GESCI-AKE Creative Media Venture 2016-2017
Living Lab Research Component

FINAL REPORT - MARCH 29 2017

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The photographs in this report are from “AKE 2016 - 2017 Creative Media Venture” Living Lab.

https://gesciakemediaventure.net/

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Executive Summary

This report highlights the key insights learned from the GESCI-African Knowledge Exchange (AKE) - Creative Media Venture training program of 2016-2017 that combines culture and digital media technology.

Conducted via a collaborative Living Lab research project, the purpose of this research has been to continue the study of a previous GESCI-AKE research (2014-2015) that sought to pinpoint core content elements of innovation in the space of creative-entrepreneurial education. This research, conducted by questionnaires, interviews, and formal and informal observations and participation by practitioners, instructors, and industry representatives, has focused on the implementation and modelling of such training.

The research brings forth a model that combines innovation and education, and that fosters creativity, skills, as well as leadership qualities and entrepreneurial knowledge. It includes three core elements: 1) Foundation (incl. Participant-centeredness; Cultural competence; Holistic approach) 2) Process (incl. Flexibility; Teamwork; Networking, Partnering and Follow up; and 3) Structure and Organization (incl., Space, Infrastructure, Coordination and other best practices, Continuity, and Intellectual Property).

The report details these elements as emerging from the research and as being realized in an emerging model. It also highlights further strengths and opportunities for such model, including unique branding and focus on social entrepreneurship.
1. Introduction: Creative Industries and Youth Employment in the Kenyan Context

Global Context: Entrepreneurial Education for a Changing World

GESCI is pioneering an innovative training and enterprise program model combining culture and digital media technology dubbed ‘African Knowledge Exchange (AKE) - Creative Media Venture’.

(...) The program addresses the changing global jobs and employment environment driven by new technologies in the context of growing youth unemployment.¹

The context of the GESCI-AKE projects is rooted in the ongoing, urgent, and increasingly global, concern of sustainable future of work for the world’s youth. The topic has in recent years sparked debates, fuelled research, as well as inspired a vast array of projects that seek local solutions to this systemic problem.

One challenge is that digitalization and related Innovation progress quicker than government policies. Education has not (yet) responded adequately to the new demands and challenges. Few technologists are devoting time in understanding global structural inequalities, or building tools together with different communities, to ensure applicability and effectiveness of new technologies.² While mobile leapfrogging and great innovations especially in banking and healthcare are making a difference in lesser developed regions in the world, there exists a hidden digital divide, comprised of things like the speed of internet connection, or the rapid development of hard and software in the developed countries that the rest of the world cannot match. The predicted disruption in the nature and markets for work in the next decades will most likely hit the most vulnerable populations the hardest.³

However, according to the Foresight Alliance⁴, one the key solutions to the challenges is that higher-income and lower-income countries learn from one another about best practices in policies, flexible institutions (including education), and formal-informal

¹ http://gesci.org/our-work/youth-skills-enterprise/african-knowledge-exchange-ake-program/
³ Ibid.
work. In essence, this knowledge exchange is not between countries but between people. “Center the experiences of those at the margins of the economy,” stresses the Open Society Foundations in its recent report on the Future of Work. Today’s underdeveloped markets bear greatest potential. This is one of the main reasons for developing not only a concrete educational program, but to develop, and diffuse a model that others can adapt and build upon.

The potential is not only economic but has a ripple effect in terms of all forms of sustainable development. As the United Nations Industrial Development Organization has recently highlighted, the use of innovative technologies as well as the use of information and communication technologies in the attainment of higher levels of social, economic and environmental development have gained increasing importance, and as such are key to the achievement of sustainability. Such technologies have shown to harbor immense potential in generating the necessary momentum for broader action towards the achievement of the United Nations Sustainable Development Goals, and in mobilizing the needed financial, technological and human resources. Even more, these technologies find resonance amongst the key drivers of inclusive and sustainable development, namely young social entrepreneurs. There is also heightened interest among African policymakers to unlock the employment potential of youth: New jobs in the region are unlikely to be generated by the public sector. Entrepreneurship is then viewed as an option for generating sustainable livelihoods. In fact, with their ability to adapt to changes and innovate, young people have the potential to drive tech-entrepreneurship and growth.

An important challenge thus remain to find models that show promise of being harnessed and leveraged to other sectors too.

GESCI-AKE’s training and enterprise model is thus in line with the trend that believes in local entrepreneurship as one of the most empowering, and cost-effective, solutions local systemic problems of youth employment.

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Regional Context: Creative Industries in East Africa

While it took 115 years of conventional banking to provide just over a 1,000 bank branches and 1,500 ATMs in Kenya, within 5 years of the launch of M-Pesa there were over 30,000 M-Pesa were operating in the country.\(^9\)

While GESCI-AKE is at the moment a Kenyan project, based locally in Nairobi, it is located in the region that exemplifies the (albeit contested, and contradictory\(^10\)) development sometimes referred to as “Africa Rising”. East Africa has undergone and is still undergoing a major digital revolution. Arguably, creative Industries play a key role in the economy\(^11\) -- and consequently, in innovation in East Africa.

A recent study by the British Council\(^12\) analyzes the reasons for that: 1) East African countries are set on a path to become middle income countries over the next 20 or so years; 2) The region is already one of the world’s creative and entrepreneurial hot-spots when it comes to utilising new technology and new platforms; 3) digital connectivity and infrastructure is a direct replacement for the physical infrastructure that the region lacks and mobile connectivity creates entirely new opportunities; 4) youthful demographic results in creative small start-ups; as well as 5) growing self-confidence and the realisation by young people that digital technology allows for self-expression and (potentially) means for reaching new markets.

There are, of course, also challenges, in Kenya and East Africa: While local markets are growing, lack in infrastructure, education, marketing channels, or policy support all hinder the development of digital creative industries.\(^13\)

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\(^13\) Ibid.
A SWOT analysis\textsuperscript{14} of East African Creative Industries, conducted by the British Council\textsuperscript{15} -- of its current strengths and weaknesses, as well as future opportunities and threats -- summarizes these trends and positions the approach by the GESCI-AKE program in the landscape in the region.

**Strengths:** Beyond the growing market, cultural distinctiveness, very strong traditions, and real flair across creative sectors including music, crafts, fashion, visual arts, film, define the centrality for creative industries for the economy in the region. In addition, rapid urbanisation re-creates cities as centers for talent and creativity. Digitalization has created proliferation of straight-to-digital business models across the region. It has also fostered a culture of collaboration across different sectors, disciplines and technologies. Finally, a sense of an emergent new world order and growing confidence in an African context.

**Weaknesses:** Cultural conservatism in the region can lead to an aversion to risk. There are limited opportunities for too many talented people. Weak creative education and low levels of entrepreneurialism, management and leadership are evident across the arts and cultural sector; plus low levels of literacy across the wider population. It also seems there is a tendency of replication over innovation. In addition, lack of policy support in the field of education but also inconsistent approaches to copyright weaken the region.

**Opportunities/Threats (if opportunities not taken):**
- Build capacity and confidence across the creative workforce
- Create digitally-enabled platforms which showcase and trade creative goods and services
- Nurture domestic and international markets for creative products and services. Even small growth creates many jobs.
- Establish a set of high profile networks of creative industries for information exchange
- Position the creative industries as value-adders across the economy in order to lift the quality and innovation potential of other sectors
- Improve the policy and regulatory landscape through capacity-building and guidance.


Focus on Kenya

A similar SWOT analysis of the Kenyan creative media ecosystem\textsuperscript{16} echoes the analysis of the region and gives a more detailed picture of the home country of GESCI-AKE in the above creative industries development and marketplace:

**Strengths:** Kenyan economy continues to grow rapidly. Kenya is also a regional leader in incubating innovation. It is no wonder that Kenya also attracts Interested international funders and partners: There is an ongoing interest of investing in incubating innovation from development organizations, multinational technology companies, and private equity firms, particularly, IBM, Google, P&G, Nokia, Huawei, Intel, and Microsoft.\textsuperscript{17} And the domestic market is growing.

**Weaknesses:** Lack of adequate institutional support for ICT infrastructure and services development, including multi-stakeholder networks. This is partly due to the speed of development that is difficult to meet, either by educational institutions, the government, or the creative companies themselves. Also, since the innovation investment is currently mostly short-term, Kenyan tech incubators are looking for sources of financial support. GESCI-AKE program is specifically building both educational capacity and networks of broader communities around its activities.

**Opportunities:** Changing consumer behaviour is one of the key drivers of change. This means multi-screen consumer behaviour, that is, increasing engagement of consumers with digital creative content and rise in consumers’ readiness to pay for content, through value-added apps and services for smart devices. Because of this foreign private equity investment has been shifting from fixed assets to services. Simpler monetary transactions, e.g., mobile payment platforms have helped, and will help digital entrepreneurs tremendously\textsuperscript{18}, and this opportunity in Kenya has yet to be seized. New education innovations that target entrepreneurship and entrepreneurial mindset will foster new opportunities.

\textsuperscript{16} See the detailed analysis, originally published here: \url{https://gesciakemediaventure.net/2015/05/12/4th-gen-3-swot-analysis-approach-to-kenyan-innovation-ecosystem/}


Threats/Challenges: Creative industries need to be taken seriously as economy boosters: Only focusing on ICT and mobile innovations and neglecting culture would be a threat to the field. This potential threat is recognized in the Comprehensive Kenyan Policy Vision 2030\(^\text{19}\) that has called for attention in upscaling ICT-based services, with the consideration of needs for cultural investment in education, youth, and gender equality. It also takes account showcasing culture and talent, as for examples with the project to establish an International Centre for Arts and Culture “geared towards development of the youth potential and to nurture talent with a view of empowering them economically”.\(^\text{20}\) The same vision is also a driving force for the key content focus of GESCI-AKE. Another challenge is the mushrooming of innovation projects that only target high-profile talents. This turns down a great amount of potential talents who lack qualifications and experience, even though they have passion for innovation and they learn the skills needed on their own. Again, GESCI-AKE is specifically geared to respond to the potential talent pool.

Form as Context: Innovation Hubs as Local Solutions to Global Challenges

The above description offers a background to the content and approach for GESCI-AKE. The core purpose of this research effort has been to give form to a model that would structure educational innovation efforts in the creative industries sector, with a focus on local cultural competence. The framework for such form comes naturally from the concept of innovation hub.

First, a hub is a tested framework: The rise of numerous entrepreneurial education projects, start-up incubators, innovation centers, and the like, is evident in the region.\(^\text{21}\) As the Figure 1. shows, East and South Africa are prominent hosts of such hubs. (In general, the number of technology hubs has doubled in Africa in less than a year, from 2015 to mid 2016.\(^\text{22}\))

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\(^{20}\) Ibid. See specifically: [http://www.vision2030.go.ke/projects/?pj=156](http://www.vision2030.go.ke/projects/?pj=156)


Second, as organizations, innovation hubs, programs, and training projects are creating value beyond their start-ups and products in multiple ways:\textsuperscript{24}

1. Through building a network for “collaborative knowledge exchange and research activities”, innovation hubs can help their stakeholders solve problems that they have defined, increasing the opportunities of co-creation innovation.
2. In order to maximize the benefits for those involved, innovation hubs should play a role in accelerating the communication between academia and industries and encourage highly interactive “two way knowledge exchange”.
3. By offering an environment to enhance the collaboration among people, innovation hubs would be able to support the economic, cultural and sustainable development for future generations.
4. Innovation hubs cannot only create communicating channels but also simplify the process of innovation by efficiently adopting existing knowledge, expertise and support from various stakeholders in order to make knowledge transfer spread widely.

At the same time, sustainability of training and innovation projects/programmes themselves is crucial in capacity-building for any field. As noted by UNIDO, based on its start-up programmes in the Global South: Ideas are plentiful but the absence of actual technical and business development support often stops innovative projects and startups after their initial seed funding ends.\textsuperscript{25} In addition to these points there is also a role for supporting policies and government programs that can strengthen local actions.

\textsuperscript{23} Ibid.


\textsuperscript{25} UNIDO Workshop on SDG 9 at the UN ECOSOC Youth Forum 30 January 2017 (Unpublished).
For the purpose of positioning GESCI-AKE, 14 innovation and training labs/hubs in Eastern and Southern Africa were surveyed.\textsuperscript{26} In the majority of cases, international funders, either countries and/or businesses, are key to the sustainability of these actors. This is also the result of a research effort on Kenya. However, many of these hubs have developed co-funding and other sustainability mechanisms. In general, it seems that the trend for sustainability for such hubs is that of social business, or the so-called Fourth Sector, or Social Business / Social Enterprise; models that include multiple sources and modalities of funding and sustainability.\textsuperscript{27} Consequently, as the British Council study on East African creative industries noted, many of creative industries start-ups, emerging from these hubs, also adhere to the social business -- non-profit meets for-profit -- models.

\textsuperscript{26} Horowitz, M., & Botero, A. (2016). GESCI-AKE in the ecosystem of edu-tech-biz - A concept note. The benchmark is available: https://drive.google.com/open?id=1h-aan4xrDx1VKM--JBnowqXcHYyb60cMgLXz4DC91GI.

2. The GESCI-AKE Living Lab Research Component and Research Instruments Used

Solution-oriented, participatory models such as Design Thinking and Living Labs have become common in product innovations, but also in curriculum development, policy-making, communication campaigning, and international development. The GESCI-AKE program has been using the method since 2014, in its training program The Sound of the City (2014-2015), and, as depicted in this report, in its program GESCI-AKE Creative Media Venture (2016-2017).

Designing a Model: Living Labs as Method of Innovation

A “Living Lab” (LL) is a design process model in which innovation happens hand in hand with research. Living Labs have become a key tool in creative industries as well as in policy-making because they have radically mixed the roles of those who innovate. They are about the co-creation, exploration, experimentation and evaluation of innovative ideas. They involve user or client communities, not only as observed subjects but as co-creators. 28

Living Labs are often used in a regional context, for example in developing policy solutions within a city. A LL integrates research and innovation processes within a triangular citizen - government - industry partnership. 29

Living Labs can also be used within companies to come up with new ideas and products. In corporate LLs, end-users and different experts of product research and development, technology, marketing and sales all work together throughout the product design and testing process. 30

Many different types of Living Lab environments exist: 31

1. Research Living Labs: focusing on performing research on different aspects of the innovation process.

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Available at: https://www.dropbox.com/s/sf957eiyy0xtpvb/Intro%20to%20LL%20method.pdf?dl=0.

29 Image: http://cii.ox.ac.uk/what-is-a-tech-innovation-hub-anyway/.

30 A collection of Living Lab literature can be found at: https://gesciakemediaventure.net/resources/

2. Corporate Living Labs that focus on having a physical place where they invite stakeholders (e.g. citizens) to co-create innovations.

3. Organizational Living Labs where the members of an organization co-creatively develop innovations.

4. Intermediary Living Labs in which different partners are invited to collaboratively innovate in a neutral arena.

5. Time-limited Living Labs that support the innovation process in a project. The Living Lab closes when the project ends.

Literature on Living Labs tends to suggest that there is not an exact *de facto* definition for Living Labs.\(^\text{32}\) Therefore, new and hybrid Living Labs models cannot only be identified, but they area also built, along the same lines that the GESCI-AKE experiences indicates.

Several aspects, however, are common to all Living Lab, research-based innovation efforts, and can be certainly identified in AKE process:

- They are **collaborative**. Every stakeholder contributes. Everyone brings their expertise.
- They are “learning-by-researching”. The research is not a background overview, or an evaluation of the final outcome, but continuous collaborative documentation and reflection of a process that informs the next steps.
- They are **spiral**, progressive, and take different research forms and modes at different stages.
- They gear towards a **prototype**, and often a final **product**; not towards a research descriptive or analytical report of activities.

\(^\text{32}\) See the collection of literature at: [https://drive.google.com/open?id=15-lphoNJpej2C4rTR1FxCnkExZEYV61_hN3iR7SnFUU](https://drive.google.com/open?id=15-lphoNJpej2C4rTR1FxCnkExZEYV61_hN3iR7SnFUU). For a more critical account see also: Kommonen, K.-H., & Botero, A. (2013). Are the Users Driving, and How Open is Open? Experiences from Living Lab and User Driven Innovation projects. The Journal of Community Informatics, 9 (3).
The above described characteristics aspects make LLs especially fruitful tools when developing a model; whether in terms of policy, process, or product, which aligns well with the objectives and initial ambition of GESCI-AKE’s programs.

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Figure 2. A model of a Living Lab in Innovation

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The research component in the GESCI-AKE 2014-2015 Creative Media Skills Course was designed taking into account the novel use of Living Labs in education design. The basic premise of the research was that the Living Lab *The Sound of the City* would have two specific, albeit intersecting, sets of processes and goals: 1) (product) innovation-related goals and 2) educational goals.

This basic premise was made along with the formulation of two research objectives, which helped to frame the research process. Research objectives were revised after getting the initial results using the research instruments and methods described below, and constructed in collaboration with the staff at GESCI-AKE. The objectives, here distilled to two broad questions, were related to the hybrid content (educational - innovation) of the programme:

- What was the GESCI-AKE 2014-2015 Creative Media Skills Course (*The Sound of the City*) as an educational Living Lab?
- How could the successes of GESCI-AKE 2014/2015 Creative Media Skills Course (in this round, *The Sound of the City*) be replicated?

To respond to these objectives, a multi-method qualitative research was conducted from November 2014 to March 2015. It was a combination of background research, survey research and thematic interviews, and participatory observation. The results were cross-analyzed using the “spiral” data gathering method of Living Labs (see, Figure 2.) adding new elements to enrich and deepen initial results with the analytical method of qualitative close reading.
This summary table highlights the key components found in the GESCI-AKE LL process since 2014. It depicts the key concepts of that emerged as core components of the content of the GESCI-AKE training program: hybrid training approach, local-global marketplace, innovation, leadership skills, competitive content creation, and sustainability.

<table>
<thead>
<tr>
<th>Micro-level: Practitioners - Participants</th>
<th>Meso-level: Institution - GESCI-AKE Programs</th>
<th>Macro-level: Societal Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hybrid model: art- edu-biz</td>
<td>Learning crafts, skills and business practices</td>
<td>New ways of collaboration with the industry</td>
</tr>
<tr>
<td>Local – global markets</td>
<td>Learning to ‘research’ the markets and own existing knowledge; social value creation</td>
<td>New ways of collaboration with the industry; further research</td>
</tr>
<tr>
<td>Innovation</td>
<td>Creating innovative products for the market-place through training</td>
<td>Becoming one of the central hubs for innovation via training</td>
</tr>
<tr>
<td>Leadership as cultural competence</td>
<td>Learning leadership skills: how to balance personal goals and skills with collaboration</td>
<td>Providing strong edu and inno leaders within training projects to ensure successful outcomes</td>
</tr>
<tr>
<td>Content as cultural competence</td>
<td>Competitive edge as a professional, in terms of skills and cultural knowledge</td>
<td>Competitive edge as an organization</td>
</tr>
<tr>
<td>Sustainability</td>
<td>Employment; own business; sustainability of employment</td>
<td>Sustainability: in education (content), networking; ongoing model development</td>
</tr>
<tr>
<td>= Success</td>
<td>Meaningful learning experience and jobs; job creation and entrepreneurship</td>
<td>Meaningful learning experience and jobs for the students + the hybrid model servicing the industry = cutting-edge in innovation education</td>
</tr>
</tbody>
</table>

*Table 1. Summary Results of the GESCI-AKE LL 2014-2015*
Designing a Model: GESCI-AKE Living Lab Research 2016-2017

Following the above research, the Living Lab research objectives set by the managing team of the GESCI-AKE Creative Media Venture 2016-2017 (i.e., the program and process described in this report), moved from the focus on content to the focus on models.

The aim has been to examine how the innovative practices in the demonstration project can be consolidated and enhanced through the Creative Media Venture LL intervention, linking training and digital creative industries industry processes in Kenya, producing innovative products and improving skills development for entrepreneurship and innovation among budding artists, secondary and pre-tertiary youth.

The methodological objective has been to examine how the Living Lab approach can be used to facilitate engagement between mentors, students, digital creative industries specialists, researchers, and entrepreneurs, throughout the consolidation phase of the project so as to contribute to the facilitation of innovative practices in the area of digital creative industries industry skills development:

- that can influence the production of creative prototypes, products/services and start-up formation, and
- that can provide alternative training and good practice models for replication in formal and informal educational settings.

As Living Labs are about processes, a secondary aim of the LL integration has been to reflect new knowledge that can also be translated into policy recommendations that relate to:

- new product/service relevance and viable start-ups,
- industry partners, marketplaces and consumers in the local, regional and global innovation spaces,
- new national, regional and global skills and standard requirements and how to set them up,
- social, cultural and business environmental needs, trends, niches and opportunities,
- collaboration, networking and partnership opportunities for support, building of strengths and competitiveness, and
- knowledge of how to ensure sustainability of the Creative Media Venture beyond the project parameters.

The focus has been to map experiences of all stakeholders in the GESCI-AKE Creative Media Venture LL model - and to map best practices of similar efforts in the region and elsewhere, to inform further innovation and the LL knowledge base and networks with a new and dynamic model approach.

The LL research design has been created around the phases of the training process:
(1) Upskilling and Training; (2) Apprenticeship and Curriculum; and (3) Start-up Development and Incubation. These were met with corresponding core research questions that all targeted toward model creation:

![Diagram showing the process of LL 2016-2017](image)

**Figure 4. The Process of LL 2016-2017**

1. During **Upskilling**, overview of “**what is now**” for the communities of practice: Surveys of their needs, their definitions of collaboration and innovation, their experiences of good practices.
2. During **Apprenticeship**, collaborative research of “**what is happening**”. Interviews, self-documentation and co-analysis of the ongoing LL process, by the core stakeholders of the communities of practice (with some “prompts” from the research team); sharing of information and perspectives by the guest expert bloggers.
3. During **Incubation**, collaborative research on “**what can be**”. Creating an opportunity for **collaborative scenario-building** and brainstorming about the future sustainability for the venture.

**The GESCI-AKE Living Lab Research Instruments Used in 2016**

Living Lab is still a rather new methodological approach. It builds on and adds to distinctive features to the tradition of action research. Living Lab research takes “a developmental view of innovation and studies novel technologies in complex real world setting”.

With this context in mind, Living Labs can be researched with various qualitative and quantitative methods. While ethnographic research methodologies are, arguably, quite common in Living Lab research, other research methods are often used hand-in-hand with ethnographic methods.

Since Living Labs are, by definition, multi-stakeholder environments, where the roles of creators, participants and facilitators can and even should be mixed, also the research process should note this, for example, by advocating mixed- and multi-methods research tools, where quantitative and qualitative methods are mixed and/or combined. Therefore, tools and methods for researching Living Labs can often combine, for
example, quantitative survey tools, qualitative ethnography, theme-based structured/unstructured interviews - and so on.

The specific methods used in the GESCI-AKE Living Lab research included several different research tools.

1. Short online surveys (e.g., “Question of the Week”, see an example via this link here).
2. Long surveys at key points of the training (Showcase preparation; surveys, see an example here).
3. One-on-one and focus group interviews (participants, trainers, mentors, industry collaborators, experts, policy makers) via Skype, WhatsApp, or in person.
4. “Creative diaries” of the participants, see an example here.
5. Quarterly recaps and analysis of the Monitoring & Evaluation results of the training, see an example here.
6. Contextual, secondary research of digital creative industries: markets, examples, views. This was done transparently during every week of the training, under the heading “In the News”, see an example here.
7. Documenting the Showcases. This was done as Participatory Action Research and documented as Live Blogs on the blog, see an example here.
8. In general: collaborative knowledge and resource sharing via the blog: http://gesciakemediaventure.net/.

Table 2. summarizes the multi-method approach in different stages of the GESCI-AKE Creative Media Venture in 2016:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Research</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Upskilling and training</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Setup</td>
<td>Update the blog (domain name, design); responses from several short questionnaires to add to the background knowledge about the participants</td>
<td>March-July 2016: LL interview and review phase (not official contract); completed.</td>
</tr>
<tr>
<td>Skills Upscaling</td>
<td>Mapping for extra needs (short questionnaires: “Question of the Week”).</td>
<td>March-July 2016: LL interview and review phase (not official contract); completed.</td>
</tr>
<tr>
<td>Contextualization</td>
<td>Weekly news update</td>
<td>March-July 2016: LL interview and review phase (not official contract); completed.</td>
</tr>
<tr>
<td>Showcase</td>
<td>Live-blogging the showcase</td>
<td>24 June 2016; LL interview and review phase (not official contract); completed.</td>
</tr>
</tbody>
</table>
### Apprenticeship and curriculum

<table>
<thead>
<tr>
<th>Creative process: Individual projects</th>
<th>Ongoing feedback from interviews, work diaries, observation</th>
<th>July-August 2016; completed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative process: Teamwork</td>
<td>Ongoing feedback from interviews, work diaries, observation (also insights from the LL 2014-15)</td>
<td>July-August 2016; completed.</td>
</tr>
<tr>
<td>Creative process: Mentoring</td>
<td>Ongoing feedback from interviews, work diaries, observation</td>
<td>July-August 2016; completed.</td>
</tr>
<tr>
<td>Business process: Tools and Opportunities</td>
<td>Expert interviews/blog posts; potentially participant reflections on training sessions on the blog</td>
<td>September-November 2016; completed.</td>
</tr>
<tr>
<td>Business process: Mentoring</td>
<td>Ongoing feedback from interviews, work diaries, observation; mentor and participant reflections on training sessions on the blog</td>
<td>September - November 2016; completed.</td>
</tr>
</tbody>
</table>

### Start-up Development and Incubation

| Showcase: Preparation | Survey to multiple stakeholders; also insights from the LL 2014-15 | November- December 2016; completed. |
| Showcase: Presentation | Participatory observation including live blogging; sub-report on the showcase | December 2016; completed. |
| Showcase: Outreach and Networking, Follow-up | Participatory observation including live blogging, exit survey, also insights from the LL 2014-15 and the Policy Forum | December-March 2016; completed. |
| M&E | Highlighting take-aways via blog | January 2017; completed. |
| Contextualization | Weekly news update | December - March 2017; completed. |
| Start-up development: Coaching and mentoring | Participants reflections, expert comments and continuous monitoring of activities of the start ups (in pitching sessions, and with advances via small tasks) | February - March 2017; completed. |
| Model | Draft report for comments | 5 February 2017; completed. |
| Final report | March 2017 |
| Policy Forum | Brief and material package | March 17th 2017 |

*Table 2. Activities, Research Methods, and Timing of LL 2016-2017*
3. Setup of GESCI-AKE Program 2016-2017

Because Living Lab research is not about background overview, or evaluation of the final outcome, but focuses on continuous collaborative documentation and reflection of a process that informs the next steps, it is paramount to describe the concrete program setting of the *GESCI-AKE Creative Media Venture* 2016-2017 program, to situate the main differences with components from previous iterations and its differences with the components of the ideal model presented in Section 5.

**Program duration:** Nine months (extended to 12).

**Focus:** Creative Media Industry. For three domains, organised in submodules: (1) Animation; (2) Game Design and Mobile Apps; (3) Sound and Music Production.34

**Host institution:** GESCI, Nairobi

The following Figure illustrates the main components of the ecosystem of the GESCI-AKE 2016-2017 as seen from the perspective of the Living Lab research.

*Figure 5. LL research - AKE 2016 ecosystem - main actors and relationships*

*GESCI-AKE Creative Media Venture* participants, their start ups, and the physical space at GESCI (Hub / Studio where the program operated from), are featured in the center of the diagram as their digital skills, cultural and entrepreneurial capacities were the main focus of development. Some of the main relationships that GESCI-AKE has created with internal and external networks are depicted on the sides of the diagram. These include

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educational and learning experts and providers, potential audiences and users, communities, industry representatives and potential clients and partners -- each to strengthen the hybrid nature of the model that was already identified in The Sound of the City program.

Participants: 1 local manager [M], 3 members of the overall management team [MT], 21 training participants [P], 5 tutors [T], around 22 external partners participating as mentors, lecturers or commentators [I,O], 4 start-up external partners (individuals co-opted by the start-ups that were not originally AKE participants), 2 training the trainers tutors in Ireland (P&L), 2 living lab researchers in New York and Helsinki (M&A).

Structure: As noted earlier, the core curriculum consisted of three, partly overlapping, phases: (1) **Upskilling and Training**; (2) **Apprenticeship and Curriculum**; and (3) **Start-up Development and Incubation**. (see AKE curriculum resource for details).

Location: The physical hub was provided by **GESCI’s Digital media production studio**, located in Nairobi. This space provided access to a full range of digital media equipment, software and tools, internet connection, sound recording and meeting spaces that participants used during the program.

Infrastructure: Besides the physical hub, **GESCI-AKE Creative Media Venture 2016-2017** has made use of various online tools including: 1) The LL Blog that documented this research but also acted as channel for aggregating information on the program. 2) Various repositories for shared documentation (**Dropbox** and **Google Drive**), 3) A web-based project management software (**Trello**) and 4) Online social media channels (**WhatsApp** group, **Facebook** page and 2 **Twitter** accounts).

The program generated several outputs. The following diagram (Figure 6.), locates some of the main results of the **GESCI-AKE Creative Media Venture 2016-2017** program.

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22 individuals registered to the AKE program, 21 graduated in the second phase. During the last phase 4 people were recruited by the start-ups to strengthen their teams.

The **GESCI-AKE curriculum resource** will be available here: [http://culturalindustriesafrica.org/AKE_curriculum/](http://culturalindustriesafrica.org/AKE_curriculum/).

Mutiti Road, Unga House 7th floor (below GESCI’s main offices).

**Dropbox** ([www.dropbox.com](http://www.dropbox.com)) is a sharing file service that offers both a free and a premium package. Some GESCI-AKE participants and key personnel at GESCI used that service to share and archive files and productions.

**Google drive** ([drive.google.com](http://drive.google.com)) is a similar service providing file sharing and collaborative working solutions. It was used for collaborative writing, archiving documents and coordination practical production work. The service is free but relays on accumulating user data that is used for advertisement.

**Trello** ([http://trello.com/](http://trello.com/)) is a web-based project management application that offers a basic service free of charge and a business class paid-for service. GESCI-AKE used the basic service.
During the first **upskilling and training** phase participants created 25 different outcomes. These include several small productions like the animated web TV series *Sponsa* and a series of mobile games, a shared repository of hands, faces and other moveable joints to be used in their animations, and a data bank of side and front shorts, musical scores and soundscapes. These results were featured and showcased in a round-table and solution design workshop that closed that phase (August 2016). This event brought together most of the partners and mentor connections that GESCI had assembled to help *GESCI-AKE Creative Media Venture* think through the content of the second phase.

During the second phase, **apprenticeship and curriculum**, besides developing a joint project called *Hera of Nangwe* (a short animation and mobile game) AKE participants sketched and rehearsed nine small scale start-ups (September 2016). Seven of them and their prototypes were presented in the showcase event that closed the phase, and served also as the graduation ceremony for individual participants (December 2016). The showcase provided a networking opportunity for the participants and a chance to get feedback on the start-ups. The seven startups that manage to complete the Kenyan authorities registration process joined the last phase for **Start-up development and incubation** and worked together with the support of tutors and business coaches to fine tune their start-up’s offerings, value propositions and business models (March 2017).
Entry to the GESCI studio (a lab and hub) and the environment inside the GESCI studio, December 2016

Details from the website of AKE start-up VerbHouse in March 2017
4. Results: Main Lessons from the Living Lab Research

Results from the Creative Media Venture Living Lab research 2016-2017 are presented here with key areas of foundation, process, and structure/organization. These key areas entail specific dimensions that are fundamental to the model that emerged from the LL.

It should be noted, as highlighted in Section 2, that the Living Lab 2014-2015 focused on the content needs and fundamentals of an edu-biz model to be created: leadership, innovation, content, sustainability and local/global. These five elements were built into the Living Lab 2016 that worked towards a model; hence, they are an inherent part of the Foundation, as well as Structure. These results highlight, that the new insights gathered are a more concrete reiteration of LL 2014-2015, showcasing how those earlier findings can be operationalized into a model. This is also highlighted in the below summary table.

**Foundation** entails the issues of:

A. Participant-centeredness / Diversity (of innovation, students, approaches, and configurations of start-ups: products and/or services);
B. Cultural appreciation and competence (local/global content);
C. Holistic approach ("Biz-Edu+") - beyond mere business and creative education, including leadership skills, ongoing self-improvement.

**Process** includes the aspects of:

A. Flexibility;
B. Teamwork, tutoring and peer learning (including leadership in practice and individuality);
C. Networking, partnering and follow-up.

**Structure and Organization** includes:

A. Space;
B. Infrastructure;
C. Coordination and other best practices, including Intellectual Property;
D. Continuity (sustainability).

The keywords not only describe some general characteristics and factors of GESCI-AKE 2016, but they also describe some broader possibilities and challenges in building future Living Labs projects, or even broader ecosystems using Living Labs as tools for innovation and creativity.

Key for the quotes used: Participant [P], Tutors [T], Manager [M], Management Team [MT] Industry partners [I], Others [O].
Foundations

A. Participant-centered: Diversity

Meeting the participants “where they are” has been the core approach of the GESCI-AKE since the *The Sound of the City* training project (2014-2015). The GESCI-AKE *Creative Media Venture* 2016-2017 has not been any exception. Participant-centeredness is present in AKE from the point of view of the individual learner, and from the perspective of the team.

At the individual level, the program has able to take into account individual circumstances by 1) identifying what level of skills people come with, and 2) recognizing that they are not all the same. This has required certain level of flexibility in the curriculum that has been both a strength and a dilemma. A strength when the hub has offered an interesting infrastructure that can develop the intrinsic motivations, specially of those who recognize what their goals are. Participants are not simply acquiring a new skill, but serious aspirants to communities of practice of professional creative media entrepreneurs.41

Flexibility is achieved by recruiting, peer-learning, and stakeholder support

Curriculum flexibility has also been a dilemma in the cases where the level of participants was so uneven that it become quite time consuming to cater for all the needs. This placed some pressure on the tutors during the first stages.

To support diversity and the needed curriculum flexibility and relevance, three pedagogical tools are especially salient. The GESCI-AKE model requires that the recruiting process identifies candidates whose individual aspirations and motivations ensure they can take advantage of the possibilities for individualized, and peer support learning offered. Ideas for improvement of the recruiting stage include for example presenting more clearly incentives to take the program (e.g., make a case for high level of self-employability) as

well as mapping clear consequences if commitment is not fulfilled (e.g., losing rights to the space). Second, the GESCI-AKE experience shows that different skill levels are not necessarily a challenge for everyone, specially not for those able to identify and rely on peers to helped them learn and catch up with the rest of the group. This is the one of the reasons why supporting more explicitly peer-learning becomes a central aspect of the model, and underlines the importance of team work as a pedagogy, and ties to the team point of view. Third: Finally, the *multi-stakeholder dialogues* (e.g., showcases and round tables) that develop the program by helping fine tune the content of the training to needs of individuals and of the teams as they emerge.\(^{42}\)

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*Participants acting as a team at the GESCI studio in September 2016.*

Participants as individuals, and as teams

At the level of team-work is visible in the opportunities and simulations of real work experiences provided during the training program\(^ {43}\). In particular, work experiences, in today's employment context, are marked by team work. Therefore GESCI-AKE places

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\(^{42}\) Role of showcases and round tables is a central way of working for GESCI. In the context of GESCI-AKE, their role in networking with the context to create learning partnerships has become more clear as the program advanced.

\(^{43}\) See GESCI-AKE program objectives GESCI (2026).
emphasis in the ability to develop creative team-work\textsuperscript{44} practices and deeper understanding of the role each participant can have in the production process (particularly visible and important to achieve when doing large and ambitious cultural productions\textsuperscript{45}).

GESCI-AKE trains teams that work together in shared projects during the course of the training program. As a result, as the program has advanced the unit of analysis for those engaged in planning and conducting the training has become the team, rather than isolated individuals. Recognition of team-as participant centeredness is also visible in GESCI-AKE’s decision to graduate “startups” and not individuals after the last phase is completed.

Team-centeredness has grown in importance and become more clearly recognized in the phases of GESCI-AKE 2016-2017. It has become evident that programs like GESCI-AKE are not only recruiting individuals, but potential members of a team. Diversity in the base of participants is therefore quite important. Participants should be selected not only on the basis of their skills, motivations and life circumstances, but also on their potential and willingness to work as part of a team and by mapping how their competencies complement with that of other applicants.

B. Holistic Approach (“Biz-Edu+”)

A holistic approach to the training of individuals (the abbreviation here coined: Biz-Edu+) and an emphasis on developing cultural appreciation competencies are two specific content features of the GESCI-AKE pedagogy. While cultural appreciation and competencies have been explicitly recognized with a module in the curriculum, the issue of holistic approach to the training of participants has been more intrinsically embedded. (In the future, this feature is worth highlighting as a core aspect of the curriculum.)

During GESCI-AKE 2016 participants have been encouraged to think about their skills and learning more holistically, by not only developing practical skills but also attitudes and practices. Through practices like the Friday screen-ups (screenings) and the outreach events, GESCI-AKE participants learn to talk about their work, present

\[\text{"As a team they work well, individually though the beginners still have to catch up."}
\text{Tutor 4}\]

\text{Manager}

\text{AKE model needs to involve life skills training, to improve soft skills of the participants. I suggest we incorporate this to make well-rounded students who have the ability to speak, present and gain professional mind set necessary for competition in the market place.}

\text{Manager}


themselves and their ideas with coherence, manage deadlines and communication with clients. The local manager and the GESCI-AKE team have had particular key roles in identifying this need and driving its implementation forward, even when there has not been a particular place in the curriculum for it. In new reiterations of the model, explicit inclusion of the holistic approach, and required resources, need to be acknowledged. The GESCI-AKE model highlights the fact that participants are educated on, and supported, as individual artists, as well as team players by creating multi-talent professionals for the flexible job markets of the future. This goes beyond tools in marketing and business practices, and extends to interpersonal skills and one's own personal vision. In other words, a core component is biz-edu+.

GESCI-AKE participant present the work of his team to the LL researchers via Skype during GESCI-AKE’s roundtable in August 2016

C. Cultural Appreciation and Competence

The focus on cultural competencies continues to provide a coherent and transformative backbone for the GESCI-AKE experience. GESCI-AKE stakeholders have recognized that it is a promising direction that needs time to develop. Outcomes of the program so far and answers from participants to the probes (e.g., Question of the week) confirm that there is now the participants now understand the role of creative industries in sustainable development, and “cultural preservation-meets-innovation” approach. They see also possibilities for social engagement that are present when they use, develop, and innovate the own culture. For some participants, this may have been an
awareness they had before, for others, a new revelation. Regardless, it has to worked well as the framing philosophy of the model. Translating cultural elements into more concrete (and more non-obvious) products and the concrete proposals requires work and a change in mindset. Industry partners were also adamant in stressing the need for local content, and opportunities for both for- and not-for-profit content creation. Recent research also backs up the potential and urgent need for these type of approaches.46

Cloud of keywords based on participants response to the question: What, in your opinion, is the role of creative industries and innovation in development of a country/region, or the world? 47


47 Question of the week in the blog (May 2016). https://gesciakemediaventure.net/2016/05/24/question-of-the-week-for-the-united-nations/
Excerpt from the stakeholders workshop discussion (Table: Culture) during the showcase event in December 2016

Process

A. Flexibility

GESCI-AKE participants defined themselves very often along a continuum that included several areas; some have clearer identities, however most rely on flexible and fluid ways of representing themselves. Participants have benefited from integrating skills and from developing other skills they have not had the chance to try before. The participants themselves see this as a response to the marketplace, a way to become and stay relevant as a professional. The GESCI-AKE setting and curriculum provide that kind of flexibility. This, naturally, requires flexibility from tutors. It should be noted that GESCI-AKE 2016 Creative Media Venture worked with some elements of contingency (as the program started later than planned), therefore the possibilities to account for flexibility were limited. Certain levels of contingency will not be avoided in the future, flexibility has also been asked from internal planning and budgeting process inside the organization. In line with previous discussion on the possibilities of a participant-centered approach that recognizes the team as a unit, the importance of peer learning (see point B.) and self-direction becomes very relevant.

"You need to know what you need to learn to keep up with industry standards"

Participant [14]

Flexibility in the process has been also visible in the experimentation level that has existed. GESCI-AKE has not stuck to predefined methods, but has been open to try new ideas. Several different methodologies have been discussed by the core team in Nairobi, by partners in situ, or suggested by the training tutors in Ireland, and by the LL researchers. Because the scale of the GESCI-AKE 2016 pilot was manageable and all stakeholders consider the hub as a safe space for experimentation; some of these have been taken on board with good results.
This is the case with the adaptation of Scrum approach\textsuperscript{48} that the GESCI-AKE team made for the first show-case. The Scrum approach was suggested by the training the trainers component of GESCI-AKE to structure the teamwork of the participants in the second phase. The GESCI team adapted the idea of a Scrums's sprints also for structuring the evaluation of the results of the students and the development, and to develop the curriculum components of the second stage. Elements of the Scrum framework are now incorporated in the day to day activities of the teams, and in interactions with other stakeholders.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
1 & IMPORTANT DEVELOPMENTS? \\
\hline
1 & ETHICAL STANDARDS  \\
\hline
2 & TECHNICAL TECHNOLOGY  \\
\hline
3 & ENTREPRENEURSHIP SKILLS  \\
\hline
\end{tabular}
\end{table}

\textit{Variety of Professional Skills to Improve - Excerpt from the stakeholders workshop during the December 2016 Showcase}

\textbf{B. Teamwork, Tutoring and Peer Learning}

\begin{quote}
\textit{\textldots As an artist and creative, you learn that people and the relationships that are build thereafter are what takes you to the next level and make you visualize things beyond your usual thoughts. We have to be vulnerable and open to collaborate with different minds.\textldots}.

AKE participant [P10]
\end{quote}

All GESCI-AKE participants have reported that positive teamwork experiences have been the one of the biggest highlights of the training.s. Some are able to map the relationship of their individual contributions (and their individual self expression) to ways of articulating their work as part of a team.

The GESCI-AKE experience has also empowered some of them to feel vulnerable, recognize that they are stuck but with a feeling of confidence that it is a normal step in the learning process.

\textsuperscript{48} Scrum is an Agile framework for completing complex projects. Scrum originally was formalized for software development projects, but it has been documented to work for several other complex, innovative type of work processes. (The Scrum alliance is a good source of materials regarding the framework \textit{e.g.:} \url{https://www.scrumalliance.org/why-scrum#sthash.jKv7GcO8.dpuf})
Teamwork has been the most concrete opportunity GESCI-AKE participants have had to rehearse and practice leadership. It is also used as a strategy that GESCI-AKE and the participants used to identify joint ventures, and therefore “recruit” those that became startup-partners later on the process. There is a similarity here to the experiences that industry representatives reported when describing their entrepreneurship learning paths. For the professionals interviewed, a big breakthrough in their ability to consolidate sustainable working opportunities came when the right team was assembled through. However, in the absence of a program like GESCI-AKE, their paths involved considerable trial and error, in an environment with not so many peers to reflect and mirror up the experiences.

During GESCI-AKE 2016-2017 it has been evident that everybody is learning. Tutors and participants have benefited almost equally from the shared spaces (e.g., screenings/screen-ups, shared lectures, group work sessions, etc.) for skill exchange and feedback.

C. Networking, Partnering and Follow-up

GESCI-AKE 2016-2017 has created a wide variety of relationships within both the hosting organization (GESCI) and with external partners (community, industry, educational
representatives, etc.) through the work and activities of participants themselves, the staff of the hosting organization, and the resources they mobilize (consultants, advisors, and other people, materials and spaces involved). As the GESCI-AKE model exists in the cusp of creative artistry, skill-enhancement, and business development, building networks and finding collaborators has been an essential part of the work.

A start-up mentor meets the team in one of their regular sessions at the GESCI studio, December 2016

The training program and the results were achieved through practices of collaboration that were adapted, localized and developed to fit particular local circumstances. In terms of networking and partnership the Friday screenings, company visits, showcase events (applying scrum evaluation) and pitching sessions were appreciated not only by GESCI-AKE participants, but also tutors and GESCI staff. Participants defined them as turning moments that closed stages, generate visibility and created spaces for

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49 The development of collaborative forms of partnership in GESCI-AKE seems to follow well documented examples of a continuum where more complex forms of collaboration are aligned with less resource intensive forms (e.g. simply knowledge sharing vs. collaborative work on a joint issue). For an elaboration on such collaborative continuum see: Huxham, C. (1996). Creating Collaborative Advantage. SAGE.
experimenting and testing\textsuperscript{50}. However, the company visits for will require flexible administration procedures to warranty they can be organized at short notice.

\section*{GESCI-AKE LL research - Interview with industry partners (Tsunami studios) - December 2016-2017}

Conversations with the industry partners have brought about the feasibility of starting from a simple framework for cooperation that includes a memorandum of understanding (MOU). This was well received idea and deemed a good framework to explore other more complex forms of interaction (e.g. joint productions) All industry partners interviewed were able to map and list concrete collaboration opportunities they could foresee with programs like GESCI-AKE. These included: themselves or their employees serving as mentors for specific cohorts \([1,2,3,4]\), providing case studies and commissioned work during the second phase \([1,3,4]\), and jointly applying for funding for productions and/or joining forces to do required advocacy and policy work at higher levels \([1,2,4]\).

Regarding partnership models that involved joint productions between GESCI-AKE and their own companies, the interviewees biggest concern was that of securing the \textit{quality} of contributions from participants.

Conversations with the industry partners also indicated where GESCI-AKE exist, from their perspective, in the spectrum of local innovation hubs. The industry

\textsuperscript{50} GESCI also considers these events as instances of validation of the model itself.
interviewees placed AKE on an entry level of a larger continuum, where the focus is more on skill creation and improvement through rehearsing entrepreneurship\textsuperscript{51}. Some of the interviewees felt that the higher end spectrum (=startup creation with high innovation content and/or novel products) was covered by existing innovation hubs in the country: Those do not place as much attention to skill development as AKE does.

The use of terminology such as “start-ups” influences conversations about partnerships. These conversations are relevant as background information but not always reality of the kind of innovation and the type of ventures GESCI-AKE participants are creating at the moment: Small scale design consultancies and media production companies.

The seven emerging “startups” launched during the AKE showcase in December 2016\textsuperscript{52}

Structure and Organization

A. Space

The GESCI-AKE studio/hub has been a basic resource allowing the GESCI-AKE participants to first experiment and later simulate working conditions. The centrality of a physical space is typical to all kinds of innovation and tech hubs, as also evident in the overview of 14 African education-innovation projects conducted for this research.\textsuperscript{53} It is also well-
recognized, and articulated, by the GESCI-AKE Management Team as a tool not only for infrastructure, joint innovation and education, but for networking and branding -- and as an essential component for the continuity of the program as the center, focal point for participants and alumni. The examples of other hubs show that a space can also be an income-generator54.

From the perspective of the participants, the studio / hub has provided a relatively good level of flexibility: A larger shared space that can be subdivided in two, a smaller sound studio, large walls and some movable tables and chairs. These are allowing several configurations of the space that can be further supported e.g., by relatively easy interventions like “movable project walls”.

The uses of the space and the equipment have changed as the program and the individuals and team projects advance and grow -- and this should be a feature of any hub modeling after the GESCI-AKE program. The space is also an occasional object of development for the AKE participants: It has acted as a learning environment, a co-working space, a gallery and even a cafe.

B. Infrastructure

The shared space includes not only physical one (the hub) but also digital (drive folders, blog posts, email threads, etc.). Technology infrastructure is a necessary prerequisite for models like the one GESCI-AKE is experimenting with, as technology is one of the key conducts to coordinate and document teamwork and project outcomes. This applies not only for the activities between GESCI-AKE participants, but also the coordination work of the GESCI-AKE team, as well as the interactions of the program with other stakeholders like the Living Lab researchers.

A shared document with comments for planning one of the AKE showcases and a view to one of the shared project management boards in October 2016

During the first phase of GESCI-AKE, the immediate lack of access and software hindered progress. Such challenges may affect participants’ commitment and possibilities to experiment. For the GESCI-AKE Creative Media Venture, this challenge was addressed for the second phase when internet connection improved, and when a project management shared platform was selected (Trello).

The most used tools of the GESCI-AKE 2016-2017 programme were open-access commonly and globally used professional ones: A blog (LL research), informal email lists, Dropbox folders, Google Drive folders, Youtube channel, Facebook page, WhatsApp groups, Trello boards, Slack channel, and two Twitter accounts. The participants themselves have been creatively developing some infrastructure based on their needs. For example, early in the program they set up a WhatsApp group for internal communication. Synergies and complementarities between the basic infrastructure provided by GESCI-AKE and the ones brought by participants and other stakeholders need to be mapped.

D. Coordination and other Best Practices, including Intellectual Property

Coordination and other organizational best practices for the model are essential for two reasons. 1) The model should work as smoothly and (cost)efficiently as possible; 2) At the same time, the program (model-hub) is a creative venture in and of itself. In terms of pedagogy methodologies, like “Teaching by example” can be powerful. The same practices that GESCI-AKE employs can be taught as good management practices for one’s own business.

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You do not want the tax authorities to come knock your door. If you start day one with that discipline and take care of your paper work you will thank yourself down the road. It gives you longevity.

// Do not forget the boring stuff! Paper work, invoices, taxes, etc.
Some organizational issues that emerged from the GESCI-AKE Creative Media Venture 2016-2017 include the complex online infrastructure and the roles of tutors and mentors. While it benefits the participants to learn different organizational tools and platforms, their focus is in building their creative and business knowhow and collaborating effectively. Another issue is the question of roles of tutors and mentors. It was noted by participants and tutors alike that a project-long commitment would be most beneficial for the participants. Good organizational practice includes terms of commitment. Many participants studied and/or worked elsewhere and that caused disruptions in the (team) workflow, and thus to learning.

Perhaps the most important organizational issue pertained to core language and definitions. For instance, in terms of the edu-aspect of the hub, there were multitude of terms emerging throughout the program to describe its different phases. Being a model-in-development in a Living Lab context, this is a part of the process, but such developments need to be clearly communicated to different stakeholders.

Similarly, the AKE 7-step-methodology that was tried for project planning and incubation was a result of the “living” process of GESCI-AKE Creative Media Venture that would need to be formalized and clarified for stakeholders, if taken as a regular part of the model in the future. Such structures are not pedagogical or innovation tools but also “quality indicators” for industry and other partners.

From the perspective of the participants, terminology and related consequences matter as well. As it was noted with the use of the term startup, the much discussed issue of intellectual property rights (IPR) highlighted the same challenge. During the December showcase workshops IPR was one of the themes most participants expressed was timely for them to learn. The lack of coherent IPR practices in the region were discussed in the Introduction. While an important concept to understand in terms of the marketplace, such agreements should be clear within project teams and between the

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participants and GESCI-AKE, including the beginning and duration of any ownership of rights.

E. **Continuity (Sustainability)**

Continuity and sustainability are central concepts that bring together the Foundation and Process with Organization. In a conceptual, model level, the core educational concepts and methodologies need to form a continuum throughout the program process, and beyond: to self-sustaining start-ups. This continuum of growth needs to translate to participants’ progress from students to entrepreneurs. This is, naturally, at the core of modeling GESCI-AKE: Creating a systematic scheme for continuity in these fundamental levels, that then ensure related organizational arrangements and practices.

The other aspect of sustainability is the funding structure, of both the hub, and the individual ventures emerging from the program.

At this stage, most innovation and tech hubs in Africa are like GESCI-AKE - funded by foundations, development funds, and/or international companies. However, the trend is for many of these hubs to frame themselves as social businesses that have solid business models and income streams from own operations as well as private and public funding -- while concentrating on the social value outcome, not the bottom-line.

The sustainability of the start-ups emerging from GESCI-AKE program is a multi-faceted issue that the program alone cannot solve. Its curriculum is naturally geared to create success -- and the LL 2014-2015 was greatly focused on the factors that were essential for the curriculum and the program at large. As noted in the introduction, the biggest challenge in Continuity for start-ups seems to come after the initial incubation and first projects, when first hardships are faced (financial or other challenges). In this sense the

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inclusive policy environment proposed by GESCI-AKE is a very much needed development to really ensure sustainability.

Experiences shared during the last policy forum on March 2017 also confirmed that to support youth entrepreneurs there is a need for concrete actions and scaffolds that provide diverse sources of inspiration to young people, helped them team up with other like-minded people and resources, as well as providing them a safe space to fail and learn.
5. Elements for a Replicable Model

This section introduces some of the elements that form the framework of GESCI-AKE model, from the perspective of the LL research. The following description provides an overview of some of the high level considerations embedded in the model, but also account for some practical decisions to be made when rolling out other programs based on this model.

![Figure 7. GESCI-AKE model framework.](image)

Figure 7. outlines the configuration of these elements in relationship to each other, not in order of appearance or of weight. The elements marked in green form the core themes of the program and are the main actors in an GESCI-AKE training trajectory. The elements marked by black dotted circles point at necessary relationships to be built within the particular context the model is applied to.

The GESCI-AKE model is participant-centered, where people (their talent) and the joint projects (ventures and startups) they embark on are at the core of the activities and interactions.
Participants: People are the key ingredient of GESCI-AKE model. The GESCI-AKE model assumes that the unfolding of a meaningful curriculum starts from a joint recognition of everyone's current capacities and of their motivations to create a learning trajectory inside the training program. To ensure participant centeredness, any application of the model should take care of two important aspects. First: Conduct a selection process that takes into account both individual circumstances and the possible teams that can be formed during the training program. This is done to guarantee diversity and commitment amongst participants. Second: Provide flexible mechanisms to plan the training process. Flexibility and relevance of the curriculum are secured by continuous multi stakeholder dialogues (via showcases and round tables, but also industry visits and invited guests). They help finetune the content of the training to both the individual and the team cohorts.

Training activities at the core of the GESCI-AKE model (internal green circle) are achieved to 3 basic ways of interacting: Expert tutoring, Creative teamwork and Peer learning.

Expert tutoring: the core content of the program is delivered by a strong and committed team of experts that know their trade and are able to relate real work conditions to participants. In the GESCI-AKE model the work of the tutors and their role are not static. They transition from that of a teacher, to a coach, to a mentor, during the development of the training program.

Creative team work: GESCI-AKE participants are recruited to represent a diverse range of skills to ensure that effective teams will be formed during the course of the training. The GESCI-AKE model pays particular attention in supporting participants building skills on collaborative work by careful facilitation, transparent communication and clear rules and expectations that are put in place early on in the process.

Peer learning (p2p): The GESCI-AKE model takes advantage of the pre-existing skills that participants can teach to each other while developing their projects. Therefore the GESCI-AKE model mobilizes explicitly GESCI-AKE participants capabilities as potential

58 All these activities should be properly resourced and given space in the curriculum, with provisions for unexpected ones to emerge if the need arises.

59 The key role of tutors (as opposed to teachers) is well established in approaches such as problem based learning curriculums (PBL) which are close to GESCI-AKE curriculum approach. For some thoughts on the matter see e.g.: Jung, B., Tryssenaar, J., & Wilkins, S. (2005). Becoming a tutor: exploring the learning experiences and needs of novice tutors in a PBL programme. Medical Teacher, 27(7), 606–612. https://doi.org/10.1080/01421590500069728.

teachers of their peers. The model supports co-location and teamwork to achieve this goal\textsuperscript{61}.

To be able to develop practices of expert tutoring, creative teamwork and peer learning, basic and shared conditions must be secured in place (external green circle). The GESCI-AKE model relies on a series of shared basics that are embedded in: space, infrastructure and resources as well as in practices.

**Shared spaces (hub):** Includes the physical space and the resources that can be mobilized by participants to develop their projects, to learn, to meet and to work together. For the GESCI-AKE model, a shared space is not only a basic resource but also an object to develop as the training program unfolds. The space act as learning environment, a production studio, a co-working space, an innovation laboratory, gallery and sometimes even a cafe. It changes as the program and the projects advance and grow.

**Shared infra and resources:** Infra (technological and else) is a necessary prerequisite\textsuperscript{62} of the GESCI-AKE model. Adequate support for communication and collaborative work is key and includes: fast internet connection, access to collaborative and social media tools, appropriate computer and AV equipment, access to physical and digital storing of materials (drive folders, email threads, pin boards and talking walls). Synergies between what participants have and bring, and what should be offered and accessible are mapped at the beginning of the training program. This is also done to provide participants a voice in influencing and developing their shared infra, as the program advances.

**Shared practices (interactions):** Shared practices mediate the learning opportunities and relationships of collaboration inside an GESCI-AKE program. These practices have been adapted, localized and developed in order to support participants to arrive at products and ventures that could be culturally relevant and economically sustainable and for developing their entrepreneurial possibilities. Shared practices include relatively simple commitments like holding weekly update meetings as well as other more complex interactions like the organization of showcases and round table events.

To warranty that an GESCI-AKE program delivers value for all participants and stakeholders the model builds on three pillars: culture competencies, entrepreneurship competencies and honing of practical craft and life skills (smaller green circles).

\textsuperscript{61} This is the most underdeveloped aspect of the model validation during GESCI-AKE 2016-2017, while it happened, it remained implicit. Since GESCI-AKE model relies on simulation real work environments, the following resources might be important to consider when developing this aspect further: Billett, S. (2001). Learning in the Workplace: Strategies for Effective Practice. Allen & Unwin and Boud, D., & Middleton, H. (2003). Learning from others at work: communities of practice and informal learning. Journal of Workplace Learning, 15(5), 194–202. \url{https://doi.org/10.1108/13665620310483895}.

\textsuperscript{62} Early experiences in GESCI-AKE 2016-2017 showed that lack of access to the right tools and support hinder progress, affect the commitment and the possibilities to experiment of the participants.
Cultural Competencies: AKE model works on the premise that culture can be acknowledge as an untapped resource for creativity, social change and business development. AKE participants reflect on their cultural condition and identity as a mirror to develop competitive results.

Entrepreneurial Competencies: GESCI-AKE model curriculum for developing entrepreneurial competencies relies on a behavioural approach to entrepreneurship. This is a practical approach that help participants develop Personal Entrepreneurial Competencies (PEC) while doing, as opposed to attending lectures. The GESCI-AKE model works to develop the following attitudes: Opportunity-seeking behaviour, Taking calculated risks, Persistence, Demand for efficiency and quality, Fulfilling commitments, Information seeking, Goal-setting and Self-confidence.

Skills (craft/life): The GESCI-AKE model commits to develop a set of practical (craft) skills that include hands on engagement with technology in creative and transformative ways and knowledge of new tools and working practices. GESCI-AKE recognizes that this set of skills are not enough. To achieve 1) graduates that finish the program as well-rounded individuals who have the ability to speak, present and that gain professional mind set, and 2) start-ups that mobilize the resources of the whole team; a holistic approach that includes life skills is also present in the model. These skills guide participants to recognize commitments, expectations and other basic skills.

To develop all the above mentioned components in constant interaction with the context, the model relies on supporting a collaborative continuum approach that includes simple and complex forms of partnership. These relationships are created within the training program (e.g., GESCI-AKE), with the hosting organization (e.g., GESCI) and with external partners (community, industry, educational representatives, etc) via mentoring and networking partnerships and through follow up actions.

Mentoring: develops a learning and development partnership between those with vast experience in a particular area and the GESCI-AKE participant / startup who wants to learn. GESCI-AKE develops mentoring relationships with experts from related industries, educational leaders and other stakeholders. Mentoring relationships offer for participants a way to enhance their individual learning objectives and their team goals and approaches, by close exchange and continuous communication with an expert.

Networking and Partnering: These activities are created to form new relationships, to recognize, create, or act upon opportunities or simply to share information and seek potential partners for ventures.


Follow up: Activities and strategies are placed to follow up on the trajectories of all those involved in any GESCI-AKE cohort. This facilitates transitions of roles: e.g., previous participants to become mentors or tutors, mentors that might become investors, attendants to an event to become partners (by commissioning work), etc.

Figure 8. GESCI-AKE Model - Elements of the Ecosystem

Overview of the Curriculum

This section gives an overview of the structure of an ideal GESCI-AKE model curriculum from the perspective of the observations, comments and learning gathered by the LL research of GESCI-AKE 2016-2017.

Figure 9. provides a visual overview of how the GESCI-AKE curriculum is organized in time to help others implement future programs. The curriculum model keeps the three phases that have been validated in GESCI-AKE 2016-2017, however overlaps amongst the phases are minimized.

The phases are: 1) Upskilling and training; 2) Apprenticeship and curriculum; 3) Start-up development and incubation (grey boxes). Based on previous iterations of the model an ideal length of (1) year to complete GESCI-AKE program is proposed.
Besides the core 3 phases, there is also explicit recognition for the importance of a solid preparatory phase (white box in the left), and of the importance of concrete follow up actions and strategies (smaller white box in the right).

The model assumes that not all participants will necessarily complete the whole AKE cycle. There will be certain gates when transitioning from phase to phase. These checkpoints ensure that cohorts have continuous commitment and relevance to the goals of the program.

Figure 9. GESCI-AKE Blue print — curriculum model

Preparatory Work

A training program starts with internal preparatory work (0) where the foundations of the program are laid out through procuring and updating the necessary shared infra and shared spaces (ICT equipment, software, lab setup and furniture) and via recruiting.

The recruiting process of the participants should be carefully designed and implemented for a successful execution of the model. A successful recruiting process will be able to anticipate working teams that can enhance and complement personal motivations. Recruitment is also seen as an instrument to create ownership within other key
stakeholders. Because of this, along with the recruitment of participants GESCI-AKE model pays attention to the process of acquiring skilled Tutors and engaging Industry representatives. All participants are recruited to inform the design and fine-tuning of the specific curriculum; to set parameters for timing; and ensure attendance and commitment.

The recruiting process includes three complementary actions: a) recruitment of participants, that is the actual people undertaking the training; b) recruitment of tutors, who are experts in the domains that the program offer and will guide participants; and c) recruitment of partners, that is representatives from the industry and immediate community that can offer networking, coaching and mentoring opportunities for participants. This is particularly relevant also as it guarantees employment after the training and create fruitful multi-stakeholder forums.

The selection process of the participants is be conducted by a team of key GESCI-AKE staff (the manager, at least some of the tutors) with the support/help of industry representatives and other stakeholders.

The main outcomes of the preparatory phase are:

1) A carefully selected set of participants and tutors
2) A mapping of potential partners
3) Implementation plan and budget
4) Shared Infra and shared space setup and in place

Upskilling and Training Phase

This is the first phase of the actual training curriculum providing entry level courses to gain life skills, industry standards skills and experience. The pedagogical focus is on tutoring, teamwork and peer learning. In this model it takes three months to implement. During this phase participants improve their technical, creative and cultural skills in a collaborative environment. They have access to shared infra as well as a shared physical space that acts as a learning hub and studio, and sometimes as a laboratory for experimentation.

Participants start this phase by developing their own learning goals and commit to a personal development track. Tutors develop content to populate the curriculum on a continuous basis and on newfound software or skills or course unit. At this point, potential industry and other partners are identified. They are invited to engage and participate in specific events.

Shared practices and interaction strategies used:

1. **Baseline survey(s)**: Informs the project on the existing and emerging knowledge gaps as well as where resources are needed the most. A well scoped survey is
designed to assess the needs of the tutors, participants as well as the project management.

2. **Screenings:** A weekly opportunity to show work in progress in an informal and secure setting. The screenings facilitate tutoring and peer-learning opportunities, and they make the advance and feedback of the work transparent to all. Screenings are also spaces to invite guests to contribute to the core modules.

3. **Industry visits:** GESCI-AKE participants visit regularly state-of-the-art production facilities and companies that relate to their field of training. These visits provide overview of industry practices and also generate initial networking opportunities and knowledge of the needs and demands of clients and the job market.

4. **Showcase:** A completion stage event where the outcomes of the program are shown to a wider audience. A showcase generates visibility and is a space for experimenting and testing the ideas. Showcases are executed and planned to the highest standard. That means they need to start on time, have a well planned room layout, a schedule and be of the highest production value. In this phase the showcase marks the transition to the next level and provides a way to include stakeholders in the larger evaluation and reflection on the results of the work.

5. **Roundtable:** A multi-stakeholder meeting which evaluates the results of the previous phase providing feedback in regard to industry standards and production process (e.g. quality, relevance and market potential of the outcomes). The roundtable and solution design also provide an action plan for the second phase “Entrepreneurial practice phase”. The action plan includes a curriculum and time table proposal for the second phase as defined and co-created with roundtable participants.

6. **Shared reflection and documentations:** Organized in a joint online platform (LL action research component) where all participants share updates and concrete thoughts on the development of the process.

**Resources and infrastructure:** Shared space (studio / lab); Internet connection, Social media (FB group and WhatsApp group for internal informal and formal communication); shared file sharing repositories (Google drive, dropbox or equivalent); computers and other equipments, shared floppy charts and project wall, web presence.

The main outcomes of the upskilling and training phase are:

1. **Individual class assignments** that are completed and turned into an individual portfolio for each participant. AKE stakeholders use them to validate learning and development and to showcase the acquired skills.

2. **A jointly produced community/cultural research-based project.** Participants work together on a topic/theme to be assigned by tutors with participation of all the team. The community project provides AKE participants with opportunities

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65 Since this is a transition activity, details of it are also elaborated in the section on “Entrepreneurial practice phase”.
for developing creative team work strategies and collaboration. This project feeds directly into the second phase.

3. **A database / repositories of course work resources:** Upskilling and training phase cohort does not only create individual results but also contributes to a pool of shared resources for AKE. These resources can be reused by peers and future AKE cohorts. Creating this resources saves in production time and also equips AKE participants with creative knowledge.

**Apprenticeship Curriculum Phase**

The Apprenticeship phase is a *laboratory based simulation* of a real working office environment, where participants learn hands-on and minds-on. The pedagogical focus is on continuing development of team work practices and peer learning opportunities, this time enhanced by mentorship, and entrepreneurial coaching done by practitioners. This phase can be completed within three to four months. Participants continue to have access to shared infra and a shared physical space that starts to act also as a co-working space and innovation hub.

The content of the module is largely influenced by a market needs assessment. The market needs assessment is provided by industry experts engaged during the roundtable and solution design workshop that closes the first phase of training and opens this one. Therefore the apprenticeship curriculum phase has some pre-set learning content; however most of its content will vary from cohort to cohort.

Participants for this phase are selected from those participating in the previous phase. The selection happens by a second entry interview. To continue to the next phase participants submit a report that documents the community/cultural project assignment. This document is used as a baseline survey /research /study for the Entrepreneurial practice phase and for development of the next commercial project (to be showcased at graduation from this phase). Those selected, will organically form groups that eventually lead to a startup experimentation and formation.

The role of the tutors in this phase is that of providing support and consultancy, including training and upskilling on areas found to be challenging to the participants. Tutors help in identification, selection and development of projects that participants develop (commissioned and self initiated) which have both commercial potential and could be replicated elsewhere. During this phase tutors should also be supported by a “training of trainers” complementary activities.

Shared practices and interaction strategies:

1. **Entry interview:** A dialogue occasion in which the work of the first phase is evaluated together with the prospective participants to assess the suitability of each individual to larger team goals and entrepreneurial possibilities.

2. **Roundtable and solution design workshop:** A multi-stakeholder meeting with industry experts that helps the participants and the GESCI-AKE program manager
to assess the results of the previous course work and to plan the next phase. The roundtable provides a concrete method for offering constructive criticism to the participants’ work. In the roundtable industry experts and other invited stakeholders think through and iterate the outcomes showcased by participants. They develop jointly an audit of: Resources available, skills, and resource gaps in the cohort and in the outcomes presented. A project management plan unpacking all tasks and learning goals for the second phase is developed.

3. **Scrum project management:** Teamwork in this phase is rehearsed in a simulated working environment, to manage the development of all teams’ projects in this phase GESCI-AKE uses the Scrum framework. Scrum is an iterative, incremental and agile development framework for managing product development that enables teams to self-organize and involve clients and users closely. GESCI-AKE model implements this approach in the physical space as well as by enhancing the coordination of each team with online coordination and collaboration tools (e.g., Trello or similar)

4. **Weekly status update meeting:** Provide opportunities for the diverse teams to share their advancements, rehearse peer learning as well as encounter external input.

5. **Bi-weekly scrum meetings:** Meeting where each team work and evaluate the results of their previous iteration. The structure of the meeting is based loosely on the Scrum Sprint.

6. **Expert dialogue in the co-working space:** Teams establish mentoring relationships with experts coming from GESCI-AKE partnering organizations or from experts that have attended the roundtable. These experts mentor and guide teams on practical and conceptual aspects of their projects together with GESCI-AKE tutors.

7. **Showcase and graduation:** The last showcase marks the graduation of individual participants in GESCI-AKE program (next phase graduates only teams forming a start-up). The showcase provides a way to include stakeholders in the larger evaluation and reflection on the results of the work.

8. **Shared reflection and documentations:** Organized in a joint online platform (LL action research component) where all participants shared updates and concrete thoughts on the development of the process (see LL resources)

**Resources and infrastructure:** Shared space (studio / lab / co-working space ); fast internet connection, internal social media (Facebook group and WhatsApp group for internal informal and formal communication), shared file sharing repositories (Google drive, Dropbox or equivalent); computers and other equipments, shared floppy charts and project wall, web presence and other social media outreach channels (Twitter, Facebook, Instagram, etc), project management support (Trello).

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66 Besides been an agile product development framework, Scrum has also been used to structure activities for agile and lean organizational development. For an intro see, Maximini, D. (2015). The Scrum Culture: Introducing Agile Methods in Organizations. Springer. N: Y.

67 In the Scrum method, work is confined to a regular, repeatable work cycle, known as a sprint or iteration.
The main outcomes of the Apprenticeship phase are:

1. **Experimental ventures and start-ups**: At the end of the second phase teams have created a business plan for commercial ventures offering products or services related to the skills acquired during the training program. Now teams are ready to officially register their business, acquire a bank account, and secure clients.

2. **Portfolio of commissioned work**: During this phase GESCI-AKE partners and other stakeholders provide GESCI-AKE participants with concrete and well-focused projects that can be used as learning opportunities and development steps. These are documented by each team and used as learning portfolios.

3. **Joint production**: New or updated joint production with cultural/community value, showcasing creative team development.

**Start-up Phase**

The third and last phase of GESCI-AKE program offers practical entrepreneurial advice, guidance and mentoring for small start-ups which have marketable products or services (ideally with commissioned work).

Participants who want to reach this level, must be affiliated to an in-house startup. In-house start-ups are those ventures that have been formally registered as business entities (they have proof of government certification of the business, any local authority government license requirements, a valid tax registration, a bank account and products or samples). During the Startup phase, teams are advised on how to gather information on sources of funding (including a database of existing sources of potential funding), coached on business fundamentals and design practices. The pedagogical focus is on start-up incubation guided by industry experts as tutors. It takes three to four months to complete this stage. Participants continue to have access to the shared infra and a shared physical space that act as a co-working and incubation space.

In this stage, the organization running the program should also be active in: 1) Lobbying business finance providers (such as youthfund, 2jiajiri, Unaitas) and monitoring and enforcing of strategies of business finance access and resource mobilization. 2) Collecting knowledge on local matters for start-up-incubation such as infancy challenges, funding, and scalability of start-ups, sustainability and market penetration challenges.

**Resources and infra**: Shared space (studio / lab / co-working space); fast internet connection, internal social media (Facebook group and WhatsApp group for informal and formal communication), shared file sharing repositories (Google drive, Dropbox or equivalent); computers and other equipments, shared floppy charts and

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68 As documented by the GESCI-AKE manager.
project wall, web presence and other social media outreach channels (Twitter, Facebook, Instagram, etc), project management support (Trello).

Shared practices and interaction strategies:

1) **Startup pitching and validation:** Prospective start-ups make a pitch to a group of five business experts who validate the ideas and provide feedback. The pitching session doubles as the entry interview for the participants of each start-up. Experts map the weaknesses and strengths of the start-ups and help plan the content of the module according to each team’s needs.

2) **Startup assessment and mentoring:** Continuous refinement of the commercial potential of the startup; of its competitive landscape and their strategies of business finance access and resource mobilization. This will be done via reflection on start-up cohort diaries and work plan, market analysis reports and customer/client feedback evaluations, pitching videos/audios produced and the performance logs and on mentor’s feedback gathered.

3) **Start up graduation:** A session to close formally the training program. Incubated start-ups will have an updated value proposition, well rounded offerings and working business plan.

4) **Policy forum and policy recommendations:** (GESCI-AKE specific) Policy Forums are events in which GESCI engages different stakeholders — accomplished professionals and industry representatives, policy-makers, educations, and so on — to discuss broader issues and join efforts related to the model. Policy Forums are opportunities not only for networking but for benchmarking developments in the field, advocating for joint policy goals of the field, and planning for joint future actions. Policy Forums are essential way to disseminate information and to map opportunities of scaling and expansion.

Outcomes:

1) **Creative ventures and start-ups:** The most important and crucial delivery of the GESCI-AKE program will be the creation of well functioning, prospective small companies by committed teams of individuals, with collective resources and skills.

Follow-up

After the three main phases when incubation and training needs are met, AKE transforms into a support mechanism that instead of incubating discrete cohorts of start-ups works on linking them across time. This does not only help to iterate the next training session (via, e. alumni feedback, communication and linking with industry partners). It also works well for branding the organization as a liaison between industry and young talent. This role can generate change across multiple actors, citizens, corporations and institutions and start-ups.

Shared practices and interaction strategies include:
1) **Mailing lists:** Updated and iterative resource of everyone involved in AKE programs. That includes previous participants, start-ups, tutors, mentors, guests of the showcase, invited speakers, company visits, commissioners of work, policy actors’ involvement.

2) **Invitations:** Engaging alumni and the extended networks to attend screenings (1st phase), show cases and policy forums. Securing company visits and commissioned work from companies.

Outcomes:

1) **AKE portfolio:** A consolidated sample of what the program has accomplished, the types of partnership agreements and collaborations available, and data and statistics on results and impact generated.
6. Conclusions: A SWOT for GESCI-AKE Creative Media Venture

The Model in Sum: Impact for Stakeholders

This report has documented the Context of GESCI-AKE Creative Media Venture, the Living Lab Process and Research Result, the consequent model and its elements. To fully evaluate the model’s viability and transferability would require prototyping it in different contexts. This section thus introduces several markers that can be set to assess its potential impact. As the depiction of the research results highlights, the key areas of Foundation, Process, and Structure have impact for participants, the organization/hub, and the broader network / other stakeholders.

<table>
<thead>
<tr>
<th></th>
<th>Participants</th>
<th>Organization/Hub</th>
<th>Wider Community</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundation:</strong></td>
<td>Participant-centered</td>
<td>Participant-driven curriculum development</td>
<td>Grounded theory approach: engaging and reflecting the wider community</td>
</tr>
<tr>
<td><strong>Foundation:</strong></td>
<td>Holistic</td>
<td>Participant-driven curriculum development: Biz-Edu+</td>
<td>Growth of “thought and action leaders” for the community</td>
</tr>
<tr>
<td><strong>Foundation:</strong></td>
<td>Diversity</td>
<td>May be a challenge for curriculum and organization; but builds wider base that can support sustainability</td>
<td>Reflecting the wider community</td>
</tr>
<tr>
<td><strong>Foundation:</strong></td>
<td>Local culture in global marketplace</td>
<td>Creates a brand that supports sustainability</td>
<td>Contributing to building a robust marketplace</td>
</tr>
<tr>
<td><strong>Process:</strong></td>
<td>Flexibility</td>
<td>May be a challenge for curriculum and organization; but builds wider base that can support sustainability</td>
<td>Offers forms of collaboration; responding to emerging opportunities</td>
</tr>
<tr>
<td><strong>Process:</strong></td>
<td>Individuality vs. team</td>
<td>May be a challenge for curriculum and organization; but builds commitment and maximises learning potential</td>
<td>Ensures well-rounded partners for community</td>
</tr>
</tbody>
</table>
The specific features of Foundation, Process, and Structure of the GESCI-AKE model can be translated to broader lessons for youth entrepreneurship training. This has been detailed in the related Policy Brief. As Table 4 highlights, the features of the model respond to the general challenges faced in the field and can speak for the potential of replicating the GESCI-AKE model for other fields than creative industries.

First, the GESCI-AKE model is responsive of contextual demands, both in terms of the market, as well as in terms of the unique nature of each startup venture and young
entrepreneur it incubates. Second, it recognizes the importance of space and other infrastructure, as well as specialization in the increasingly crowded landscape of innovation hubs. The model is built on a continuum of collaboration with stakeholders (also to respond to the market needs). Finally, the model indicates that, at the end of incubation, training needs to transform into a support mechanism of sorts -- that, in turn, will help in creating the next re-iterations of training (alumni assistance) as well as brand the organization as a connector of industry and young talent.

Figure 10. GESCI-AKE - 7 Thesis mapped to the curriculum model

<table>
<thead>
<tr>
<th>Thesis</th>
<th>Impact: Micro Participants</th>
<th>Impact: Meso Organization</th>
<th>Impact: Macro Wider communities, market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context matters</td>
<td>Skills and innovations that match demand (no replication)</td>
<td>Challenge: no one model fits all</td>
<td>Innovations that match demand = boost economy and create social value</td>
</tr>
<tr>
<td>Entrepreneurs cannot be cloned</td>
<td>Understanding of one’s own learning needs and personal talents / challenges</td>
<td>Challenge: no one model fits all</td>
<td>Diversity in innovation and products</td>
</tr>
</tbody>
</table>
Table 4. Three-level impact of the GESCI-AKE Model on Youth Entrepreneurship

The SWOT for GESCI-AKE Creative Media Venture

The research goals set by the management of GESCI-AKE Creative Media Venture for the Living Lab included mapping:

- New product/service relevance and viable start-ups;
- Industry partners, marketplaces and consumers in the local, regional and global innovation spaces;
- New national, regional and global skills and standard requirements and how to set them up;
- Social, cultural and business environmental needs, trends, niches and opportunities;
- Collaboration, networking and partnership opportunities for support, building of strengths and competitiveness; and
- Knowledge of how to ensure sustainability of the Creative Media Venture beyond the project parameters.

These goals are broad. For example, digital creative industries is a field that changes incredibly rapidly (especially the question of standards) so actual concrete standards are not at stake here. Also, as the GESCI-AKE Creative Media Venture (2016-2017) is by definition participant-focused, searching for relevant opportunities “from above” would
be against the principle of participatory Living Labs. That said, the LL research blog provides a rich source of co-created information and insights on practices of the field, by and for the participants, that features general trends, including opportunities and threats.

Here, the above goals are taken into a more general context, to serve as guidelines for the SWOT analysis for a GESCI-AKE Creative Media Venture Model depicted in this report. Table 4. summarizes the internal strengths and weaknesses of GESCI-AKE as at beginning of 2017, as well as (overlapping) outside opportunities and threats to the program:

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Own place at the continuum of tech-creative industries training and incubation</td>
<td>● Financial model and continuity: Development of the (social) business model further needed</td>
</tr>
<tr>
<td>● Conceptual, detailed, tested model</td>
<td>● Fine-tuning of the niche and brand needed: Is this a course or an ongoing support network?</td>
</tr>
<tr>
<td>● Biz-edu+ approach</td>
<td>● Development of the hub as space and virtual tools</td>
</tr>
<tr>
<td>● Potential transferability and marketability of the model</td>
<td>● Fine-tuning of terminology and core methodology</td>
</tr>
<tr>
<td>● Innovation in educational methodologies</td>
<td>● Reliance on exceptional human capital: Manager and Tutors play a key role in success; they need to be and feel committed</td>
</tr>
<tr>
<td>● Innovation = products</td>
<td>● Impact assessment tools need to be developed from educational M&amp;E to broader social value analysis</td>
</tr>
<tr>
<td>● Existing networks of industry and policy partners as well as successful alumni</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Ever-growing markets and needs locally, nationally, regionally; even globally</td>
<td>● Competition: Rapid increase of innovation hubs and youth entrepreneurship projects in the region</td>
</tr>
<tr>
<td>● Lack of education opportunities continues to be the challenge: solves that problem</td>
<td>● Sustainability: Creating the right mix of revenue sources in the increasingly crowded field (business plan, impact indicators)</td>
</tr>
<tr>
<td>● Social business models the biggest trend in youth employment: an opportunity for GESCI to become one, and also to teach social entrepreneurship in the field of creative industries</td>
<td>● Trust from Industry Partners requires transparent quality assurance mechanisms</td>
</tr>
<tr>
<td>● Highlight gender as one of the key foci in training</td>
<td>● Contextual challenges: potential bureaucracy, corruption, and IP infringement in the field</td>
</tr>
<tr>
<td>● Established brand that continues to grow -- and that can get synergy and support from other programs of GESCI</td>
<td></td>
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| Table 5. GESCI-AKE SWOT |
The internal strengths and weaknesses of the GESCI-AKE model-in-progress have been discussed in detail in Section 4 where they have been highlighted as research results, and in Section 5 that features the how the best practices and processes can work as a model. Core strengths include, as depicted in this report, a modelling that can make the GESCI-AKE “product” marketable. GESCI-AKE has also clearly developed a brand, and found a position in the “beginning” of the continuum of education for digital creative industries. It can thus showcase both creative products (start-ups and their work) as well as educational innovation. In the level of pedagogy, GESCI-AKE experience has empowered some participants to feel vulnerable and allow them to recognize that they are stuck but with a feeling of confidence that it is a normal step in the process. The opportunity to fail, the space to act and create, as well as the place to get empowered are generally considered as essential concepts of entrepreneur training.\(^69\) The Biz-Edu+ approach, i.e., a holistic view on the participants as persons-creatives-entrepreneurs, fosters those elements. That said, they require the emergence of complex forms of leadership skills in participants themselves, in the host organization, and the tutors but also at the level of teams forming start-ups.

The weaknesses are not really weaknesses as such, but aspects of the model-in-development that would warrant further fine-tuning. Sustainability is obviously the key. Given the growing importance of social businesses in their different reiterations, framing GESCI-AKE model and the related hub as such might be an excellent solution to further create a mixed-source revenue stream. In this regard, one of the most urgent challenges for GESCI-AKE is the lack of impact metrics -- something that potential funders would probably like to see in the densely populated field of youth entrepreneurship and tech incubator space. Conventional Monitoring and Evaluation on educational impact will not suffice; neither is LL measuring social value and impact (but recording processes for further innovation). Social value is be a crucial aspect of the value proposition of any social business. A part of the metrics is, naturally, the specific niche of GESCI-AKE. Research shows that not only is the lack of education or seed funding a challenge, but societal attitudes, and support services were found to be barriers for youth entrepreneurship in Africa.\(^70\) This raises a question as to what role does GESCI-AKE model-hub play. Is training and short incubation enough of a competitive edge?

The strength of GESCI-AKE is also its weakness: Such a flexible, participatory, supportive, and participant-driven model requires enormous commitment from its staff-faculty. For instance, in the case of GESCI AKE Creative Media Venture 2016-2017 the project manager has had also an orchestrator and choreographer role to steer flexibility.

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He has brought together his own previous networks to support the project at critical times. Due to the nature of contingency work, the manager took also tutoring duties (e.g., life skills). When asked about the characteristics he thinks are required from someone coordinating an GESCI-AKE training program\(^{71}\) he listed the following characteristics:

- Mix of skills, some understanding of the content;
- Openness;
- Social skills; and
- Knowledge of the industry (contacts and network existing from before).

In terms of external opportunities, Table 4. depicts just a broad generalization of the emerging focus on youth entrepreneurship as one of the key drivers of sustainable development. As the recent British Council report documents\(^{72}\), the crossover between digital technology and social entrepreneurship and the emergence of new digitally enabled business models; the connection between digital technology and arts and cultural organisations; the continued significance of crafts and traditional practice for sustainability and innovation; the need to connect agendas in arts, creativity and education; and the convergence of the creative industries with sectors such as tourism, cuisine and services, all highlight the opportune position of GESCI-AKE. An additional trend that GESCI-AKE could benefit from even more pointedly, is the trend of women and minorities as key participants in the creative economy. Another underserved aspect of the sector is training for social entrepreneurs in creative industries. As noted in the introduction, both most hubs and creative businesses they incubate tend be mixed between for- and on-profit. GESCI-AKE could incorporate social entrepreneurship in its business education modules -- and this might be attractive to many funders.

Finally, the threats mirror the opportunities. The field is growing so rapidly that timely honing of the model is needed. As noted, this includes a robust business model for GESCI-AKE, fine-tuning its mission and value proposition, as well as creating solid impact and quality indicators.

\(^{71}\) Interview with the GESCI-AKE manager over Skype (September 2016).

References


APPENDIX I: Toolkit Components Developed to Complement the Model

This section includes a set of tools and resources that have been used in the GESCI-AKE Living Lab implementation.\(^3\)

As the model proposed here is not necessarily field-specific, these resources have been modified to apply to different kinds of hubs and projects. They are intended as inspiration and support of the model, to be used and modified as appropriate.

The resources include co-creation and co-research tools (from workplan, to methods to reporting), as well as broader organizational issues, as well as a list of readings that can help in the general conceptualization of what Living Lab approach can be in education, business, and related innovation projects and processes. Please see each resource under the link provided.

1. Research proposal, design, and workplan
2. Participant diaries and interviews
3. Tutor and stakeholder interviews
4. Portal updates and discussions
5. Research reports and updates
6. Showcase template
7. Funding models
8. General organizational checklist
9. Useful literature on Living Labs

\(^3\) Please note that these toolkit components are not a part of the research design and research process. They were created in response to the request by V. Omondi for the website http://culturalindustriesafrica.org/AKE_curriculum/. They are not based on this LL research, but rather on participatory research tools and practices the researchers use in their work, generally. However, they are included here to concretize the LL component of the recommendations, i.e., the model.
APPENDIX II: List of Living Lab 2016-17 Activities

1. Research design
2. Basic blog design updates and a new domain name purchased
3. Intro post and video to the participants
4. Pre-course questionnaire
5. “In the News” and “Industry Insights” updates for the participants: total 50 posts by 4 February 2017
6. Monitoring & Evaluation blog updates
7. Questions to the participants:
   i. Career goals
   ii. Your future clients?
   iii. Your future collaborators?
   iv. What did we learn last week -- in an image?
   v. The connection between creative industries and development? (For the UN side event)
   vi. Your innovator hero?
   vii. Your key to a successful creative business venture?
8. Interviews with the tutors about the upskilling phase (Skype & WhatsApp)
9. Interviews with industry representatives (on location)
10. Collection of background blog posts for the Roundtable
11. “Work diaries” and “Updates from the Field” of the participants
12. Mid Term Report: Power Point summary and written report
13. Revised research proposal to complete the initial interview and review phrase of LL
14. Background overview of similar projects in sub-Saharan Africa
15. Emails and conference calls
16. Fieldwork in Nairobi - December
17. Showcase design and presentation in December
18. Live blogging (3) for the showcases in June, August, and December.
19. Follow up of start up activities and products
20. Final Report - Model
21. Resource PDFs on Living Labs for the Model Website
22. Policy Forum tools: Powerpoint and a Policy brief.