distribution center) to be housing the Startup Jamaica Hub. The building is already the property of the Government, no land acquisition and/or resettlement will be needed, and is currently being refurbished by the HEART Trust.

VI. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Forests OP/BP 4.36</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Comments (optional)

VII. Contact point

World Bank
Contact: Fabio Pittaluga
Title: Senior Social Development Specialist
Tel: 458-9367
Email: fpittaluga@worldbank.org

Borrower/Client/Recipient
Name: Government of Jamaica
Contact: 
Title: 
Tel: 
Email: 

Implementing Agencies
Name: Ministry of Science and Technology
Contact: Ms. Kaydian Smith
Title: Principal Director
Tel: 1-876-929-8990
Email: ksmith@mstem.gov.jm
VIII. For more information contact:
The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop