IGF 2017
Best Practice Forum on Local Content

*Internet cultural and linguistic diversity as an engine for growth*

*Editor Wim Degezelle*

*January 2018*
IGF 2017 - Shape Your Digital Future!

Best Practice Forum on Local Content

Internet cultural and linguistic diversity as an engine for growth

Table of contents

Internet cultural and linguistic diversity as an engine for growth

Table of contents 2
Executive Summary 4

1. Framing the BPF on Local Content 6

1.1. The Best Practice Forum on Local Content 6
1.2. Methodology and acknowledgments 7

2. Local content, a key component to shape the local digital future towards achieving SDGs 9

2.1. Lack of locally relevant content slows down the global Internet uptake 9

2.2. Locally relevant content 11
2.2.1. International and locally created content 11
2.2.2. Local language 12
2.2.3. Creating Local Content : benefits and opportunities 13

2.3. Creating an enabling environment for local content 15
2.3.1. Defining an environment that encourages the creation of locally relevant content 15
2.3.2. Stakeholder roles and opportunities for action 16
3. Fostering local content development: Best practices and observed drivers and hindrances

3.1. Projects and Initiatives

3.2. Best Practices and experiences
   3.2.1. Factors that contributed to success
   3.2.2. Obstacles and barriers to success
   3.2.3. Lessons learned

4. Conclusions and way forward

List of references and background documents

Annexe - Feedback on the BPF’s call for projects & initiatives
Executive Summary

The IGF Best Practice Forums (BPFs) bring experts and stakeholders together to exchange and discuss experiences and best practices in addressing Internet policy issues. The BPF on Local content was part of the IGF intersessional work programme leading into the 2017 IGF Meeting in Geneva, Switzerland, on 18-21 December 2017. This report reflects the work of the BPF and is the result of a community-driven bottom-up and open process.

Despite the rapid growth of the Internet and the considerable improvement of access in developing and remote areas, Internet uptake seems not to evolve at the same speed and keeps lagging behind in some regions. Access and cost are only two of three factors affecting Internet growth. The third one is the availability of locally relevant content and services. Having the possibility to access the Internet is, by itself, not a sufficient motivation to go online. People start using the Internet because they expect and experience that the Internet is useful and interesting for them.

For the local Internet, and in extension a local digital economy, to develop the content and services accessible and provided over the Internet must be relevant for the local Internet user. Content must be in a language that is understood by the local population, and deal with matter of local interest. Local content creators are best placed to understand what is relevant for their own community and local entrepreneurs well placed to target the local market with online services.

An enabling environment that facilitates, encourages and stimulates the development of locally relevant online content and services depends on different factors, amongst other the availability of content in the local language; the digital literacy and skills of the locals, and presence of support and guidance for those who need help; the possibility to monetize local content and services and related issues such as IP and copy right, and payment systems; the infrastructure for Internet access and local content distribution, and related, the availability of broadband, local hosting and Internet exchange points; access to information and freedom of expression; etc. .

The BPF collected, via a public call for input, a variety of examples of successful projects and initiatives to stimulate the creation of local content, and learned from these experiences what worked well, what were obstacles and challenges. The analysis and best practice examples included in this document are intended to inspire policy decision makers and other stakeholders.

All stakeholder groups bear responsibility and can contribute to an enabling environment in which the creation of locally relevant online content and online services is encouraged and not hindered. The BPF took a modest attempt in listing what actions different stakeholders
are taking or could take. It is important that all stakeholders continue to be involved in discussions on local content creation, seek opportunities for stakeholder action and explore possibilities for cooperation between stakeholders.
1. Framing the BPF on Local Content

1.1. The Best Practice Forum on Local Content

One of the key outcomes of the World Summit for the Information Society (WSIS) was the Internet Governance Forum (IGF). The IGF is a global forum where governments, civil society, the technical community, academia, the private sector, and independent experts discuss Internet governance and policy issues.¹ The annual IGF meeting is organized by a Multistakeholder Advisory Group (MAG) under the auspices of the United Nations Department of Economic and Social Affairs (UN DESA). The 12th annual IGF meeting took place in Geneva, Switzerland, on 18-21 December 2017.

The IGF Best Practices Forums (BPFs) bring experts and stakeholders together to exchange and discuss best practices in addressing an Internet policy related issue in a collaborative, bottom-up process. The BPFs are an answer to the call for intersessional work and more tangible outputs of the IGF.

At its virtual meeting on 25 April 2017, the IGF Multistakeholder Advisory Group (MAG)² approved local content as a topic for a Best Practice Forum leading into the 2017 IGF meeting. The BPF worked in an open and iterative way to produce this tangible best practice outcome.

Local content is a returning topic at the IGF and considered to be a challenge that could benefit from continued cooperation and coordinated effort of all stakeholders.

The 2014 Best Practice Forum on ‘Creating an enabling environment for the development of local content’³ undertook an attempt to define ‘local content’ and studied what is needed to create an enabling environment from the perspective of users, the infrastructure and the law. In its conclusions, the 2014 BPF recommended to ‘encourage regional cooperation and collaboration by organizing and sharing existing case studies of local content production and capacity building. A repository of such content would be a useful resource for Internet users’.

The IGF’s Policy Options for Connecting and Enabling the Next Billion - Phase I (CENB I)⁴ observed that ‘the need to ensure that people are able to use the Internet according to their needs was reflected in many of the contributions. Providing access to the Internet is

---

¹ IGF website: [http://www.intgovforum.org](http://www.intgovforum.org)
² IGF MAG: [https://www.intgovforum.org/multilingual/content/about-mag](https://www.intgovforum.org/multilingual/content/about-mag)
⁴ CENB I: [https://www.intgovforum.org/multilingual/content/connecting-and-enabling-the-next-billion-phase-i](https://www.intgovforum.org/multilingual/content/connecting-and-enabling-the-next-billion-phase-i)
only the first step - once in place people must be able to use it. Ensuring availability and the ability to use applications, to stimulate the development of local content and services in all languages, and to implement strategies for safeguarding access to people with disabilities were some of the issues identified by the community.’

The IGF’s Policy Options for Connecting and Enabling the Next Billion - Phase II (CENB II)\(^5\) pointed out that providing meaningful access to the Internet requires ensuring that people can both consume and produce content, and that ‘access inequalities and barriers like content availability not only affect those in developing countries more profoundly, but also those in rural areas as well as cultural minorities, women, refugees, and disadvantaged groups.’ In addition, the CENB II identified several linkages between the United Nations’ Sustainable Development Goals (SDGs)\(^6\) and the availability of content, amongst other with SDG 4 (Quality of education), and SDG 16 (Peace and Justice).

The IGF Best Practice Forum on Internet Exchange Points (IXPs) in 2015\(^7\) and 2016\(^8\) pointed at the two-way relation between locally stored local content and the growth and development of IXPs and the local Internet Infrastructure, contributing to a more affordable local Internet of higher quality.

The IGF Best Practice Forum on Overcoming Barriers to Enable Women’s Meaningful Internet Access\(^9\) listed the ‘availability of relevant content and applications as a barrier for meaningful access.’ Some of the testimonials in the report explicitly refer to the lack of available content in the local language.

In addition, local content has been the topic of numerous workshops and discussions at the annual meetings of the IGF since the first IGF in 2006.\(^10\) In these meetings content creators and other stakeholders from various countries and regions have talked about their experiences in bringing their projects to life.

1.2. Methodology and acknowledgments

This document reflects the work of the 2017 BPF on Local Content. The BPF outcome document is the result of and open and iterative process that occured over the months

---

\(^5\) CENB II: [https://www.intgovforum.org/multilingual/content/igf-2016-policy-options-for-connecting-and-enabling-the-next-billions-phase-ii](https://www.intgovforum.org/multilingual/content/igf-2016-policy-options-for-connecting-and-enabling-the-next-billions-phase-ii)


\(^8\) BPF IXPs 2016: [https://www.intgovforum.org/multilingual/content/bpf-ixps](https://www.intgovforum.org/multilingual/content/bpf-ixps)

\(^9\) BPF Gender and Access 2016: [https://www.intgovforum.org/multilingual/content/bpf-gender-and-access-2016](https://www.intgovforum.org/multilingual/content/bpf-gender-and-access-2016)

\(^10\) IGF 2016, Local Content and Sustainable Growth; IGF 2014, Creating an Enabling Environment for the Development of Local Content; IGF 2014, Building Local Content Creation Capacity - Lessons Learned; IGF 2013, Encouraging Locally Relevant Content to Grow the Internet

IGF 2017

BPF Local Content
preceding the 2017 IGF meeting in Geneva, Switzerland, 18-21 December 2017. The structure and content of the document were developed through open and collaborative discussions with interested stakeholders, on an open mailing list, a virtual webex meeting and a BPF face-to-face meeting during the IGF in Geneva. A draft of this output document was published on the IGF website for public input prior to and during the IGF meeting.

The BPF launched a public call for contributions via the IGF website and received 17 submissions that describe examples of projects and initiatives that aim at stimulating the creation of relevant local content and services. These examples fed into the discussion and are reflected in the document, with summaries throughout the text and full descriptions in the annexe.

The BPF Local Content workshop at the 2017 IGF meeting in Geneva was an opportunity to engage with the IGF community present and participating remotely on the importance of local content as one of the drivers for the development of the Internet. Testimonials, discussions and feedback on the BPF draft document served as input for this BPF output document.

At the IGF meeting, the Workshop ‘Local content: an opportunity for underserved regions’ (WS238) and the BPF on Local Content agreed to hold their meetings back-to-back during a shared time-slot to allow for cross fertilisation and a richer discussion. As such, the presentations and discussions at the WS238 served as an additional and valuable source for the BPF output document.

Acknowledgements

The BPF wants to acknowledge and thank all contributors who, in various ways, helped to raise awareness about the work of the BPF, contributed to the discussions or directly helped in the drafting process of this output document. A special thanks goes to the people and organisations that took the time to submit examples of projects and initiatives to create or support the creation of local content and services.

The BPF wants to express its gratitude to the organisers of the WS238 ‘Local content: an opportunity for underserved regions’, for agreeing to share the meeting slot, and to the workshop chair, panelists and participants for the interesting discussions.

The BPF thanks the IGF MAG for supporting the proposal to organise a BPF on Local content in 2017; MAG members Ms. Raquel Gato and Mr. Miguel Estrada for coordinating the BPF’s activities; the IGF Secretariat for its support and Mr. Wim Degezelle for holding the pen on the BPF output.
2. Local content, a key component to shape the local digital future towards achieving SDGs

2.1. Lack of locally relevant content slows down the global Internet uptake

Hardly half of the global population is online and can reap the benefits of the Internet. Still, many people ‘don’t want or need the Internet because there is a lack of locally relevant content and services or training how to use it.’

‘The three issues affecting Internet growth are: not everyone wants or needs it, not everyone has access to it, and not everyone can provide it.’

Access and cost - the availability and the price of access to the Internet - are still a major challenge in many regions, with multiple barriers still to overcome. Local content is an opportunity for human economic and social development in underserved regions [but] local content cannot thrive without the extension of the Internet broadband infrastructures.

Continuous effort is needed at different levels - infrastructure, technology, regulatory, etc. - to bring the Internet to more places and get more people online. The 2014 BPF on Local Content identified cost and access as a hindrance for the creation of an enabling environment that facilitates local content development.

There's a symbiotic relation between Internet access and local content, with Internet uptake and usage as an explanatory factor in the middle. Based on recent data for the Sub-Saharan Africa region, a 2016 report noted that ‘as a result of new investment in access infrastructure, including most notably mobile Internet networks, Internet availability now far outpaces adoption, and raises the question why adoption is lagging behind.’ This leads to the observation that providing Internet access alone is not per definition a guarantee for success and growth in Internet uptake.

‘The ability to access the Internet is necessary, but not sufficient, to increase Internet adoption in a country.’

Despite the rapid spread of the Internet and the increasing agreement on the opportunities it brings, a significant part of the world’s population remains offline. ‘These gaps in the availability and penetration of the Internet persist and a large portion of the population is still

---

11 ‘The Internet, Homemade’, Leandro Navarro, 2 November 2017
13 Marie Noemie Marques, Orange, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
unable to directly reap digital dividends. Enhancing access to infrastructure (...) is therefore a major task for developing economies. The task of closing the access and usage gaps is a multifaceted one. It involves major ‘supply-side’ challenges, notably of encouraging investment and competition, extending broadband infrastructure outside of urban areas into rural and remote areas, and upgrading networks to match rising demand. Additionally, demand-side issues such as low levels of income, education and local content production add new challenges to improving affordability and relevance of services to users.  

In some countries in Sub-Saharan Africa, ‘90% or more of the population live within range of a mobile Internet signal, but adoption may be 20% or less of the population.’ At the same time, other countries and parts of the world are witnessing an explosive growth in usage, and particularly of mobile data and mobile Internet usage.

People choose to go online because they expect the Internet to be useful and interesting.

Leaving aside factors such as cost and access, people choose to go online because they expect the Internet to be useful and interesting to them. In other words, what the Internet brings, its content and services, must be relevant and useful from their perspective and meet their expectations, whether they are looking for information, amusement, or helpful tools for their business, study, or hobbies, or to keep in touch with family and friends.

Relevant content and services motivate users to go online. The ‘mobile Internet adoption has been so successful in the US and Europe because of the ubiquitous availability of content that is locally relevant to those populations,’ while the seemingly lack of interest to go online in other regions is believed to be caused by a lack of available locally relevant content and services.

The lack of locally relevant content explains the lack on interest to go online.

‘Without content and services adapted to [the] local taste and language, it may not be attractive or digestible. At the same time, local access and education are necessary primers to produce such relevant and meaningful content.’ This year’s BPF is focusing on what is needed to increase the available content relevant for the local Internet user, with a special attention for measures to enable and stimulate local creators and entrepreneurs to offer their content and services online.

---

17 ‘Promoting Content in Africa’, The Internet Society, August 2016.
18 ‘Local world - content for the next wave of growth’, GMSA Intelligence, September 2014.
2.2. Locally relevant content

‘In order to be relevant, content must be in a language understood by the local population, and it must meet local demand.’

Encouraging people and small businesses to use the Internet is to a large extent ‘a matter of stimulating the development of relevant and useful content. Such content is often developed in, or translated into, the local language and deals with matter of local interest.’ In order to be relevant, content must be in a language understood by the local population, and it must meet local demand, whether those needs are social, educational, government or business related. From the perspective of the Internet user, content can be divided into ‘six major categories: entertainment, information, utilities, business services, sharing platforms, and communications.’

2.2.1. International and locally created content

‘Much of the international content and many of the services available are relevant in many countries worldwide - this is true for social networking services, educational access, and, of course, entertainment. However, we also note the importance of locally created content, both for the relevance of the content in the local context, as well as for the opportunities provided to the creators for earning a living and creating jobs.’

In some predominantly Arab countries, for example, an important share of the top ranked websites are, surprisingly, not in Arabic or do not include Arabic as a language option. This shortfall is increasingly being compensated by user-generated content on social media platforms to the extent that in some areas Arabic is slowly overtaking English as main language in social media and social media platforms are increasingly being seen and preferred by users as main source of information.

‘And even where language is not an issue, local relevance is key. While much of existing content has international appeal, much is also targeted. A local online newspaper in Spain may not be of any interest in Mexico, French e-government services are of little use in Senegal, and Uber is only of interest in cities where Uber operates.’

25 Abdelaziz Hilalin, Mediterranean Federation of Internet Associations, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
**Project highlight: “Correspondentes” form VEJA, Brazil**

The project “Correspondentes”, launched in June 2017, creates a network of journalists in 10 state capitals in Brazil to bring local news on dedicated blogs on the VEJA website. This initiative comes in a time when big newspapers and magazines reduce the coverage of local news to cut costs and local news publishers are shutting down. The project empowers professional local journalism to bring exclusive qualitative content.

*See annexe for more details*

### 2.2.2. Local language

‘Lack of relevant content in local languages can impede bringing people online. The World Bank estimates that 80% of online content is available in one of 10 languages (...). Only about 3 billion people speak one of these languages as their first. More than half of the online content is written in English, which is understood by just 21% of the world’s population according to estimates by Mozilla and the GSMA. To reach the goal of global connectivity, the problem of relevance as it relates to awareness and language must be addressed.’

In many large countries, the local language that is spoken and used in parts of the country and in particular in rural areas, is different from the country’s official national language(s). Local users do not always sufficiently known or feel familiar in the official language. For those areas, it is important that online content is available in the language that people understand and use. Websites from the government and official institutions, or e-government platforms, which traditionally will be in the country’s official language(s), often fail to reach local populations.

**Project highlight: the คน.ไทย Platform, Thailand**

คน.ไทย is an Internationalised Domain Name (IDN) that stands for “Thai people”. Besides คื.ไทย being a useful platform with information in the local language, the THNIC domain name registry and local email service provider Throughwave partnered in a project to offer hundreds of free @คน.ไทย email addresses. The Thai IDN for web pages in the Thai language and email addresses in the local language enables local people who are not familiar with English - over 30% of the population - to use the Internet.

*See annexe for more details*

Wikipedia, one of the largest platforms of community generated educational content on almost any item throughout the world, has articles in more than 280 different languages. Creation of content in different languages is a huge but important challenge because the fewer articles that are available in a language they understand, the less people are motivated to go to Wikipedia to read and contribute to it. Hence, it’s important to incentivise or support

---

27 *‘Internet for All, A Framework for Accelerating Internet Access and Adoption’, World Economic Forum, April 2016.*

28 *‘Promoting Content in Africa’, The Internet Society, August 2016.*
people in their efforts to bring content to Wikipedia. This is for example done by locally organised edit-a-thons where people come together to translate articles available in other languages into the local language, or to create content on locally relevant topics.29

**Project highlight: Sewasew, Ethiopia**

Sewasew, named after and Amharic word for ‘ladder to prosperity’, is a collaborative social network application where individuals can curate and contribute content about anything that is Africa in their local language. The aims of the platform are to deepen knowledge about various topics relevant to Africa, connect its users to one another, and to increase global awareness about Africa.

Sewasew hosts crowd-sourced content available in 4 languages: Amharic (አማርኛ), Afaan Oromo/Oromik, Tigrigna (ትግሪኛ) and English.

So far Sewasew hosts 30,000 articles on a wide variety of topics such as health and home, government and how to use different services, culture, travel and customs in different villages and countries. Through collaborations with local educational and cultural institutions, Sewasew aims to further increase the available local content.

See annexe for more details

2.2.3. Creating Local Content: benefits and opportunities

‘Digital ecosystems that produce local content and apps are vital for building digital literacy, attracting local users and serving local needs. Digital services can also address local problems and boost competition in an increasingly digital services market. In addition, using the Internet can have a significant impact on local businesses, especially small and medium-sized enterprises (SMEs).’30

‘The lack of local content means that there are great opportunities for local entrepreneurs and other content creators to step in and address this need. Especially for local developers of content, this also may create new sources of income. At the same time as providing developers with income, local content can help to address local needs for information, coordination, entertainment, and other Internet services, through apps and websites.’31

**Project highlight: Triggerfish Story Lab, South Africa** -
The Triggerfish Story Lab is a public-private initiative led by Triggerfish Animation Studios and South Africa’s Department of Trade and Industry to identify and support Africa’s next generation of storytellers, particularly storytellers from historically excluded and underrepresented groups, and provide an opportunity for their work to find an audience across the world.

The Story Lab received 1,378 entries from 30 countries across Africa and a shortlist was invited for a two-week intensive workshop. Finally, Triggerfish Animation Studios selected four features and four TV series for development.

See annexe for more details

---

29 Jan Gerlach, Wikimedia Foundation, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017


‘Local developers have several advantages with respect to local content. First, they know the local market and information needs. Second, they know about existing channels and methods of communication, as well as cultural referents, allowing them to best target the local market.’

Bringing local knowledge and experience online is relevant for the own community but creates as well the opportunity to share this knowledge with the Internet and the rest of the world, what can lead to useful exchanges and enriched insight for the own and other communities.

During the workshop on Local content at the IGF Meeting in Geneva, a member of the audience raised the question whether it was possible to define the type of content - especially in a developing context - that would be most relevant and should be stimulated. Some pointed out that the concept ‘relevant content’ is very broad, with all kinds of content potentially interesting for the local community. They argued that it is difficult to ‘decide’ upfront what people will be happy and willing to access, and that therefore it is more important to make sure that creative communities have the freedom to post content instead of worrying too much about what is good content. If content is available, it will quickly become clear what is popular and what not. Others were more critical and noted, while acknowledging that in general any locally created content that is useful for the population is good content, that one should not fixate on the small videos, music, jokes and animations, but also stimulate the production of cultural content - which is still an issue in many regions. The real aim of the effort to promote local content in developing regions is to get people online so that they can take the opportunities the Internet offers, and for example be present and active on the online market or develop applications.

**Project highlight: Art in Hawai.i**

**Art in Hawai.i** serves to connect and nurture the Hawaiian contemporary art community by informing on and about the visual and contemporary art community in Hawaii, featuring the work of artists from Hawaii or the greater Pacific. Art in Hawai.i is active on social media: [Facebook](#) and [Instagram](#).

See annexe for more details

---

33 Issue raised by Bathopi Luke, BW Botswana, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
34 Dorothy Gordon, InnovTDD Ghana, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
35 Mohammed Tijani Ben Jemaa, AFRALO, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
2.3. Creating an enabling environment for local content

2.3.1. Defining an environment that encourages the creation of locally relevant content

There are many factors that contribute to an environment that encourages the creation and distribution of locally relevant content including freedom of expression, intellectual property protection, appropriate privacy protections for users and creators, consumer protection infrastructure, and secure payment platforms. All of these factors are needed to ensure that both creators and users benefit from the value of the content.

A primary component of an enabling environment for content creation is support for freedom of expression in all its forms - creative, political, social and economic expression. Expression allows people to connect and to build communities, and it drives political movements, creative endeavours, economic growth and social discourse. Another important element of the enabling environment for content creation is intellectual property protection and enforcement. Studies, such as a 2014 examination of Bollywood, find that effective protection of intellectual property supports greater content creation. Without the incentives for content creation created by an effective intellectual property framework, digital content creation will flag or – worse for less connected countries – never materialize.

A trusted Internet infrastructure and services that encourage users to engage in e-Commerce will enable the creation of additional locally relevant content. Consumer protection and the availability of secure payment mechanisms together with secure distribution platforms are critically important enablers for content creation. The infrastructure to allow users to easily purchase digital products, and responsible business practices protecting them when they do, spurs the availability of digital content.

Infrastructure and local hosting

Local content is an opportunity for human economic and social development in underserved regions but cannot thrive without the deployment and extension of the Internet broadband infrastructure. Broadband infrastructure is paramount to ensure connectivity to all, to allow the development of new and innovative services, and achieve a transition to a digital society and economy. For this to happen, an enabling regulatory policy has to be in place in combination with a business environment open to investment and innovation.

---

36 Rahul Telang & Joel Waldfogel, *Piracy and New Product Creation: A Bollywood Story*, at 27 (finding that “during the period of widespread unpaid consumption, revenue fell by a third to a half . . . [and] the number of new products released fell substantially”).


38 Contribution Sajda Ouachtouki, The Walt Disney Company.

39 Marie Noemie Marques, Orange, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
Developing countries, including a large majority of the African countries, still see few content hosted within the country. Most of the content and applications intended for local use are hosted abroad, in particular in Europe and North America. This makes access to content selective and expensive, and reduces the Internet’s contribution to local development. The lack of sufficient hosting infrastructure within the country is a key culprit, but also other factors play an important role. Many countries would benefit from an enabling legal and regulatory framework stimulating and not hindering the development of a local hosting industry. Price and registration procedures for the local ccTLD are often high, slow and cumbersome. The limited availability of state of the art transport infrastructure makes internet access expensive, as often costly solutions (e.g. satellite links) are needed. IPv6 deployment is low. The absence in certain countries of Internet exchange points (IXPs) is a missed opportunity. The experiences in countries like Rwanda, Kenya or Nigeria have shown that the existence of an IXP for local data exchange between networks has contributed to a boost for the development of a local content industry.\(^40\)

New and growing segments of online users, for example women or rural populations, should be seen as opportunities to engage and do business. There’s a need for easy-to-use tools in the local language for the creation of user-generated content by locals, and low-cost and uncomplicated hardware tools (e.g. phones, laptops) are more suitable to access the Internet in areas where the infrastructure is lagging behind.

2.3.2. Stakeholder roles and opportunities for action

Throughout the BPF’s discussions, opportunities for stakeholder action surfaced. They are briefly reflected in this section. Unfortunately, time constraints did not allow for in-depth discussion within the scope of the 2017 BPF. Further stakeholder conversation is recommended on how stakeholders can help to stimulate the creation of local content directly, and contribute to creating an enabling environment. Such a conversation should address the opportunities for individual stakeholder action, as well as opportunities for stakeholder cooperation.

Government as stimulator, enabler and creator

Governments play a key role with regard to the availability of relevant local content in their countries, both in their role as policy maker and as provider of essential information and services online.\(^41\)

Governments can play an important role as creators of online content and services. Citizens interact with their governments to pay their taxes and arrange administrative businesses, or turn to their governments for education, information and healthcare. These provide ample opportunities to provide online information and services.

\(^{40}\) Contribution Nico Tshintu Bakajika, ISPA-DRC/KINIX.

In countries where local languages other than the country’s official language, are dominantly used in some areas or rural communities, governments need to take this into account.

In its role as policy maker the government can take initiatives to promote and stimulate the content development by others. They can set up, support or subsidise projects that aim at creating local content. They can invest, or give incentives to invest, in local companies and platforms that create or enable the creation of locally relevant content and services.

Legal frameworks and other initiatives that grant access to information and provide open data, create opportunities for content creators to analyze, use, reuse and distribute the information. Access to information is one of the challenges hindering the creation of quality media and online content in some regions. Clear laws and regulations on telecommunications and intellectual property are important factors that could enhance local content.

Public Service Broadcasters can play an important role in developing local content. In 2016, European public service broadcasters, for example, have invested more than € 18 billion in content creation for locals in their local language, sometimes minority languages. This is more than twice the combined worldwide spending by Netflix and Amazon on original content. In other countries, unfortunately, public media is not investing in producing local content that responds to the need of local communities. Their activities are limited to serving as mouth pieces for their governments and do not have strategies for the production of content.

**Project highlight: Public Service Broadcasters as enablers for local content**

Many Public Service Broadcasters in Europe and beyond have launched a video on demand service (VOD) over the Internet. Access to these services are granted for free to citizens that can access any programme broadcasted when they want on any device they want. One of the most famous is the BBC i-player which today counts for a large portion of video traffic over the Internet in the United Kingdom. An important share of the content available on the i-player is locally produced in the UK by the BBC and for the BBC by independent producers. Similar successful VOD services are offered by Public Service Broadcasters around Europe and the world (eg RaiPlay).

See annexe for more details

---

42 Layal Bahman, Maharat Foundation, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
43 Roula Mikhael, , at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
44 ‘IGF2014 Best Practice Forum on Creating an Enabling Environment for the Development of Local Content.’
45 Giacomo Mazzone, EBU, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
46 Layal Bahnam, Maharat Foundation, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
Civil Society, Academia

In many regions and developing areas civil society and academic organisations take initiatives to promote and directly support the development of local content.

Traditionally, in some areas, civil society is active on topics such as openness and access to information, requesting governments to develop and install the necessary legal frameworks. Where such frameworks are in place, there’s often a lack of awareness among journalists and citizens regarding the existence of laws that grant access to information and data, or about the procedures to request the information. Civil society organisations can help to raise awareness about the rights of access to information, monitor and challenge administrations to abide to the rules.47

Project highlight: ICANNWiki - Enhancing engagement in ICANN in East Africa
ICANNWiki partnered with stakeholders in East Africa to create Internet governance related content in Swahili. This is part of a larger localization initiative where ICANNWiki coordinates with local stakeholders to collaboratively translate or create content in other languages, currently in Chinese, Portuguese, Russian, Spanish and Swahili.
In East Africa, stakeholders organized workshops that combined capacity building sessions to introduce participants to the central concepts of Internet governance with sessions on how to contribute content to ICANNWiki in Swahili. The translated and new content in Swahili is then used as tools in future workshops and is available for the Swahili speaking community at large. See annexe for more details

Project highlight: Armonía, Universidad de Oriente de Cuba, Cuba
The Armonía project promotes the cooperation between schools and the local community in rural areas to use ICTs for local development. Armonía brings together IT-specialists, teachers, researchers, and local residents to produce digital educational material on challenges faced by the local community. Results include multimedia, websites and e-books on health, education, environment, local history and other topics. See annexe for more details

Technical community

The Internet technical community plays an active role in the further development of the Internet and its rollout around the world, for example by supporting the creation of Internet exchange points. Many technical community organisations are also involved in projects and trainings to improve e-literacy, digital skills, etc..

47 Layal Bahman, Maharat Foundation, at the workshop ‘Local content: an opportunity for underserved regions’ - joint session with the BPF Local Content, IGF2017, 21 December 2017.
The deployment of Internationalised Domain Names (IDN) that allow non-Latin addresses for websites and email are an important step to allow people to access and use the Internet in their local language. Continued effort is needed to further promote the uptake of IDN domain names and to solve - in cooperation with industry players - the universal acceptance of IDNs so that Internet applications and systems treat them in a consistent manner and accept, validate, store, process and display IDNs in the same manner as legacy Latin-script domain names.

---

**Project highlight:** Dominios Latinoamérica. Uruguay, Argentina

**DOMINIOS LATINOAMÉRICA** is a new portal dedicated to Internet and online tools for productivity, with a special focus on informing SMEs in the Latin American and Caribbean region. All content is available in three languages, Spanish, Portuguese and English. In addition to the portal, news in the different languages is distributed via social networks. Dominios Latinoamérica also organises webinars and a yearly event in one of the countries in the region.

*See annexe for more details*

---

**Private sector**

The private sector, larger international and national companies as well as local SMEs, is an indispensable partner for the development of a local online digital market. Without their interest in doing business online, there will be no supply of content, services of good to trade online. The dialogue with other stakeholders is an opportunity for businesses to point at obstacles and barriers that hinder the development of a local online market, withhold them from bringing their business online or from doing online business in certain regions, and work with the other stakeholders on appropriate solutions.

---

48 Universal Acceptance Steering Group, [https://uasg.tech](https://uasg.tech)
3. Fostering local content development: Best practices and observed drivers and hindrances

3.1. Projects and Initiatives

The BPF Local content collected - via a public call for contributions - examples of initiatives and projects that aim at the creation of content relevant for local Internet users, or at enabling local entrepreneurs and content developers to put their content online. Contributors were asked to identify in their submissions what factors helped or hindered the project to maximize its success.

The BPF received 17 contributions from 15 different countries:

- Femmes et Développement du Contenu Internet Local (Chad)
- Asociatividad institucional para el desarrollo e integración de infraestructura y servicios de conectividad (Argentina)
- Proyecto Armonía: las TIC y el desarrollo humano en comunidades rurales. (Cuba)
- Harmony Project: ICT and human development in rural communities. (Cuba)
- Bislama Online Dictionary (Vanuatu)
- Summit CSA Cloud Security Alliance Argentina (Argentina)
- Fiji Museum Virtual Museum (Fiji)
- Food is Life Media Campaign (PNG & Melanesia)
- Examples of public service broadcasting enablers for local content (UK)
- Dominios Latinoamerica (Uruguay/Argentina)
- South School on Internet Governance (Uruguay)
- “Correspondentes” from VEJA website (Brazil)
- Art in Hawaii (USA)
- Triggerfish Story Lab (South Africa)
- Guardians of the Ocean - The Last Frontier (Asia Pacific)
- Reducing Digital Divide for Thais Through ชื่อ Plateform (Thailand)
- Enhancing Engagement in ICANN in East Africa (Tanzania, Kenya)
- Sewasew (Ethiopia)

The description of the projects can be found in the annexe.

The contributors were asked to present their project and its main achievements, and to reflect on what helped or hindered the project to achieve the envisaged results. These enabling factors and barriers to success are listed in the following sections to help and inspire others who run or plan initiatives that aim at creating or enabling the creation of locally relevant content.
3.2. Best Practices and experiences

Disclaimer
There exist a variety of projects and approaches, and important differences depending on when, where, what and who’s involved. As a result, it’s obvious that some of the observations and advice may be useful, while other suggestions may be irrelevant for a specific project or initiative. It is not the BPF’s intention to be normative or exhaustive. What follows is per definition open, flexible and incomplete and should be adapted to and supplemented with own experiences and insights.

3.2.1. Factors that contributed to success

*What contributed to the success of the project or initiative?*

- The active involvement of different stakeholders;
- Working with the local government and a locally established partner was instrumental in helping the project succeed;
- A good understanding between the authorities and technical parties;
- The partnership/collaboration with private partners with the technical skills to facilitate the work;
- The will to innovate and to serve all citizens, of all classes and of all ages, on all platforms (with content free of charge);
- Working with professionals to collect and create the content (in the example, experienced journalists);
- Simultaneous translation and broadcasting via audio and video streaming for remote participation;
- Establishing networks through social and traditional media;
- The strong passion of the initiators and partnership with local service providers;
- Support from local academia and engineer scholars;
- The autonomy of the local stakeholders in determining the subject matter and content;
- The combination of local ownership of the project with a strong facilitating framework;

3.2.2 Obstacles and barriers to success

*What hindered the project in achieving results?*

- Slowness of processes and (official) procedures;
- The high cost of Internet connectivity in the country;
- A lack of resources and financing (e.g. to obtain or procure hardware - PC, Camera, video);
The main problem, beyond the political will, is the problem of the resources needed to create the (initial) content and launch the service;
Facebook and Instagram are not the ideal platforms, as they don’t allow full control over the own content and its circulation. On the other hand, they do allow garnering a strong following and access people and communities that we may not be directly connected to.
Multiple parties (e.g. authors’ rights organisations) may have a say to make high quality content available on a digital platform.
Working with the local government and a locally established partner was instrumental in helping the project succeed
Production cost (of a qualitative movie)
Too much autonomy for the local stakeholders may occasionally lead to content that is of poor quality or irrelevant
Lack or resources, dependence on self funding or donors; complexity of models to monetize or sustainably fund
Internet shutdowns and unreliable Internet access
High cost of the Internet connection (which contributes to the predominance of contributions in the official language and from a relatively more centralized user base.

3.2.3. Lessons learned

**Lessons learned?**
- Constructing a local project and progressively enlarging its scope in a bottom-up way, might be more effective than pursuing the large scope from the start;
- From the start, it’s important to persuade and sensitize decision makers, managers, teachers and residents of the importance of the project in terms of human interest for the whole local community;
- Initial scarcity of material and financial resources in rural areas can be intimidating at start, but will be compensated by the gratitude, participation and support of its inhabitants;
- Strong partnerships are vital and solutions need to work within the technical capacity of the target audience;
- All the successful stories of Video on Demand of public service media around the world prove two main things: that local contents remain the preferred ones by each citizen of the world, at equivalent quality conditions; and that the contribution and the active involvement of all the stakeholders is needed to achieve success;
- Language is a barrier, and creating or making the content available in two or more languages is challenging, but worth the effort.
- SMEs have all their human resources focused on concrete issues, and few time for networking, attending conferences etc..
- Social media is the perfect medium to connect across communities and oceans.
• If you’re involved in organising a project in another region, giving local stakeholder ownership is very important, but there need to be some structure to ensure that the project achieves the desired outcome.
• Working with strong and motivated local leaders is indispensable in finding the right balance between structure and autonomy.
4. Conclusions and way forward

Despite the rapid growth of the Internet and the considerable improvement of access in developing and remote areas, Internet uptake seems not to evolve at the same speed and keeps lagging behind in some regions. This leads to the conclusion that the ability to access the Internet is, by itself, not a sufficient motivation to go online. People start using the Internet because they expect and experience that the Internet is useful and interesting for them.

Local content and services that are relevant for the local Internet user, is why people decide to go online and why Internet uptake will increase. The 2017 BPF Local content discussed this reality and focused on factors that contribute to the development of an environment that encourages and stimulates the creation of locally relevant online content.

The BPF received, via a public call for input, a variety of examples of successful projects and initiatives to stimulate the creation of local content, and learned from these experiences what worked well, what were obstacles and challenges. The analysis and best practice examples included in this document are intended to inspire policy decision makers and other stakeholders.

The topic Local content is broad and can be approached from different perspectives. Inevitably the BPF had to make choices and limit its scope. The BPF compiled a high-level description of an enabling environment that encourages the development of locally relevant online content. This description touched upon numerous issues, challenges and opportunities that deserve to be elaborated in more detail. For example, the importance of digital literacy and skills, and support and guidance for those who need help; the monetization of local content and services and related issues such as IP and copyright, and payment systems; infrastructure for Internet access and local content distribution, and related, the availability of broadband, local hosting and Internet exchange points; access to information and freedom of expression; etc.

It is important that all stakeholders continue to be involved in discussions on local content creation, seek opportunities for stakeholder action and explore possibilities for further cooperation between stakeholders at different levels.
List of references and background documents

Annexe - Feedback on the BPF’s call for projects & initiatives

1. Femmes et Développement du Contenu Internet Local (Chad)
2. Asociatividad institucional para el desarrollo e integración de infraestructura y servicios de conectividad (Argentina)
4. Bislama Online Dictionary (Vanuatu)
5. Summit CSA Cloud Security Alliance Argentina (Argentina)
6. Fiji Museum Virtual Museum (Fiji)
7. Food is Life Media Campaign (PNG & Melanesia)
8. Examples of public service broadcasting enablers for local content (UK)
9. Dominios Latinoamerica (Uruguay/Argentina)
10. South School on Internet Governance (Uruguay)
11. “Correspondentes” from VEJA website (Brazil)
12. Art in Hawaii (USA)
13. Triggerfish Story Lab (South Africa)
14. Guardians of the Ocean - The Last Frontier (Asia Pacific)
15. Reducing Digital Divide for Thais Through คนไทย Platform (Thailand)
16. Enhancing Engagement in ICANN in East Africa (Tanzania, Kenya)
17. Sewasew (Ethiopia)

1 - Femmes et Développement du Contenu Internet Local
Chad, Africa

La vulgarisation de l’identité numérique national ne peut se faire sans association de toutes les parties prenantes et surtout ceux qui créent du contenu local mais qui n’ont pas de moyens numériques d’en diffuser. C’est ainsi que, en tant qu’un acteur majeur dans la vulgarisation de l’internet au Tchad, l’internet Society Chad (ISOC-CHAD) organise un atelier durant décembre 2017 à N’Djamena sur la création du contenu local et sur l’importance du nom domaines nationales ‘’.le.Td’’ au profit des organisations féminines qui sont une source de contenu local non négligeable.

Stakeholders in the project
Isoc Chad

Contributed by
Brahim Ousmane Mustapha

2 - asociatividad institucional para el desarrollo e integración de infraestructura y servicios de conectividad
Argentina, Latin America
http://www.criba.edu.ar/acuerdos/

IGF 2017
BPF Local Content
Se busca promover asociatividad interinstitucional e iniciativa privada para generar una plataforma de red metropolitana, que progresivamente se convierta en regional, con infraestructura y gestión propia que evite la superposición de esfuerzos y potencie el trabajo conjunto.

Main achievements
Se reúnen ya todas las entidades de educación superior, más municipio y hospital. Se han agregado enlaces a puntos culturales. Se cuenta con el apoyo de la Red Nacional de las Universidades de Argentina (ARIU).

Factors contributing to success
Una tradicional asociatividad entre algunas de las instituciones base, la excelente predisposición de autoridades y técnicos.

Factors hindering achieving results
La lentitud del proceso ha sido un problema. Los altos costos en Argentina para Internet son un inconveniente.

Lessons learned/comments
Intentar un gran alcance del proyecto desde el comienzo es un error. Construir bottom-up progresivamente es un mecanismo más efectivo.

Es necesario promover la regionalización de la gestión de internet como un modo de facilitar la estabilidad de la red.

Stakeholder in the project
Conicet, UNS, UTN, ARIU

Contributed by
Carlos Francisco Frank

3 - Proyecto Armonía: las TIC y el desarrollo humano en comunidades rurales.
Cuba, Caribbean
http://armonia.uniblog.uo.edu.cu/

Contribuir al desarrollo humano y local utilizando las TIC desde la labor socioeducativa de la escuela rural, potenciando la participación protagónica de maestros investigadores, especialistas en informática y pobladores para la elaboración de medios didácticos digitales para ser utilizado en actividades docentes y extradocentes, mediando contenidos socioeducativos derivados del conocimiento popular y de investigaciones educativas que revelan problemáticas socioeducativas que se manifiesta en la comunidad y que favorecen resolver dichas problemáticas. El mayor aporte a lograr con el proyecto es el mejoramiento humano, laboral y profesional de los integrantes de las comunidades rurales.

Main achievements
- Formación doctoral de tres investigadores del proyecto.
- Elaboración de una concepción pedagógica de integración de la escuela con la comunidad mediada por la cultura informática en las comunidades rurales.
- Elaboración de una metodología para potenciar la cultura informática de dirigentes, maestros y escolares a través de la elaboración y uso de medios didácticos digitalizados en las comunidades rurales.
- Realización de cerca de 200 actividades científicas investigativas desarrolladas por maestros rurales como parte de su formación como Máster en educación y que se vinculan a los objetivos del proyecto.
Elaboración de medios didácticos digitales en HTML sobre historia local, educación ambiental, educación sexual, potencialidades sociopolíticas y sociales de las comunidades, desarrollo educacional, rescate de elaboración de objetos tradicionales campesinas, cultura física del adulto mayor, rescate de la música tradicional, entre otros.

Factors contributing to success
Contribuyó al éxito del proyecto la vinculación universidad, escuela, familia y comunidad, esta integración logró desde la actividad científica investigativa de los maestros de las escuelas rurales, asesorados por investigadores de la Universidad de Oriente, y desde la labor socioeducativa de la escuela, trabajar con especialistas de informática de dichas escuelas para hacer un levantamiento de contenidos socioeducativos aportados por los pobladores a partir de la indagación científica y crear los medios didácticos digitales. Jugó un papel beneficioso en estos resultados la vinculación escuela comunidad y la participación activa de los pobladores, fundamentalmente los adultos mayores.

Factors hindering achieving results
Obstaculizó el proyecto para lograr resultados las carencias de recursos informáticos (PC, cámara de fotos y videos) y el financiamiento (dieta de viaje, alimentación y hospedaje) para desarrollar con sistematicidad y profundidad las tareas propuestas por el proyecto.

Lessons learned/comments
Estuve involucrado como organizador del proyecto y las lecciones aprendidas fueron:
1. El vínculo universidad – sociedad es imprescindible para el desarrollo humano y local de las comunidades.
2. La integración de los componentes académico, investigativo y extensionista de las instituciones de la educación superior permiten con efectividad contribuir al desarrollo local de las comunidades.
3. En el marco de las zonas rurales, el trabajo conjunto de la escuela y la comunidad permite el desarrollo comunitario, toda vez que se apoya en el conocimiento científico y popular para abordar contenidos socioeducativos que resuelven problemáticas diversas en estas.
4. Trabajar con intencionalidad y responsabilidad, demostrando que con la participación de todos podemos lograr incidir en los pobladores de comunidades rurales

Consejos:
• Desde el diagnóstico de la comunidad, persuadir y sensibilizar a decisores, directivos, pobladores y maestros de la importancia del proyecto en función del crecimiento humano de toda la localidad.
• No amilanarse por la escasez de recursos materiales y financieros para el trabajo con las comunidades rurales, pues al final se compensará por el agradecimiento, participación y apoyo de sus pobladores.

Se logró un impacto pedagógico y social manifestado en:
• Se logró un nivel de gestión para garantizar los recursos humanos e informáticos, así como la coordinación de la escuela con los diferentes factores para el desarrollo del proyecto.
• Se planificaron actividades metodológicas a nivel de escuela para la implementación de la metodología.
• Se tuvo en cuenta en la actividad científica investigativa del centro, la realización de eventos científicos y elaboración de publicaciones relacionadas con la labor social y educativa de la escuela.
• Promovieron trabajos científicos investigativos y actividades curriculares con el uso de medios didácticos.
• Emprendieron acciones sistemáticas para el desarrollo del trabajo metodológico con la utilización de los medios didácticos digitales.
• Incremento en la resolución de tareas docentes relacionadas con la utilización del medio didáctico digital.
• Incremento sustancial de medios didácticos digitales elaborados que tributan al vínculo escuela-comunidad.
• Actualización y renovación de contenidos curriculares que propician el vínculo.
escuela-comunidad.
• Interés generalizado en la mayoría de la población por cursar la alfabetización informática.
• Los medios didácticos digitales responden a necesidades actuales de la familia y la comunidad.
• Fue alta la preparación de la familia en los conceptos y conocimientos sobre las temáticas tratadas.
• Hubo una influencia de los pobladores que participaron en las actividades programadas por la escuela, en cuento fueron capaces de orientar a familiares y vecinos sobre el tema.
• Disposición de los pobladores a participar en actividades que se generan desde la escuela.

Actualmente se realizan aulas virtuales para la capacitación de pobladores a través de la intranet de la Universidad de oriente para la preparación en temáticas de interés de pobladores de zonas rurales, además de audiovisuales que muestran la realización de objetos y trabajos manuales tradicionales campesinos, que prácticamente no se realizan y se están perdiendo en esas zonas rurales.

Stakeholders in the project
Ministerio de Educación de Cuba
Universidad de Oriente
Dirección Provincial de Educación Santiago de Cuba
Dirección Municipal de Educación de II Frente
Comunidades serranas de II Frente

Contributed by
Gustavo Cervantes Montero

3 (English) - Harmony Project: ICT and human development in rural communities.
Cuba, Caribbean
http://armonia.uniblog.uo.edu.cu/

Contribute to human and local development using ICT from the socio-educational work of the rural school, promoting the leading participation of research teachers, computer specialists and residents for the development of digital didactic media to be used in teaching and extra-teachers activities, mediating socio-educational content derived from popular knowledge and educational research that reveal socio-educational problems that manifest themselves in the community and favor solving these problems. The greatest contribution to achieve with the project is the human, labor and professional improvement of the members of the rural communities.

Main achievements
Doctoral training of three project researchers.
• Development of a pedagogical conception of the integration of the school with the community mediated by the information culture in rural communities.
• Development of a methodology to enhance the information culture of leaders, teachers and schoolchildren through the development and use of digitized didactic media in rural communities.
• Completion of about 200 scientific research activities developed by rural teachers as part of their training as Masters in education and linked to the objectives of the project.
• Development of digital didactic media in HTML about local history, environmental education, sexual education, sociopolitical and social potentialities of the communities, educational development, rescue of traditional peasant objects, physical culture of the elderly, rescue of traditional music, between others.

Factors contributing to success
The university, school, family and community links contributed to the success of the project, this integration achieved from the scientific research activity of the teachers of the rural schools, advised by researchers from
the Universidad de Oriente, and from the socio-educational work of the school, to work with computer specialists from these schools to do a survey of socio-educational contents provided by the inhabitants based on scientific inquiry and create digital teaching aids. It played a beneficial role in these results linking the school community and the active participation of the inhabitants, mainly the elderly.

Factors hindering achieving results
Obstacled the project to achieve results the lack of computer resources (PC, camera and videos) and financing (travel diet, food and lodging). To develop systematically and thoroughly the tasks proposed by the project.

Lessons learned/comments
I was involved as the project organizer and the lessons learned were:
1. The university-society link is essential for the human and local development of the communities.
2. The integration of the academic, research and extension components of higher education institutions effectively allows contributing to the local development of the communities.
3. Within the framework of rural areas, the joint work of the school and the community allows community development, since it relies on scientific and popular knowledge to address socio-educational contents that solve diverse problems in these.
4. Work with intentionality and responsibility, demonstrating that with the participation of all we can achieve influence on the inhabitants of rural communities.

Tips:
• From the diagnosis of the community, persuade and sensitize decision-makers, managers, residents and teachers of the importance of the project in terms of the human growth of the entire locality.
• Not be intimidated by the scarcity of material and financial resources for the development of work with rural communities, since in the end it is compensated by the gratitude, participation and support of its inhabitants.

Comments:
A pedagogical and social impact manifested in:
• A level of management was achieved to guarantee human and computer resources, as well as the coordination of the school with the different factors for the development of the project.
• Methodological activities were planned at the school level for the implementation of the methodology
• The scientific research activity of the center was taken into account, the carrying out of scientific events and the preparation of publications related to the social and educational work of the school.
• They promoted scientific research and curricular activities with the use of digital teaching aids.
• They undertook systematic actions for the development of methodological work with the use of digital teaching aids.
• Increase in the resolution of teaching tasks related to the use of the digital teaching medium.
• Substantial increase of digital didactic media elaborated through the curricular activities that are taxed to the school-community link.
• Update and renewal of knowledge related to curricular contents that favor the school-community link.
• Generalized interest in the majority of the population for studying computer literacy.
• Digital didactic media respond to the current needs of the family and the community.
• The preparation of the family was high in the concepts and knowledge about the topics dealt with.
• There was an influence of the inhabitants who participated in the activities programmed by the school, as soon as they were able to guide relatives and neighbors on the subject.
• Disposition of the inhabitants to participate in activities that are generated from the school.

Currently, virtual classrooms are being developed for the training of residents through the intranet of the University of the East for the preparation of subjects of interest to rural inhabitants, as well as audiovisuals that show the realization of objects and manual traditional peasant works, which practically they are not realized and they are being lost in those rural areas.
4 - Bislama Online Dictionary  
Vanuatu, Asia Pacific  
www.bislama.org

An online dictionary in the Bislama language of Vanuatu.

Stakeholder in the project
Ausaid via the TVET strengthening project

Contributed by
Daryl Moon

5 - Summit CSA Cloud Security Alliance Argentina  
Argentina, Latin America  
https://csa-ar-summit.com/

Annual event to share the news related to the security of the information found in the cloud connected to the internet.

Main achievements
2017 https://csa-ar-summit.com/  
2016 https://www.eventbrite.com.ar/e/csa-argentina-summit-2016-registration-24058749367#

Factors contributing to success
The good collaboration and communication between the professionals, the network that generates in each event, the exhibitors with the technical tables and debate.

Factors hindering achieving results
The bureaucracy in the contracted services

Lessons learned/comments
As organizer 2016 and 2017 I can comment that the important points for me were, the information shared, the organization and the work teams with short-term objectives.

Stakeholders in the project
» CIO, OSC, CISO, BISO, CRO, CFO, CCO, CGOS, CPO’s y CTO.  
» Los interesados en Gobierno de IT, cumplimiento y ejecutivos de privacidad.
» Los altos ejecutivos de negocios.
» Finanzas, auditoría, legal y de cumplimientos reguladores.
» Empresa y directores de operaciones de riesgo
» Continuidad de las operaciones.
» Gestores de crisis o de gestión de emergencias.
» Gestores de recuperación ante desastres.
» Encargados de Infraestructura de TI, operaciones y desarrolladores.
» Auditoría Interna.
» Interesados en cumplimientos regulatorios de administración de riesgos tecnológicos.

Contributed by
Carina Birarda

6 - Fiji Museum Virtual Museum
Fiji, Asia Pacific
http://virtual.fijimuseum.org.fj/

A virtual museum making the Fiji Museum's displays available online.

Main achievements
Providing access to the Fiji Museum's displays to people unable to access the Museum itself, particularly people in the rural and maritime areas of Fiji.

Factors contributing to success
The partnership between the Fiji Museum and the private enterprise with the technical skills to facilitate the work.

Factors hindering achieving results
A very short 3 month development period

Lessons learned/comments
Strong partnerships are vital and solutions need to work within the technical capacity of target audience.

An administration portal allows updating and editing of the Virtual Museum

Stakeholder in the project
Fiji Museum, First Fighter, Fiji Ministry of Education, Heritage and the Arts

7 - Food is Life Media Campaign
Papua New Guinea and Melanesia, Asia Pacific

The Food is Life campaign works to improve family health and climate impacts by increasing nutrition, traditional garden productivity and sustainable agricultural for rural populations in the Pacific. Our project educates Pacific Islanders about how to safe guard their households against poor diets, lifestyle diseases and industrialized farming threats by sharing local innovations in indigenous culinary practices, appropriate farming technologies and maintaining food gardens for health and wealth. In collaboration with our regional partners, Save PNG has produced a training tool kit complete with an educational audio-video series, facilitator’s guide and study booklet. This Information, Communications and Technology (ICT) resource will be disseminated to
Pacific audiences in Melanesia through television and radio broadcasts, social media networks and peer education trainings.

Cafe Niugini TV Series component of the project: https://www.facebook.com/Cafe-New-Guinea-601738593230738/

Save PNG article: https://www.agroecologyfund.org/blog/2017/8/7/storytelling-and-food-how-pacific-islands-are-revitalizing-pride-in-their-food-culture

Cafe Niugini TV Series video trailer: https://youtu.be/OUiHuXp0LZE

Main achievements
The Food is Life Project continues the work of Save PNG’s popular Café TV brand success which celebrates PNG and Melanesian food, culture & farming stories with pacific audiences. This 16-part video series produced in collaboration with 40 Melanesian food communities filmed in 5 countries and hosted by indigenous food enthusiast Jennifer Baing-Waiko, has reached over 1 million viewers on television networks throughout the Pacific. Audio-visual resource kits were distributed to educational institutes, non-profit organizations and community groups directly impacting the lives of 15000 participants from Melanesia. This communications kit encourages Melanesians to use appropriate agriculture techniques, rural livelihoods and indigenous food health strategies in promoting messages of ‘self-reliance’ among Pacific communities. We hope to replicate the Melanesian model to other parts of the region to ensure all Pacific islanders can exchange beneficial good food practices, cooking traditions and farming technologies.

Factors contributing to success
Over the past 5 years, Save PNG has formed a strong working partnership with regional organizations coordinating various food festivals, cultural events, conferences and trainings in building the Food is Life concept throughout the Pacific. Most recently, our Food is Life project is educating 300 rural villages throughout Melanesia on the benefits of indigenous food systems which is drastically reducing the dependence on fast food in partner communities. Secondly in 2016, to support our Food is Life Campaign, we held the Tupunis Food Festival in Vanuatu (video link: https://youtu.be/P9Q1TAk11vw) which brought together over 2000 regional participants to share skills, knowledge and strategies in building sustainable models of responsible food economies for improved health, prosperity and self-reliance. Thirdly in 2013, we coordinated an Indigenous Terra Madre regional meeting to prepare our Melanesian delegation to attend the Slow Food International and Terra Madre event in Turin, Italy. At the Salone del Gusto event, members of our team were able to exchange valuable agriculture knowledge, food cultivation practices and seed saving methods with farming groups from around the globe.

Factors hindering achieving results
- Roles and responsibilities of the Collaborative organisations in the project were difficult to negotiate and one partner failed to perform their task.
- Monitoring and Evaluation was weak and needs more commitment, time and resources to further measure impact of the project on target audiences.
- Language and Communication barriers with partners was difficult in French speaking countries such as New Caledonia and Vanuatu.

Lessons learned/comments
As a result of the Food is Life filming project in Melanesia the fusion of cultures and cuisines are now being mixed together throughout the Pacific. The cross-cultural influence and food diversity that can be created through different communities sharing each other’s culinary knowledge and cooking traditions is showing
remarkable success. Save PNG is confident there will be some healthy styles of cooking being shared around Melanesia now that these delicious recipes have been introduced into different communities throughout the region.

Stakeholders in the project
Collaborative:
Save PNG Inc. - PNG
Social Empowerment Education Program - Fiji
Seven Day Adventist Church - Suvavou
Kastom Gaden Association - Solomon Islands
Tjibaou Culture Centre - New Caledonia

Funders:
The Christensen Fund - USA
The AgroEcology Fund - USA
FFCF - USA
DFAT Australian Aid
United Nations Permanent Forum on Indigenous Issues
CPL

Contributed by
Bao Waiko

8 - examples of public service broadcasting enablers for local contents
United Kingdom, Europe (and other)

Many Public service broadcasters in Europe and beyond (Japan, Australia, Korea, Canada, US, etc.) have launched their on service of v.o.d. (video on demand) over the Internet. Access to these service, of which the most famous is BBC I-player, are granted for free to citizen, that can access when they want, on any device, any programme broadcasted.


Main achievements
In few years BBC I-player became the first service of access to video in the UK and today accounts for a large portion of the video traffic over the internet. In May 2015 (see linked document) through the I-player has been requested 222 millions video items, mainly of local contents produced in the UK by the BBC and for the BBC by independent producers. Similar success (even if not of the same magnitude) occurs to other V.o.D services of the Public Service Broadcasters around Europe and the world.

Factors contributing to success
The I-player of the BBC or Rai.play for RAI in Italy are the results of a will of innovation and to serve all citizens, of all classes and of all ages, on all platforms. This evolution of traditional broadcasting into the Internet world represent the largest offer of local contents today available on line. And it's clearly distinct from
the pay-offer of various Netflix and similar, because it is accessible for free to the citizen of the concerned country and because offer at least 60% or more of local contents.

Factors hindering achieving results
The main problem, beyond the political will, is the problem of the resources needed to create and launch the service. This is why still in some countries such kind of offer over the Internet doesn't exist. Especially in smaller and less developed countries, where only pay offers exist and contribute to dig the digital divide.

Lessons learned/comments
All the successful stories of V.o.D. of public service media around the world prove two main things: that local contents remain the preferred ones by each citizen of the world, at equivalent quality conditions; and that to make of experience like this a success, is needed the contribution and the active involvement of all the stakeholders. BBC I-player concept was proposed by BBC to the UK government and was included in the remit of the BBC. But also BBC at the same time has to discuss the availability of contents with the authors' rights organizations, with the guilds of the professional involved and with the Cultural institutions. All of those have a say in the process and all agreed to make available this huge quality contents to all citizen in the new digital environment.

Stakeholder in the project
for the I-player: BBC, the UK government, the professional of the audiovisual sector, British cultural institutions.

Contributed by
Giacomo Mazzone - Head of Institutional Relations at the EBU

9 - Dominios Latinamerica
Uruguay / Argentina, Latin America
http://dominioslatinoamerica.co/

The news portal DOMINIOS LATINOAMERICA offers up-to-date information about online tools for productivity, with special focus on SMEs in the Latin American and Caribbean region.

All its content is developed in three languages, Spanish, English and Portuguese.

DOMINIOS LATINOAMERICA also has a presence in social networks, where the news are distributed in several languages.

DOMINIOS LATINOAMERICA organizes since 2012 once a year a conference and exhibition in different countries of the region, and also several webinars during the year.

Main achievements
Successful exhibitions (see website dominioslatinoamerica.co for details about the six editions)

Factors contributing to success
The focus on SMEs and online tools is totally innovative in the region.

Factors hindering achieving results
One of the big barriers is the lack of knowledge about the general focus of the conference and exhibition, SMEs usually have all their human resources focused on concrete issues and they have few time for networking and conferences. Once they participate they realize the value of the network but this is a big barrier to have in mind.

Lessons learned/comments
Lessons learned are that language is a big barrier, creating content in three languages is very challenging but worth the effort. Also the Latin American and Caribbean region economy is based on SMEs and they have all their human resources focused on concrete issues and they have few time for networking and conferences.

Stakeholders in the project
All: government, civil society, academia, private sector, technical community

Contributed by
Adrián Carballo

---

10 - South School on Internet Governance
Uruguay, Latin America
www.gobernanzainternet.org

Objectives and Mission of the South School on Internet Governance:
- Increase the number of representatives from the Latin American and Caribbean Region in the Internet ecosystem
- Train the next leaders of Internet Governance in their countries and in the region
- Grant fellowships to all participants

Main achievements
The South School on Internet Governance has granted more than 2000 fellowship to participants, many of them are now involved in different I* organizations or as participants in constituencies, working groups or the MAG.

SSIG has been organized in the following countries:

2009 - Buenos Aires, Argentina
2010 - San Pablo, Brazil
2011 - Mexico City, Mexico
2012 - Bogota, Colombia
2013 - Panama, Panama
2014 - Port of Spain, Trinidad & Tobago
2015 - San José, Costa Rica, Costa Rica
2016 - OAS Headquarters - Washington DC, USA
2017 - Fundación Getulio Vargas - Río de Janeiro - Brazil

The school offers simultaneous translation into spanish english portuguese, these audio channels also go to the community with the remote participation with video streaming.

Factors contributing to success
There is no payment involved, no participant pays, all of them get a fellowship to participate, and there is also remote participation with no limits of access. In the 2016 edition there were up to 25,000 remote participants during the 5 days of activiti.
Other important issue is that the school offers simultaneous translation into Spanish, English and Portuguese, these audio channels also go to the community with the remote participation with video streaming.

Factors hindering achieving results
No major problems.

Lessons learned/comments
Value of simultaneous translation and remote participation, value of the fellowship program to promote participation.

Contributed by
Adrián Carballo

11 - "Correspondentes", from VEJA website
Brazil, Latin America

The project "Correspondentes", released in June of 2017, creates a network of local news in Brazil, hiring journalists from 10 state capitals to report what is going on specially on local politics - in addition to teams that work on São Paulo, Rio de Janeiro and Brasília branches. The initiative has been celebrated, in times when big newspapers and magazines reduce the coverage area due to cost cutting, while local news publishers are shutting down their outlets. Two states (Rio Grande do Sul and Paraná) are being covered so far, and until February VEJA website will launch blogs from the states of Amazonas, Pará, Minas Gerais, Bahia, Rio Grande do Norte, Ceará, Mato Grosso do Sul and Mato Grosso.

https://veja.abril.com.br/blog/rio-grande-do-sul/
https://veja.abril.com.br/blog/parana/

Main achievements
Blog "Rio Grande do Sul" brought nationally a big story on Arts: a museum canceled an exhibition after protesters complained of "erotic" works. The story caused a major controversy in the country. Besides that, the blogs are revealing problems on local administration the local newspapers, frequently suffering from political parties pressions, are not able to publish

Factors contributing to success
Hiring experienced journalists is the most important. A project like this would not work so well with junior professionals

Factors hindering achieving results
Nothing so far. The biggest problem to launch the project was having money to hire 10 journalists. The solution: cutting costs of news agencies.

Lessons learned/comments
Empowering professional journalism requires investment on exclusive content. It is easy to make a current affairs website or magazine by leaning on news agency and official content. To pursue the truth in a big and complex country like Brazil, it is important to stimulate the work of good journalists.

Contributed by
Daniel Bergamasco
Art in Hawaii serves to connect and nurture the Hawaiian contemporary art community. Beyond our Facebook group which posts art events and happening in the visual arts in Hawaii; every week we feature an instartist in residence from Hawai’i or the greater Pacific. Finally, we publish conversations between artists in Hawaii and the larger contemporary art community.

https://m.facebook.com/groups/175691812772700
https://www.instagram.com/artinhawai.i/
http://cargocollective.com/artinhi/About

Main achievements
We have over 2500 followers on Facebook and have been recognized by the local community including the Honolulu Museum of Art and the Honolulu Biennial.

Factors contributing to success
As the founder, I wanted to create something that I could contribute to on a daily basis from anywhere in the world. Social media is the perfect medium to connect across oceans and communities.

Factors hindering achieving results
Facebook and Instagram are not the ideal platforms in that our content is still circulating on platforms we do not have control of. However, they have also allowed us to garner a strong following and access people and communities that we may not be directly connected to.

Lessons learned/comments
Finding something that one can contribute to on a daily or regular basis has made this project successful.

Stakeholders in the project
Jane Chang Mi and Michelle Broder van Dyke (co-founders)

Contributed by
Jane Chang Mi
Main achievements

- The Story Lab received 1,378 entries from 30 countries across Africa. 23 features and 14 TV series were shortlisted and developed over a two-week intensive workshop in Cape Town in November 2015 with Orion Ross, Vice President of Content – Animation, Digital and Acquisitions Disney Channels EMEA, and leading Hollywood script consultant Pilar Alessandra. The selected storytellers also visited Disney’s headquarters in Burbank, California to receive mentoring from key studio and television executives.

- The selected storytellers include Nnedi Okorafor, a Nigerian-American World Fantasy Award winning novelist; multi-award-winning Kenyan director Wanuri Kahu; South African YouTube phenomenon Mike Scott, whose music videos for Goldfish have over 12m views; and Lucy Heavens, one of the writers on the breakout South African animation hit Supa Strikas, which is broadcast in 120 countries around the world.

- Triggerfish raised about $3.5 million for the Story Labs project, including funding from South Africa’s DTI, to be used specifically for the sourcing and development of film and TV scripts across Africa, including scripts from storytellers from historically excluded and underrepresented groups. Story Labs then worked with a group of experts to select scripts with the most potential and develop those to a stage where they are ready to go into production.

Factors contributing to success

- Working with the local government and a locally established partner was instrumental in helping the project succeed.

Lessons learned/comments

- Working with the local government and a locally established partner was instrumental in helping the project succeed.

TWDC went through past IGF local content sessions transcripts and pulled out information about presenters' projects/initiatives. Happy to send that over if it would be helpful.

Stakeholders in the project

- Triggerfish Animation Studios
- The Walt Disney Company
- The Department of Trade and Industry, South Africa

Contributed by
Sajda Ouachtouki

14 - Guardians of the Ocean - The Last Frontier
Asia Pacific
https://www.youtube.com/watch?v=qSMKuljWtIQ

The Last Frontier, a documentary series focusing on experimental seabed mining, an imminent venture in the Pacific. This documentary presents the situation in Papua New Guinea (PNG).
Despite the experimental nature and a dearth of knowledge about hydrothermal vents and deep sea ecosystems, Nautilus Minerals Inc. is already prospecting PNG’s Bismarck Sea with an aim to begin mining as early as 2019.

This film highlights a general failure by authorities to incorporate sufficient environmental protections, as well as the norm of free, prior, and informed consent (FPIC) for indigenous peoples of the Bismarck Sea.

**Main achievements**
This project has been able to present community voices to influence policy level. It is a project still in progress and aims to provide more platforms to local and impacted communities.

**Factors contributing to success**
The networks established via social and traditional media. We have been able to present community voices with the assistance of networks.

**Factors hindering achieving results**
Production cost was one of the major hindrance to this project.

**Lessons learned/comments**
It would have to be networks and the different platforms available to better production outputs.

**Stakeholders in the project**
Pacific Network on Globalisation

**Contributed by**
Joey Tau

---

15 - Reducing Digital Divide for Thais Through คุณ.ไทย Platform
Thailand, Asia Pacific
https://คุณ.ไทย

Having an ability to use domain and email in mother tongue language will ease numbers of Thai people who are not familiar with English to internet access. คุณ.ไทย is a Internationalised Domain Name (IDN) stands for thai people where THNIC make it available for local people to learn about domain and email in Thai language. Besides useful info for Thais, and sponsorship from local partner "Throughwave" this platform able to offers hundreds of free email @คุณ.ไทย (together with @kon.in.th) to various targets on scheduled events such as university students and conference participants. This project was launched since last January 2017 until present, and will continue to build more local contents to promote the internet accessibility for Thais.

**Main achievements**
THNIC, with partnership with a local partner (Throughwave), able to offer the first Thai-email with free of charge to Thai people. Currently, total number of Thai email given out from this project is 830 accounts.

**Factors contributing to success**
With a strong passion for Thai people of THNIC leaders and with a partnership from a local email service provider, Throughwave co.,ltd., who has developed and deployed EAI ready email service and sponsored free emails for this project. As well as supports from local academia and engineer scholars.
Factors hindering achieving results
To achieve a better result, the right ecosystem and resorts need to be in place, but the number of internet users, developers & email service providers who comfortable with existing environments may not see full benefits of adopting Thai-IDN & EAI, or have not convinced to invest to adopt the change, resulting in slow response in cooperation and supports for this project.

Lessons learned/comments
There are needs for Thai IDN & Emails for local people who are not familiar with English which is over 30% of Thai population. This project is one part to raise awareness and advocate for reducing digital divide.

Stakeholders in the project
Thai Network Information Center (THNIC), T.H.NIC Co., Ltd. & Throughwave Co., Ltd.

Contributed by
Wilaiwan Phanarin

---

16 - Enhancing Engagement in ICANN in East Africa
Tanzania and Kenya, Africa  
https://icannwiki.org/Enhancing_Engagement_in_ICANN_in_East_Africa

In 2016, ICANNWiki partnered with several stakeholders in East Africa to create Internet governance related content in Swahili. This is part of a larger localization initiative, where we coordinate with local stakeholders to collaboratively translate or create content on ICANNWiki in other languages. Currently, we have content in Chinese, Portuguese, Russian, Spanish, Swahili.

Main achievements
This project is part of a larger initiative to localize Internet governance content around the world through initiatives driven by local stakeholders. So far we have translated/created over 500 articles across 5 languages. In East Africa, the stakeholders have organized workshops that teach participants how to contribute content to ICANNWiki. These started as half-day workshops and grew into two-day capacity development events, which introduces users to the central concepts of Internet governance and encourages them to apply that knowledge by translating related content into Swahili. The content they create is then used as a tool in the next workshop, where participants are encouraged to create even more of this content for the next round of participants and the Swahili speaking community at-large.

Factors contributing to success
The autonomy of the local stakeholders in determining the subject matter of the workshops and content that was translated. The local stakeholders took ownership over the direction of the project, while we provided a framework and facilitated the project when needed.

Factors hindering achieving results
We found that too much autonomy occasionally led to content that was either poor quality or irrelevant.

Lessons learned/comments
If you are involved in organizing a project in another region, given gate local stakeholders ownership is very important. However, there needs to be some structure to ensure that the project achieves the desired outcome. Working with strong and motivated local leaders in indispensable in finding the right balance between structure and autonomy.
Named after an Amharic word for a ladder to prosperity, Sewasew enables users to curate and contribute content in their native language. The aims of the platform are to deepen knowledge about various topics relevant to Africa, to connect users to one another, and to increase awareness about Africa on a global scale. The platform hosts crowd-sourced content available in 4 languages: English, Amharic, Afaronomo (Oromik), and Tigrigna. So far the site has 30,000 articles, which focus on health/home remedy, government (especially how to use different government services), and culture (travel tips, customs in different villages and countries, encyclopedia style). Sewasew aims to increase its local content through collaborations with local educational and cultural institutions, including Addis Ababa University, National Archives and Libraries Agency, and Oromo Cultural Institute.

Main achievements
So far the site hosts 30,000 articles. The most popular articles are health/home remedy, government (especially how to use different government services), culture (travel tips, customs in different villages and countries, encyclopedia style). The articles are popular both for practical use value and also to satisfy curiosity and expand knowledge generally. Most articles are written in Amharic, the official language of Ethiopia, coming in at roughly 60-70%. The remaining percentage is distributed relatively evenly across the other languages.

Sewasew uses Google Analytics to keep track of user access statistics for the platform. Approximately 10,000 articles are viewed per day; 1% of users are contributing content and 99% are just reading. The site has 3,000 registered users, mostly Ethiopians, but also sees a fair number of users accessing the platform globally, from other parts of Africa and beyond. There are currently 250,000 followers on the Sewasew Facebook page, on which they feature articles to drive traffic to the site. 70-80% of users access the site from mobile devices, and the platform is designed to be very mobile friendly.

Sewasew is working towards developing a monetization model to ensure project sustainability. Some models being considered include approaching institutions committed to specific causes to sponsor content to promote an article of their own interest. They are also considering advertising-based revenue generation models.

Factors hindering achieving results
Lack of resources. The project is currently self-funded and in search of donors. Models for generating monetized content and sustainable funding for the project are being considered and developed, but currently there are no revenue streams in operation.

Internet shutdowns. Internet access across multiple African countries is intermittent due to inadequate infrastructure. The platform is on the web, so it is only useful to the extent that internet access to it is reliable. Improving Internet accessibility is outside the feasible scope of the project, so it is dependent on developments in other sectors.

Internet cost. Internet is not only not particularly reliable, but it is also very expensive where it is available. This contributes to the predominance of contributions in the official national language and from a relatively more
centralized mainstream user base, rather than the geographically and linguistically diverse target users.

Outreach. There is a lack of content in other languages. Most articles are written in the official language of Ethiopia, Amharic. But the platform is designed to host diverse local languages, and that functionality is not being utilized. Outreach to other language speakers has been difficult, mostly because it is expensive and there is a general lack of resources for the project. Most people only read the articles on the platform, but do not themselves contribute, and it has been a challenge to motivate users to actually contribute content of their own.

Stakeholders in the project
Sewasew

Contributed by
Sharada Srinivasan