



GESCI-AKE2014/2015 *Creative Media Skills Course*
***“The Sound of the City”* -**
Living Lab Research Component

**FINAL
RESEARCH
REPORT**

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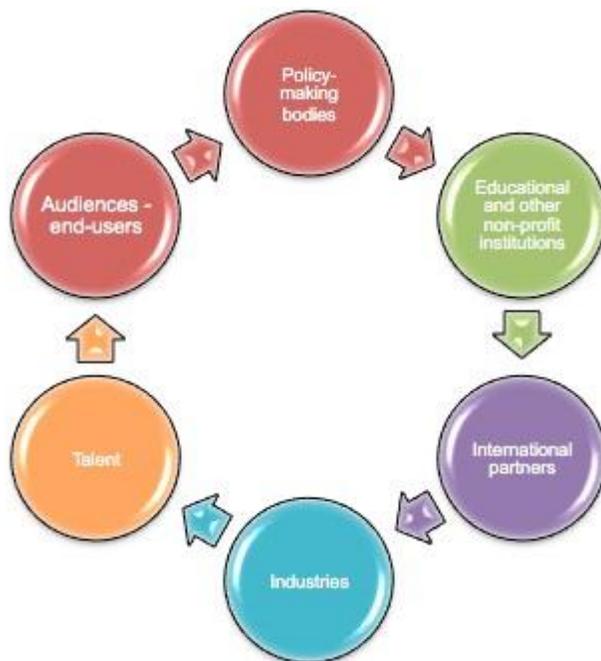
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1. Introduction: Kenyan Prospects of Creative Industries and Digital Innovation

Digital evolution is advancing in many non-Western countries, creating new markets and job opportunities. Kenya is among the countries on the rise, albeit its growth index is slower than of the top tier countries. While the mobile phone penetration is close to three quarters of the population, and the innovation environment in the country has flourished creating international fame, institutional support for digital innovations has not developed with the same speed.¹

Different Stakeholders, Different Innovation Models



ICT innovation models in Kenya do not follow those in the global North, or even those in the rapidly growing Asian digital economies. In terms of the overall outlook of the Kenyan society and the institutions involved in innovation, understanding how the roles played by many different stakeholders in **the innovation ecosystem** (policy, business, end-users, international, local, for-profit and not-for-profit actors) – is essential in grasping the shape of new technologies and markets that will emerge. In many African contexts, international funders or other partners are playing a role in incubating innovation.²

¹ Digital Evolution Index (2015): <http://fletcher.tufts.edu/eBiz/Index>

² http://www.global.asc.upenn.edu/app/uploads/2015/01/Marchant_Who-is-ICT-Innovation-for.pdf

These ecosystems, often formed around innovation hubs or *Living Labs* (see **Section 2**) can add substantial value for entrepreneurs and startups through brokering relationships with clients, funders, and partners.³ Especially the South Africa's digital creative media industries and training institutions are regarded as very advanced in Africa.

Other countries in which there is some, albeit not as extensive, development include Kenya, Nigeria, Egypt, Mozambique, Madagascar, Ghana, Algeria, Tunisia, and the Republic of Congo.⁴ **Some challenges** of these labs are that they focus on ICT and mobile innovations (not often on culture), they tend to attract college-educated innovators, and they may turn be too expensive for small start-ups.⁵

Cultural Opportunities and Challenges

A growing body of evidence points to the trend that Kenya is becoming well-known, not only for its tech innovations and incubators that have reached world fame⁶, but also for its **locally inspired content** that has begun to reach both local, regional, and global audiences.⁷



Indeed, the role of **culture** has been stressed globally as one of the key drivers of development, as evident in the United Nations research and discussions towards the Sustainable Development Goals (or, “Post-2015 Goals”).

The UN Development Group highlights the power of cultural productions to “make an important contribution to poverty reduction, as a resilient economic sector that provides livelihood opportunities”. In addition,

³ http://www.infodev.org/infodev-files/mlabs_and_mhubs_business_model.pdf

⁴ <http://www.gesci.org/assets/files/AKE%20research%20-%20Full%20Report.pdf>

⁵

<http://www.economist.com/news/middle-east-and-africa/21646216-tech-hubs-are-expanding-fast-across-africa-homes-africas-tech-entrepreneurs>

⁶ Some of the internationally most well-known: <http://www.ihub.co.ke/>, <http://www.usahidi.com/>, <http://www.ilabafrica.ac.ke/>, <http://www.safaricom.co.ke/personal/m-pesa>

⁷ <http://filmmakerafrika.co.za/african-animation-repositioning-world-stage/>; in Kenya recently: <http://www.thisisthenest.com/>

“education strategies should aim to develop cultural literacy and equip young people with the skills to live in a multicultural and diverse society, in both economic and social terms”.⁸

At the same time, in the Kenyan context, research indicates that the big challenge of the employers in the creative cultural industry is that the bulk of the applicants for work are those without qualifications and/or experience: many individuals learn the skills needed on their own, because of their passion for their field.⁹

Another factor is the degree of participation of women in this sector to fully utilize the country’s human resources to the best advantage of the field.¹⁰ Also, some claim that often acclaimed innovations do not translate into sustainable, successful businesses. The skills of, and models for, entrepreneurship need to be further developed.¹¹

Mobile Promise

As already the GESCI Policy Brief of 2013 noted, “changing consumer behaviour is becoming more and more favourable to the growth and development of Digital Creative Media (DCM) industries, driven by the power of mobility and devices, such as increasing engagement of the consumers with digital creative content and rise in their readiness to pay for content”.¹²

An example of this is the growing industry for value-added apps and services for smart devices: In Kenya, Mozambique and Nigeria, TV and media services are increasingly being accessed using smartphones. These channels can be accessed by consumers via an app on their devices. This is influencing the development of local and regional content. Innovations such as this give rise to further market trends such as multi-screen consumer behavior.¹³

To add to the potential, foreign private equity investment in Africa is increasing rapidly. The interest of investors has shifted from fixed assets to services.¹⁴ This will

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[http://www.unwomen.org/~media/headquarters/attachments/sections/what%20we%20do/dialogues-on-implementation-of-the-post-2015_lr_web%20\(1\).pdf](http://www.unwomen.org/~media/headquarters/attachments/sections/what%20we%20do/dialogues-on-implementation-of-the-post-2015_lr_web%20(1).pdf)

⁹ <http://www.uis.unesco.org/culture/Documents/acri-report-unearting%20the-gems-kenya-2012.pdf>

¹⁰ http://unctad.org/en/PublicationsLibrary/webdtlstict2014d1_en.pdf

¹¹ <http://www.technologyreview.com/notebook/426971/frustrated-innovation/>

¹² <http://www.gesci.org/assets/files/AKE%20research%20-%20Full%20Report.pdf>

¹³ <http://www.ericsson.com/res/docs/2014/emr-june2014-regional-appendices-ssa.pdf>

¹⁴

<http://www.economist.com/news/business/21640327-private-equity-investors-are-getting-hot-africa-business-es-there-need-all-capital?zid=304&ah=e5690753dc78ce91909083042ad12e30>

pave the way for opportunities for more tech innovations and related cultural products and services as well. And there are some signs that if planned well, and coupled with some bigger donors, crowdfunding campaigns might bring some additional money to innovation projects.¹⁵

Role of Policy-Making in the Ecosystem

Kenya has a new cultural policy since 2009. In very general terms, Kenyan policy-making has been geared towards **protecting** cultural products (e.g., copyrights). The challenges lie in the visibility and livelihood of cultural creators.¹⁶ However, for instance the draft policy recommendations for the music industry illustrates numerous mechanisms (ranging from education to incentives and funding) that can be used to not only **support** but actively **encourage** creative industries.¹⁷ In the global markets for digital creative goods, supporting local culture, then, can be seen as a protective measure as well as as a measure encouraging innovation, education, and employment.¹⁸ The momentum for more supportive and encouraging national policies may be at hand: A comprehensive Kenyan policy *Vision 2030* highlights in its section on the Economy the need to upscale ICT-based services, as well as, in its Social Pillar section, the need for investment in education, as well as the youth and gender equality.¹⁹

The speeding up of digital evolution process in Kenya, and in the region, will need attention to the innovation ecosystem²⁰, in particular to innovation **policy-making**, as well as concrete **educational models** that are (ideally) created in collaboration of for-profit and not-for-profit local and international partners and that respond to the needs of the **industry**. Finally, at the micro-level of the ecosystem, there is an urgent need to further fuel the strong innovation culture in Kenya and ensure that **young professionals** are equipped to enter the market creating new innovations. As the case of “Nollywood” has proven, grasping this multi-focused, “market-oriented” approach in understanding the different stakeholders is a prerequisite for creative success, locally and abroad.²¹

¹⁵

<http://smartmonkeytv.cmail2.com/t/ViewEmail/r/CDD4E896DD8E6AA22540EF23F30FEDED/3E5AE509D8F49070C45D7BC1A387288D>

¹⁶ http://www.acpculturesplus.eu/sites/default/files/2015/02/05/fiche_328447_uk.pdf

¹⁷ <http://www.musicpolicy.or.ke/wp-content/uploads/2014/08/MUSIC-POLICY-FINAL.pdf>

¹⁸ <http://whc.unesco.org/document/6856>

¹⁹ <http://www.vision2030.go.ke/index.php/pillars/index/social>

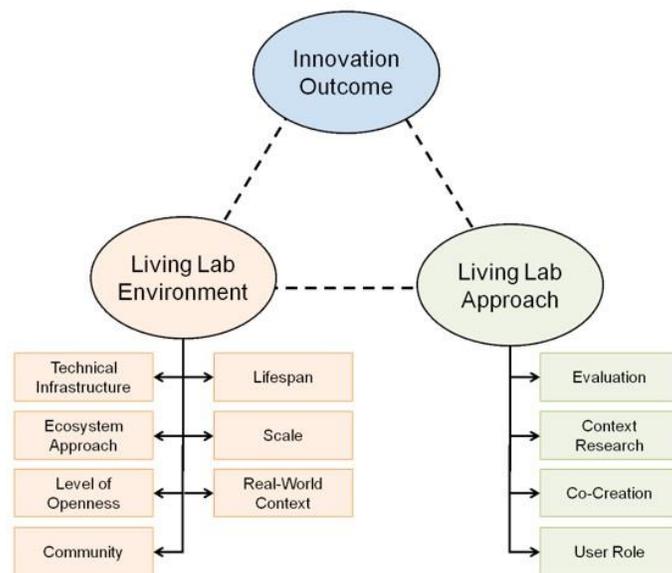
²⁰ http://www.global.asc.upenn.edu/app/uploads/2015/01/Marchant_Who-is-ICT-Innovation-for.pdf

²¹ <http://www.ijbmer.com/docs/volumes/vol4issue4/ijbmer2013040401.pdf>

Anna Ståhlbröst and Marita Holst of the University of Luleå note that many different types of Living Lab environments exist. For example, Ståhlbröst and Holst identify five different LL concepts:

1. Research Living Labs: focusing on performing research on different aspects of the innovation process.
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 Lab 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. A time limited Living Lab as a support for the innovation process in a project. The Living Lab closes when the project ends.²⁷

Ståhlbröst and Holst argue that there is not an exact *de facto* definition for Living Labs. This research agrees with this argument. Therefore, new and hybrid Living Labs models can not only be identified, but also built.



It has been argued that in the African context, Living Labs Africa respond to particular challenges in relation to available rural infrastructure, educational and employment opportunities and resultant migration (particularly of youth), to urban environments nationally, as well as internationally.

There are a sizable number of successful Living Labs in Africa including two regional ones, as well as country-specific ones in Mozambique, South Africa, and

Tanzania.²⁸ At the same time, these labs focus on ICT and mobile innovations (not

²⁷ See Ståhlbröst and Holst: Living Labs Methodology Book at https://www.dropbox.com/s/vozqmd3paahi8l8/LivingLabsMethodologyBook_web.pdf?dl=0

²⁸ <http://www.ist-africa.org/home/default.asp?page=livinglabs>

often on culture)²⁹so there is a specific niche to develop more DMC-focused incubator hubs.

GESCI-AKE 2014/2015 Creative Media Skills Course as a Living Lab

The *GESCI-AKE 2014/2015 Creative Media Skills Course Living Lab* with the working title “*The Sound of the City*” was defined by two core components.

First, taking the **ecosystem** approach, the LL structured stakeholders into two groups: "community of interest" and a "community of practice". Community of practice members encompass training centers, universities, tutors and participants, industry affiliates and enterprises. The community of interest encompasses the Government, as well as GESCI and donors. GESCI and the AKE project team coordinated and facilitated both communities “in terms of a shared vision and purpose; concrete and attainable goals and objectives; mutual respect and open communication; good record keeping; and a way for success.”³⁰



Second, the focus of “*The Sound of the City*” was in pedagogy and innovation through **local content and combining traditions with current trends**, with the joint theme for animation, game development, and music - thus “*The Sound of the City*”.

For example, in the music cluster this meant guiding participants in the art of storytelling, as well as recording and production, based on “how the traditional techniques of African chants and songs influence modern rap music”, and studying the ways “music uses language and folklore to tell stories and how this aspect can be important to the current scene in hip-hop, how music contributes to street languages.”³¹

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<http://www.economist.com/news/middle-east-and-africa/21646216-tech-hubs-are-expanding-fast-across-africa-homes-africas-tech-entrepreneurs>

³⁰ Living Lab Framework - AKE 2014.

³¹ Cultural Music Syllabus for *GESCI-AKE 2014/2015 Creative Media Skills Course*.

Living Lab Research

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-method 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.



Researching a single Living Lab can also be seen from the context of “blackboxing”. To cite Bruno Latour, blackboxing is “the way scientific and technical work is made invisible by its own success.”³²

A Living Lab can be seen as a “black box”. While results of a single Living Lab are interesting to research and review *per se*, a social scientific approach to researching Living Labs often

require opening the “black box”, i.e. understanding the mechanisms and processes not only within a single Living Lab, but also in Living Labs in general. This knowledge is needed especially when building both single Living Labs projects and broader, replicable Living Labs models.

³² Simple definition of “blackboxing” at <http://en.wikipedia.org/wiki/Blackboxing>

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

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**.³³

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:

- *What was the GESCI-AKE 2014/2015 Creative Media Skills Course (The Sound of the City) as an educational Living Labs? We intended to identify the characteristics - including the participant feedback - of the course, as well as the best practises, key features, successes and challenges. The purpose of this research question was to gain understanding on the course.*
- *How could the successes of GESCI-AKE 2014/2015 Creative Media Skills Course (The Sound of the City) be replicated? One of the goals of the research project was to take steps in building a “hybrid” Living Labs model, which could combine the learnings from “The Sound of the City” as well as other educational Living Labs with learnings from other Living Labs projects. These learnings, in dialogue with stakeholders, help in building this “hybrid” model for future Living Labs, to be prototyped in Africa at later stage.*

To answer these research objectives, a multi-method qualitative research was conducted. The research, conducted from November 2014 to March 2015, was a combination of background research, survey research and thematic interviews, described in more detail below.

1. *Background research* was used to provide information on current and previous Living Lab models, their possibilities and best practices. It included literature review as well as reviewing a set of different Living Labs scenarios.

³³ See: <https://thesoundofthecity.wordpress.com/2014/11/15/research-design-first-proposal/>

Background research also included informal interviews and discussions with professionals with experience in Living Labs models.³⁴

2. *Two survey research questionnaires* were conducted.

The first survey questionnaire, aimed for “*The Sound of the City*” participants, was built with Google survey tools. This questionnaire, sent to the participants at the late stage of the project in December 2014, aimed to gather information from “*The Sound of the City*” and its characteristics. In addition to the questions which focused directly to “*The Sound of the City*”, more general questions on the themes of good/bad leadership, good/bad teamwork and best practices in teamwork were presented.³⁵

Second survey questionnaire, presented as a printed paper questionnaire to “The Sound of the City” participants at the showcase/graduation event in February 2015, focused to gathering feedback from the showcase event.

The questionnaires focused on three themes: a) getting information and feedback from various stakeholders of this LL project; b) obtaining information on best practices while doing creative collaboration; and c) finding out the most important take-aways from the event where final innovations were demonstrated and different stakeholders interacted.

3. *Individual and focus group interviews* were conducted throughout the whole research process, from December 2014 to March 2015. Thematic semi-structured interviews were advocated to gain deeper insight on the themes of this research, within the keywords of leadership, innovation, teamwork, sustainability and local/global (for more information on these keywords, see section 3).

In addition to the interviews, an open stakeholder dialogue was held as the conclusion of the showcase.³⁶

4. In line with the collaborative, transparent nature of the LL research methodology, a *research blog*³⁷ was used, where the course participants and GESCI staff were encouraged to participate in discussions on topics related to entrepreneurship, creativity, and Living Labs.

³⁴ See <https://thesoundofthecity.wordpress.com/> for selected interview summaries and for the list of literature

³⁵ See the full-length first questionnaire here:

<https://docs.google.com/forms/d/1egdDxeUVyEACZiysDalz93SGz4RFwQxl0nf3fvKUxAg/viewform>

³⁶ See the dialogue documented here:

<https://thesoundofthecity.wordpress.com/2015/02/06/the-showcase-live-blog/>

³⁷ <https://thesoundofthecity.wordpress.com/>

While there weren't many discussions with participants and/or stakeholders in the blog, the research blog in itself proved that a technological solution, such as a simple platform, could be a good tool for providing collaboration and transparency *within* a project. It could also be useful as a tool for providing information and interest *outsidethe* project, for example, for external stakeholders.

5. Researcher Dr Minna Aslama Horowitz participated to the *policy forum event* organized by GESCI/AKE in March 2015. The participation gave an additional *ethnographic perspective* to the research: observations from the policy forum and from its preparations added understanding to the whole research process, its results and recommendations.

The results were cross-analyzed using the 'spiral' **data gathering** method of Living Labs (adding new elements to enrich and deepen initial results) with the **analytical** method of qualitative close reading: "A close reading ... explores and exposes far more sensitively the complex cultural embeddedness... It gets at matters of aesthetics, craft, and ethics in profound ways. It is capable of revealing much about ... a community that is neither explicit nor even known to its community."³⁸

This inductive method is especially fruitful when researching new phenomena and a multiple kind of data as in the case of the GESCI-AKE LL.

³⁸ <https://interactionculture.wordpress.com/2009/03/24/discourse-analysis-vs-close-reading/>

3. Results: Main Lessons from the Living Labs Research

Results from “*The Sound of the City*” Living Labs research are presented here within five keywords.



The keywords - **leadership**, **innovation**, **content**, **sustainability** and **local/global** are thematic factors. They were hand-built, not only from the research material gathered, but also from the research material provided from background research. Especially the surveys and interviews helped in formulating the keywords.

The keywords not only describe some general characteristics and factors of GESCI-AKE 2014/2015 Creative Media Skills Course “*The Sound of the City*”, 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.

It should be noted that these key themes, originally emerging from within the GESCI-AKE project, were viewed as **highly relevant** by the vast majority of the participants of the multi-stakeholder Policy Forum³⁹ -- hence, validating that these themes are perceived as crucial by industry, non-profit organizations in the field, as well as representatives of policy makers.

³⁹ Policy Forum Exit Survey at: <https://www.surveymonkey.com/s/FPWJG88>

Leadership

Leadership is one of the keys in building a successful Living Labs environment. It is also one of the key themes while building a broader innovation ecosystem using a Living Labs model - be it educational, commercial, institutional or hybrid between two or more of them.

a. *Leadership should be seen broadly* - not only as selecting good individual leaders with good leadership abilities, but also as organizing the whole innovation ecosystem in a way that the workflow within a Living Labs project becomes clear to all participants and stakeholders.

A good individual leader is, for example, a good communicator and a solution provider. She/he is also a talent developer, with a good knowledge of group dynamics. At the same time, a good leader is also a good resource manager, including abilities in time management.⁴⁰

The need for good leadership in teamwork is not only the main feedback from the “*The Sound of City*” participants, but it also is in line with learnings from other Living Labs projects.⁴¹

b. Leadership is related to the question of implementation, as in implementing Living Labs -projects (and other similar ecosystems) to practise, and as in building courses, workshops etc advocating Living Labs as an innovation model.

In this implementation process, good leadership is equal to good management on the organizational level as well. In other words, when building a Living Labs or starting a project, the organization responsible should be not only well-led, but also show good leadership to the project/course etc.

This need for good leadership from the organizational level is a critical key in building successful ecosystem related to innovation, creativity and technology.⁴²

⁴⁰ Example characteristics of a good leader from a single interview (*The Sound of the City* participant, male)

⁴¹ http://www.infodev.org/infodev-files/mlabs_and_mhubs_business_model.pdf

⁴² See policy recommendations in The Business Model of mLabs and mHubs at http://www.infodev.org/infodev-files/mlabs_and_mhubs_business_model.pdf and policy recommendations in Using Locational Data to Improve the Science of Delivery at <https://openknowledge.worldbank.org/handle/10986/19316>

c. One of the ideas of “*The Sound of the City*” was to add to the entrepreneurial skills of the participants.

This was also one of the needs that was highlighted in the research data. Entrepreneurial skills should be seen broadly here - not only as building new start-ups (or participating to a start-up), or as getting employed by a company, but also as possibilities for networking, mingling and collaborating with existing companies. These possibilities should be included in the curriculum, and advocated throughout the whole Living Labs experience.

d. A good program leader can identify important issues in the field that may extend beyond technology or creative content. One of such issues is the **lack of women** in the field. Another is **financial constraints** that some practitioners may face. Leadership means **understanding diversity as a resource**, and supporting diversity and individual growth of students in a collaborative setting.

e. On the organizational level, it is vital to not only understand these issues, but build sub-organizations, ecosystems and even individual projects/courses that help solving these - and other - issues. This understanding also helps in building sustainable, replicable innovation models, and is a part of exporting ecosystem to other societies. However, further research from multiple scientific perspectives is needed to identify these issues better.

I feel there should be a wider consideration ... for example working as a group of five or six in one project creates room for slow learners and shy people to not really feel an ownership or responsibility in the project. But when you break it down to smaller teams like two people they have more responsibility and so they feel a great deal of ownership and that generates passion to create something even better.

- Survey Questionnaire

Innovation



Both the survey questionnaires and the interviews were clear in this sense: innovation comes in different forms, and innovation should be given time and space.

If an ecosystem is meant for building innovations, it is essential to build the ecosystem in a way that it makes innovating actually possible. While

this seems obvious, it is not: if an organization advocating the innovation ecosystem does not understand what innovating actually is and how it happens, the chances for ecosystem - or a project, a course or a single Living Lab exercise - to fail are higher.

a. Innovation in general is not only creating **new** ideas and concepts, but also **improving** and fine-tuning existing ideas and concepts.

“Innovation is a means to essential communication, enabling new social values, and globalization is bringing out the local innovation and need for local culture.” – A participant in the Showcase discussion

In survey answers and in interviews innovation is also seen as a process where existing skills are used - not so much as a process, where new skills are acquired while innovating. In other words, innovation is not only done while learning, but also while using skills already learned. This should be remembered not only in single workshops, projects or courses advocating Living Labs, but as well in organizations building ecosystems aimed for creating innovation.

b. Innovation takes its time, and it should be given time and space. Especially when building innovations is combined with working with experts from different fields, innovation requires time to find **common ground, vocabulary, and ways of working**.

This collaboration with external professionals is related to the question of entrepreneurial training (see keyword “Leadership”). But even in the collaborative working environments, free exchange of ideas is clearly desirable and beneficial to innovative processes.

c. Students appreciate **the opportunity to experiment and fail** - to learn. This opportunity to fail actually drives innovation⁴³, and failure in a “safe” context such as learning environment might lead to future, successful innovations.

Intensive trainings may often end up being rushed, as getting used to collaboration, building right teams and right teamwork methods, balancing brainstorming and feedback of teams vs. specialized tasks performed individually take time. Time should be not only given as an “asset” for the working environment by the organization responsible building the innovation platform. The relation of time,

⁴³ Baba Shiv, prof of Marketing, Stanford Uni: “Why Failure Drives Innovation?”
<http://www.gsb.stanford.edu/insights/baba-shiv-why-failure-drives-innovation>

failure and innovation is also an essential part of understanding how innovations are produced and made.

d. Learning to receive and give feedback and **peer critique** are also an essential parts of learning — and project innovation. Public feedback events, such as “*The Sound of the City*” showcase event, are not only inspiring for the participants, but they also serve as a good events for displaying the work done within a project.

e. In Living Labs, innovation is done in co-operation of all stakeholders related to the project, including the participants or students. This co-operation should be also a part of the curriculum development. Practitioners or participants should be able to have their say on the agenda of the course, workshop etc. In other words, innovation means also **practitioner involvement in curriculum development**.

Content

The results related to the theme of “content” can be split in two categories: content, in terms of educational content of “*The Sound of the City*”, and content, in terms of organizing the themes for future Living Labs.

a. **From the experiences of “*The Sound of the City*”, it is apparent, that there is a need for a hybrid Living Labs model, which combines the best practices of educational and more corporate Living Labs.**

This need was one of the main outcomes of the research. It is evident, pointed especially by the interviews, that to create innovation, Living Labs models or ecosystems using Living Labs, should be trimmed to this need. Currently neither educational or “commercial” or other Living Labs models (see section 2 for more information on these models) serve this purpose well enough. Therefore, experiences from “*The Sound of the City*” should be evolved towards a new, emerging innovation ecosystem.

This ecosystem, a “hybrid” Living Labs, should be not only crafted carefully, but also thoroughly conceptualized, prototyped and researched.

As pointed earlier within the keywords “Leadership” and “Innovation”, participants need basic entrepreneurial skills. These are learned through learning-by-doing, mentoring and one-one-one tutoring. They are good ways in improving the skills. Today’s innovation professionals need to understand business skills and be able to market their talent and projects. This is just what the “hybrid” Living Labs ecosystem should be able to do.

- b. In terms of content of a single project: participants appreciate both **individual** guidance/projects/mentoring as well as the **collaborative** effort. The combination of individual mentoring and collaborative practices are important for a Living Lab environment that aims to innovate, as well as to educate. Therefore, this combination is vital to understand in the emerging hybrid Living Labs model, and, again, it is necessary to understand on organizational level, in building successful innovation platforms.
- c. The thematic focus of the GESCI-AKE Living Labs on **local content** was highly appreciated by all stakeholders. Practitioners feel strongly they want to contribute to creating social-cultural value; other stakeholders feel there's a market niche that needs to be filled. This research finding also corresponds with the keyword of local/global.
- d. Content creation needs adequate **tools**. "*The Sound of the City*" researched pinpointed that there is a challenge to get international industry-standard tools - both hardware and software - to Kenya. This challenge is actually slowing down the new media sector.
- e. **Storytelling** is considered one of the essential skills for the industry by the interviewees. This should be remembered while building agenda/curriculum for future Living Labs projects.
- f. **More needs to be known about the consumers** in order to respond to the (job) market and innovation needs. We also need to know more about regional and global markets that are emerging.
- g. **Policy support is essential for local content in many ways** -- this is a question of broader cultural, educational, and innovation policies.

When it comes to animation the African story has not yet been told to the world... Africa with all its serene scenery, game reserves culture and other things has not yet been shown to the world!
- A practitioner interviewee

- h. A Living Lab model combining business and educational needs and goals could be very beneficial in **other fields** than creative industries, as well, but if it doesn't have the support of policy makers, or genuine interest/support from the organization advocating Living Labs, the outcome might not be as good as expected.

In other words, to build successful Living Labs, organizations advocating them

should not only understand Living Labs as innovation makers, but also believe in them and their participants. While this might sound simple, gaining genuine organizational/policy support for a project might be more difficult than anticipated.

Sustainability

In regard to our country: there are thousands of potential people who can be transformed into creative artists but institutions are few who render creative aspect training. Besides being creative and having the ability to animate additional business skills are needed in order for one to make it in the market.

- A practitioner interviewee

In this research, and as with other keywords, sustainability should be seen broadly. It presents a challenge for an emerging hybrid Living Labs model in two ways: in terms of professions (innovation and business skills needed) and in terms of content (sustainability of job creation through innovative content and local focus).

a. Sustainability is bridge-building not only within a Living Labs project, but between Living Labs projects - both ongoing and “past” ones. This sustainability can be built by implementing enough **networking**, mingling and other possibilities to meet other people - formally and informally - to the content. Via networking, “**team spirit**” needed for a working LL project is gained, **and it also extends the benefits of training.**

A major advantage of a Living Lab -type of educational-innovation project is that it can teach not only skills but **build alliances and partnerships** beyond the training/project itself. This will help not only individual participants, but also current and future Living Labs projects.

b. **Sustainability in terms of collaboration and follow-up.** Living Labs projects are often goal-oriented: when a certain goal is reached, the project is concluded.

Participants’ requirements differ somewhat on this aspect: even after a project is concluded, many participants wish to continue in the same field, and even by continuing the “concluded” project, or with meetups. This result is in line with results from other research: special attention should be put to sustainability i.e. continuity, both from organizational and individual perspectives.⁴⁴ Project-based

⁴⁴ See policy recommendations in The Business Model of mLabs and mHubs at http://www.infodev.org/infodev-files/mlabs_and_mhubs_business_model.pdf and policy recommendations in

educational model is not enough - a hybrid Living Labs model should research this further.

- c. **Incentives** add to sustainability. Several participants mentioned incentives (equipment, start-up grants, etc.) as possible drivers for sustainability that could be built into the course.

We really struggle to get a cable, a camera, our tools. They are expensive, need to be shopped from abroad, and if something breaks down suddenly, we might not have the funds readily available to replace it. Some sort of emergency fund would be welcomed.
- A professional in a DCM start-up

Local/Global

The theme of local/global was not a part of the questionnaire or the thematic interview model, but based on the research data gathered from questionnaires and interviews, it became evident that the theme should be noted. Core issues that emerged were:

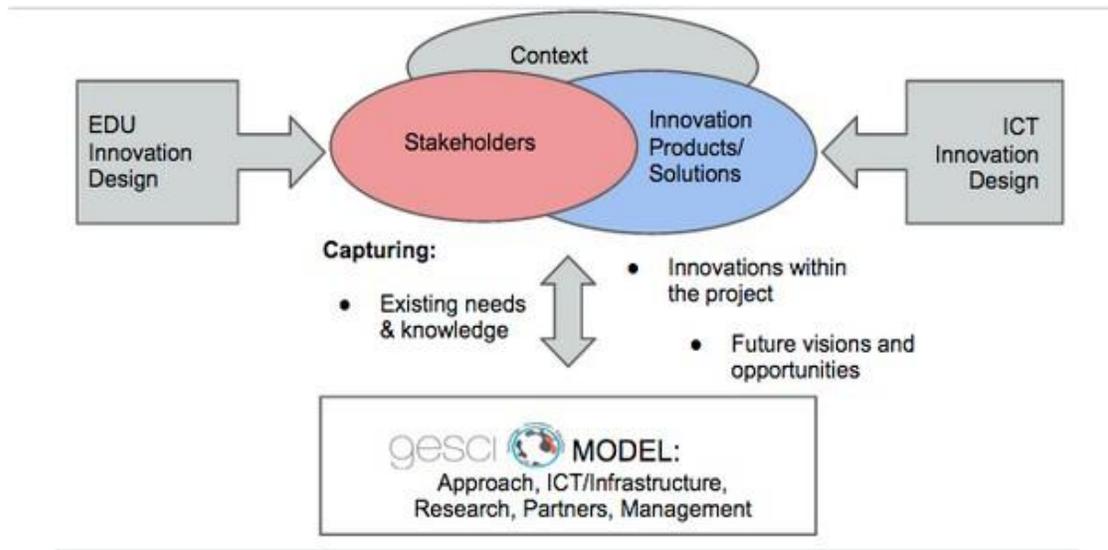
- a. **The markets are by nature both local and global.** We can't be afraid of the latter.
- b. Innovators need to focus on improving the **quality of their products**, i.e. products need to align with global standards. Perhaps a scorecard needs to be created to help guide them.
- c. The government (through embassies and otherwise) needs to better market opportunities in Kenya as well as Kenyan innovators.
- d. **A culture of collaboration versus competition** needs to be fostered.
- e. We need to understand -- as well as establish -- solid foundations for intellectual property rights for global markets and collaborations.

One of the purposes of this research was to take steps in building a hybrid Living Labs model. When building this model, and especially when bridging the model between different cities, countries and even continents - between different societies - much further research on the theme of local/global is needed.

Some additional questions that need further research and are related to local/global are, for example:

- If prototyping a new hybrid Living Labs model, which cities/countries/organizations should be selected as candidates for prototyping?
- If Living Labs model is built around the experiences from “*The Sound of the City*”, what parts of the model are related to Kenya/Nairobi context, what parts are related to African context, what parts are “global” etc?
- How could the hybrid Living Labs bridge the gaps between cities, countries and even continents? This should be not only researched from social scientific perspective, but also from technological perspective, i.e. what are the tools that can and/or should be used?
- When starting a Living Labs project, organizational support, understanding innovation and good leadership are needed from the facilitator(s). How could this be assisted, i.e. what kind of learning materials and tools are needed to facilitate a working Living Labs environment? This should be properly researched, prototyped and documented.

4. Research Conclusions



Building a synthesis from the detailed research results presented within the keywords **leadership**, **innovation**, **content**, **sustainability** and **local/global** presented in the previous chapter, a set of conclusions are presented.

The findings of “*The Sound of the City* Living Lab Research can be summarized as:

Existing needs and knowledge

1. In Kenya, there is an existing, and growing, **multi-stakeholder innovation ecosystem** that offers new opportunities for new collaborations and innovations.
2. However, the industry requires **building up the talent-base** that can respond to opportunities. There are indications that local content will be in demand.
3. The practitioners of the GESCI-AKE project recognize that need and express **strong interest in creating Kenyan digital media content**, for **local and global** markets.

Innovations within the GESCI-AKE LL project

4. The LL project has brought about the need for a **new hybrid educational model** that combines content innovation and skills training, and that fosters creativity as well as leadership qualities, management knowledge and practical entrepreneurial skills.
5. In such a model, **local content can be the driver**, the key theme, for education-business innovations and practitioner talent-building.

Future visions and opportunities

6. To build such a model, GESCI-AKE can draw from existing education-business collaborations, developing that into an AKE model, and becoming a **leader in the field**.
7. In its next face, the GESCI-AKE programme can **test and hone the hybrid model** by incorporating more collaborations with the industry elements into the curriculum.
8. The hybrid program can also create **sustainability incentives**, from meetups and networking to other entrepreneurial assistance, to support the continuing success of its practitioners in the job market.
9. A part of developing the model will also be gaining more understanding of the local - global markets **through research and collaborations with relevant organizations**.
10. **Widening partnerships** can be an essential source or resources, not only to collaborations with businesses but with research institutions and other Living Labs.
11. The next phase of the GESCI-AKE program can also inform **how the hybrid model might be used in other areas of training**.
12. Such future developments can be supported by (national) policy in **multiple sectors**: culture, economy, and education.

5. Possible Multi-Stakeholder Policy Responses



The following policy responses can be considered in addressing the key findings regarding **innovation, leadership, content, sustainability** and **local/global** of the *GESCI-AKE 2014/2015 Creative Media Skills Course "The Sound of the City"*.

These responses feature broad ideas that many stakeholders can, and should, participate in realizing. There is also a clear understanding

that for the DCM industries to flourish, such collaboration needs to take place. Please see specific implications of the findings to different stakeholders as the Appendix I. (Please also see a list practical suggestions for specifically GESCI-AKE in **section 6.**)

Knowledge Creation

1. **To support content creation and local/global:** Conducting a national-regional study on consumer markets for local digital cultural products (possibly in collaboration with other national and international actors). Gathering data on the use of mobile services and content is key here.
2. **To support innovation:** Supporting additional qualitative Living Lab innovation-research efforts for Living Labs involving educational components in order to fully understand the potential of digital innovations and education processes that promote innovation processes.
3. **To support innovation, leadership, and sustainability:** Conducting mapping of best practices and policy solutions for well-functioning education-industry partnerships: Internships? Case projects? Teacher-industry practitioner exchanges? Partnerships in getting industry-standard hardware and software? A consecutive follow-up for GESCI: Which businesses might be the best partners for what policy measures?

Pedagogical / Educational Responses

4. **To support innovation, content, and sustainability:** In education, creating innovation outcomes, not only educational outcome. Creating training models that are linked to innovation outcomes, not only training models that are linked to technical skills and knowledge outcomes.
5. **To support innovation, content, leadership, and sustainability:** Training and supporting the emergence of innovators and entrepreneurs, all while enhancing technical skills and artistic vision. This would mean including business courses, perhaps even a “media management” track in the curricula. The inclusion of the skills is essential for job creation. Many DCM businesses are “small shops” creating content for specific niche markets.
6. **To support innovation, content, leadership and sustainability:** Providing industry/market-responsive training that is also tailored by, and for, individual participants. Here, the existing skillsets but also the participants knowledge of the markets they feel they can and want to serve, can inform the curriculum.
7. **To support innovation, content, and leadership:** Carefully selecting the trainees in order to form a well-function collaborative training cohort, representing talent and gender diversity. This can help to promote women’s entry in the DCM industries -- a field that tends to be very male-dominated.
8. **To support innovation and content:** Providing one-on-one mentoring for participants in addition to collaborative projects, to improve their existing skills and abilities.
9. **To support innovation, content, and sustainability:** Developing a technology-based platform to support the multistakeholder ecosystem. This can include, e.g., a virtual talent showcase and repository of talent contact information.

Community Creation

10. **To support innovation, content, leadership, and sustainability:** Offering other specific incentives for practitioners (e.g., innovation competitions; start-up mini grants; etc.)
11. **To support innovation, content, leadership, sustainability and local/global:** Fostering young professionals’ meetups, associations, and other

semi-structured events that allow for networking for collaborations and job opportunities.

12. **To support innovation, content, leadership, and sustainability:** A platform for businesses looking to develop their Corporate Social Responsibility activities, wanting to partner with the DCM start-ups and individuals.

13. **To support innovation, content, leadership, and sustainability:** Professionalize the education system to change mindsets towards collaboration.

In General

14. **To support innovation, content, leadership, sustainability and local/global:** Multi-sector policy support to educational - business partnerships as their mission falls under education, entrepreneurship and employment, culture, social value, and innovation.

6. Possible Concrete Actions by GESCI-AKE

We need to push this idea from skills development to the interface with industries to job creation. Now, also in accordance of the Living Lab approach, this is our continuing process, a continuum.

- Jerome Morrissey, CEO at GESCI

While much of the policy, and policy advocacy, work needs to be collaborative, the research interviews and the Policy Forum highlighted numerous concrete ideas that are specific to future GESCI-AKE projects. They are summarized below according to the original elements of a Living Lab, as defined in the research design:⁴⁵ Approach, ICT and other technology infrastructure, Partners and Users, Management, and Research.



Approach

- Designing programs that are Living Labs = that have innovation and innovative products as end goals.
- Adding the idea of social innovation (social business) next to the cultural innovation, to the content mix of the program.
- Designing programs that are at the outset based on collaboration (see: Partners).
- Teaching not only skills but understanding of culture, including storytelling.
- Fostering understanding of entrepreneurial mindset, attitudes (can do), soft skills.
- Designing a market-based curriculum that responds to industry needs, including the kinds of innovations needed. entrepreneurial skills from understanding markets to project managements to digital marketing...

⁴⁵ <https://thesoundofthecity.wordpress.com/2014/11/15/research-design-first-proposal/>

- Internationalizing of curriculum to prepare young talent for local-global markets: Master Classes, study trips, study of global markets.
- Recognition & rewarding of top innovators / innovations: competitions and awards; clubs, festivals; monetary and other resources for DCM start-ups.
- Building a bridge between skills and job creation: Incubator space and services (marketing, legal, etc.) for students, alumni (and possible others); case studies and other student projects that may lead to employment, hackatons, job fairs, and other events that ensure networking.
- Creating a dynamic flexible curriculum that allows hybrid forms of learning; which, in turn, facilitate work-study balance and different opportunities for students in different life situations. This could eventually include more marginalized communities – “People shouldn’t have to move to urban areas to access opportunities/ to innovate”.
- Becoming a hub not only for innovation and job creation, but for further collaboration and networking between different actors involved in DCM industries.
- Marketing and outreach the GESCI-AKE approach: GESCI as a hub and trusted partner and convener for collaborative projects, knowledge sharing, possible talent repositories, and other multi-stakeholder actions.

ICT and other technology infrastructure

- Ensuring alliances and sponsorships that can facilitate access to technology that is needed for “international industry standards”.
- Related: Creating a “score card” to map standards in technology and related skills.
- Offering access to technology via an incubator hub to alumni (and selected others?).

Partners and Users

- Designing programs that are at the outset based on collaboration with industry partners, with social entrepreneurs and not-for-profits, with other Living Labs and hubs, with international contacts, and universities/other research institutions. Here are some most attractive forms of collaboration (according to the Policy Forum exit survey).
 - Joint mentorship programs
 - Internships
 - Joint events (master classes, showcases, job fairs, etc.)
 - Joint repositories of talent, etc.
 - Also: Joint internationalization programs: field trips, international tutors and mentors who could stay for several months (for impact).

- Including students=practitioners as partners in the curriculum design.
- Encouraging peer learning.
- Including end-users of envisioned innovation outcomes (e.g., gamers, music audiences) to be a part of some sections of the innovation-training process to highlight understanding of the market, and to teach about collaborative creative processes.
- Inviting local universities to observe and discuss different forms of innovation research such as Living Labs -- to build interest and capacity for future collaborations.

Management

- Positioning GESCI as a hub for collaboration would require managing multi-stakeholder relations, not only a curriculum.
- Designing a hybrid education-innovation model would require managing sometimes differing needs and goals -- the challenge of balancing the goals and evaluating success:

Issue	Business/ Innovation LL	Educational LL
End goal	New innovation - product	New skills and tools that foster innovation and new products: innovation/inspiration; tech skills, business skills
Stakeholders	End-users (e.g., gamers, music fans, app users), R&D-designers, back & front-end developers, marketing staff, sales, management, other business partners, (policy-makers – not often, perhaps if a business innovation initiative is a part of regional development)	End-users = students, instructors, other edu staff, businesses (their various representatives), policy-makers
Stakeholder collaboration - challenges	Business-specific, internal	Different individual backgrounds and needs of the student
Important to end-users	Individual value (Usability, novelty, price, design...)	Social value; ability to collaborate and experiment without pressure

Leadership challenge	Managing expertise towards the final product	Managing/balancing collective vs. individual development
M&E	Testing, deadlines, sales	Artifacts, their possible business applications, student experience, students' success after AKE, further AKE projects, policy implications
Sustainability	Ongoing (market-driven)	Project/course-based

Research

- The research described in **this report** focuses on understanding the needs of the multiple stakeholders of DCM industries (in a Kenyan context), and specifically how an upskilling/training project could fulfill such needs. The data gathering and analytical methods reflect that. The main outcome has been the need for a Living Lab training/upskilling program, and the research has highlighted both some broader policy responses as well as some concrete issues related to such a model.
- Three different but integrated research strands would benefit the next phase of the GESCI-AKE program:
 - An LL research process that would be conducted throughout the next phase as a part of the innovation process, that would map experiences of all stakeholders (and markets), and that would aim at developing a model LL;
 - A participatory monitoring and evaluation process that would specifically aim at identifying the transferability of the model - how to make the GESCI-AKE LL a comprehensive innovation package?
 - Mapping of best practices of similar efforts in the region and elsewhere, to inform further innovation.

APPENDIX I

Implications of *Linking Education and Business Models towards Building a Cadre of Creative Media Entrepreneurs for the Cultural Industries* to the different stakeholders

	Micro-level: Practitioners	Meso-level: Institution - GESCI	Macro-level: Policy Implications
Hybrid model	Learning skills and business practices	New ways of collaboration with the industry	New outlooks on the relationship between education and business innovation
Local – global markets	Learning to ‘research’ the markets and own existing knowledge; social value creation	New ways of collaboration with the industry; further research	New collaborations/o outlooks on the marketplace
Innovation	Creating innovative products for the market-place through training	Becoming one of the central hubs for innovation via training	Policy support for cutting-edge initiatives; infrastructure; local culture
Leadership	Learning leadership skills: how to balance personal goals and skills with collaboration	Providing strong edu and inno leaders within training projects to ensure successful outcomes	Policy support= leadership for cutting-edge initiatives; infrastructure; local culture
Content	Competitive edge as a professional	Competitive edge as an organization	Competitive edge in national/regiona l creative

			industries
Sustainability	Employment; own business; sustainability of employment	Sustainability: in education (content), networking; ongoing model development	Supporting sustainability through policy measures
= Success	Meaningful learning experience and jobs	Meaningful learning experience and jobs for the students + the hybrid model servicing the industry = cutting-edge in ICT innovation education	Job creation, innovation creation, knowledge creation (of markets, audiences, educational and business models)

APPENDIX II

A Technological Platform for a Hybrid Living Labs Model -- initial drafts

When building a new hybrid Living Labs model, which combines the best practices from both educational and corporate-related Living Labs, a new technological platform for a new Living Labs model might come in need.

This technological platform should serve multiple purposes.

First, it should provide the tools and material for facilitators interested in building a “hybrid” Living Labs - be it a single project, course or a broader educational/corporate purpose.

Second, it should enable simple collaboration between facilitators (such as organizations), participants (such as students, teachers, mentors) and third partners, such as stakeholders, external professionals, researchers etc.

And **third**, platform should be free and open, so that the technological or budget constraints will not be a big issue.

The platform could be built, in the first stage, using existing free software and/or open source tools, keeping in mind the purposes presented. For example, using Moodle or advanced website CMS's (Drupal, even Wordpress) might provide a first-term solution for this need.

While tools for the platform might be free, building the platform is not. Therefore, monetary support for building this platform is needed. Different possibilities for gathering money for building this platform should be researched.

A platform could be built together with a sponsor organization, for example an international corporation, interested in organizing ICT-related Living Labs in African context. The sponsor organization could provide contacts, such as professional mentors for LL participants, or other professionals giving feedback for the artifacts produced within a LL. The sponsor organization, in turn, could not only get contacts to aspiring professionals from Africa, but also could benefit from the artifacts produced within a LL.



Some of “The Sound of the City” participants, pictured in “The Sound of the City” showcase event in February 2015.

To the participants:

*A Special Thank You for your help and participation to the research component!
This research could have not be done without your input.*