Good Stories Don’t Grow on Trees
A Guide to Effective Costing of Storybooks in the Global South

Neil Butcher, Lisbeth Levey, Kirsty von Gogh
With funding from the William and Flora Hewlett Foundation, and as part of its work on the early literacy ecosystem and open licensing, Neil Butcher & Associates (NBA) is conducting research on costs associated with production of different kinds of storybooks. NBA’s goal is to contribute to enhancing the availability of children’s books in mother-tongue languages in Africa, supported by open licensing.

Openly licensed resources are ‘free’ to access, but there are significant creation, adaptation, production, and use costs. The long-term sustainability of local-language publishing requires that these costs be met fairly, using financial models that will enable people to establish, grow, and maintain effective content creation organizations. This research aims to raise awareness of the various costs that go into producing and translating storybooks and of the relationship between investment and quality. It also serves to illustrate emerging business models for local organizations creating content using open licensing that funders and governments might wish to fund to support effective early literacy acquisition in developing countries.

NBA has also created a website, the Early Literacy Resource Network (ELRN), to share information on toolkits and research about open licensing, teacher training, national language and book policies, access and distribution, and key players in early literacy. The ELRN website gathers together work carried out by major organizations and researchers in this field.

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## Abbreviations and acronyms

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<th>Description</th>
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<tbody>
<tr>
<td>AAUP</td>
<td>American Association of University Presses</td>
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<tr>
<td>APNET</td>
<td>African Publishers’ Network</td>
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<td>ASb</td>
<td>African Storybook</td>
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<tr>
<td>B2B</td>
<td>Business to Business</td>
</tr>
<tr>
<td>B2C</td>
<td>Business to Customer</td>
</tr>
<tr>
<td>CC</td>
<td>Creative Commons</td>
</tr>
<tr>
<td>CL</td>
<td>Community Library</td>
</tr>
<tr>
<td>CPM</td>
<td>Cost Per Thousand Impressions</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
</tr>
<tr>
<td>DBE</td>
<td>Department of Basic Education</td>
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<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>ELRN</td>
<td>Early Literacy Resource Network</td>
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<tr>
<td>GDL</td>
<td>Global Digital Library</td>
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<tr>
<td>HDIF</td>
<td>Human Development Innovation Fund</td>
</tr>
<tr>
<td>JAMB</td>
<td>Joint Admissions and Matriculation Board</td>
</tr>
<tr>
<td>IPR</td>
<td>Intellectual Property Rights</td>
</tr>
<tr>
<td>LTSM</td>
<td>Learning and Teaching Support Materials</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>PSA</td>
<td>Public Service Announcement</td>
</tr>
<tr>
<td>NBA</td>
<td>Neil Butcher &amp; Associates</td>
</tr>
<tr>
<td>NDLA</td>
<td>Norwegian Digital Learning Arena</td>
</tr>
<tr>
<td>REACH</td>
<td>Reading within Reach</td>
</tr>
<tr>
<td>RTR</td>
<td>Room to Read</td>
</tr>
<tr>
<td>STEM</td>
<td>Science, Technology, Engineering, and Mathematics</td>
</tr>
<tr>
<td>TBC</td>
<td>Tanzania Broadcasting Corporation</td>
</tr>
<tr>
<td>URC</td>
<td>University Research Company</td>
</tr>
<tr>
<td>VOD</td>
<td>Video on demand</td>
</tr>
<tr>
<td>USAID</td>
<td>US Agency for International Development</td>
</tr>
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</table>
Introduction

Determining how much it costs to produce a children’s story with high-quality writing, illustrations, and design is complicated and nuanced. There is no single method for producing a good story. Story types and levels differ; publishers can be not-for-profit or commercial; production can be in print, online, or both. Differing products and content development processes bring varying benefits and challenges. What is clear, however, is that good stories come with a price tag of one kind or another. As Jennifer Glennie, Executive Director of Saide notes: “Storybook development is not merely a technical process among established experts. In the African context, it can be a broadly participative, empowering and collaborative social and cultural process spanning multiple countries and languages. At its best, it includes unleashing and nurturing the creativity of prospective local authors, developing upcoming artists, ensuring that some stories reflect local contexts and others spark the imagination of young readers, or systematically but informally introducing young readers to new concepts and ideas. The costs involved will vary accordingly. Key is building the agency of communities served.”

Understanding the real costs of storybook creation, production, and dissemination is an important component of the early literacy research that Neil Butcher & Associates (NBA) has been conducting. As part of this, in 2017, NBA circulated a questionnaire to both commercial and non-commercial publishers that requested details on children’s storybook costs for content creation (writing, illustration, design, translation, and editorial) and production (both print and digital). Although we focused primarily on Africa, we also included three organizations that work in South Asia; StoryWeaver, Room to Read (RtR), and the Asia Foundation. In all, six commercial publishers, ten non-governmental organization (NGO) content producers, and one social entrepreneur responded. Responses came from Ethiopia, Ghana, India, Kenya, South Africa, Sri Lanka, Togo, Uganda, and the United States of America.

We also followed up with seven content producers – two commercial and five non-commercial – to produce the organizational profiles, which are included as appendices in this report. All of the publishers profiled employ open licensing, entirely or partially.

This research is relevant because decision-makers who commission early literacy resources should understand the cost drivers involved in children’s story creation and value the role of local content producers, especially where they require that those resources carry open licences.

***

The information contained in Good Stories Don’t Grow on Trees: A Guide to Effective Costing of Storybooks in the Global South is, by definition, bound in time and subject to change for various reasons. As we continue our research into these themes, we may update and share revised versions of the report should the need arise.

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1 Personal communication from Jennifer Glennie, Director of Saide, to Lisbeth Levey and Neil Butcher, 13 January 2019
2 Content development cost questionnaire. (2017). Retrieved October 9, 2018, from http://www.earlyliteracynetwork.org/content/content-development-cost-questionnaire (This work carries a Creative Commons Attribution 4.0 licence.)
Report structure

This report is divided into five sections:
1. Open licensing
2. Storybook models, cost drivers, and variables
3. Specific content production costs for publishers
4. Conclusion
5. Appendices: Organizational profiles

The focus of NBA’s research is on the effectiveness of open licensing in enhancing the availability of high-quality storybooks in mother-tongue languages in the global South for this reason, we have included a section that briefly explains open licensing concepts.

Storybooks are written and published for different reasons – some are for pure enjoyment; others teach children how to read; still others instil science or mathematics concepts. Each type of storybook entails different kinds, levels, and translation expenses. One size does not fit all. The section on storybook models delineates the cost drivers and variables associated with each model.

In the third section, we consider specific costs and amounts that publishers incur, primarily those that responded to our 2017 questionnaire.

Detailed profiles for seven organizations are contained in the last section.
Open licensing

Open licensing permits users to share and, under some licences, translate or otherwise adapt the work of others without requesting written permission. Open licences thus give more choice about how content may be used. They do not replace copyright but do revise ‘all rights reserved’ licences to ‘some rights reserved’. They can be applied to any creative work, including music, books, articles, photos, and videos. Output can be online and/or offline. Some licences only permit sharing, while others enable sharing and adaptation. Unless explicitly stated otherwise, all open licences require that the original work, author, and publisher be acknowledged. Creative Commons (CC) licences are the most widely used open licences in education and publishing.

CC licences permit the copyright owner to determine the extent to which others are allowed to reuse material. Creative Commons licences range from very permissive, allowing copying and modification (CC BY), to those that are more restrictive, permitting distribution of a work in its original form, but no modification (CC BY-ND).

Table 1: From copyright to Creative Commons: a summary of rights

<table>
<thead>
<tr>
<th>Copyright</th>
<th>Creative Commons</th>
<th>Public Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Rights Reserved</td>
<td>Attribution Non-Commercial</td>
<td>No Rights Reserved</td>
</tr>
<tr>
<td>Non-Commercial</td>
<td>Attribution Non-Commercial</td>
<td></td>
</tr>
<tr>
<td>No Derivatives</td>
<td>Attribution Non-Commercial</td>
<td></td>
</tr>
<tr>
<td>Share Alike</td>
<td>Attribution Non-Commercial</td>
<td></td>
</tr>
<tr>
<td>Non-Commercial</td>
<td>Attribution No Derivatives</td>
<td></td>
</tr>
<tr>
<td>Share Alike</td>
<td>Attribution Share Alike</td>
<td></td>
</tr>
<tr>
<td>Attribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Rights Reserved</td>
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</tr>
</tbody>
</table>

Several children’s content producers rely on CC BY open licensing to share and adapt children’s storybooks, using digital platforms that are free to the user. These include African Storybook (ASb) and StoryWeaver. The Molteno Institute for Language and Literacy, a South African NGO, now uses a CC licence, but it restricts its resources to a non-commercial and non-derivative (CC BY-NC-ND) licence. This licence was selected so that the methodology of its Vula Bula literacy materials can be retained. The books may not be adapted or translated without prior permission from Molteno.

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3 About the Licenses. (n.d.). Retrieved 30 November 2018, from https://creativecommons.org/licenses/
4 Go to https://creativecommons.org/licenses/ for an explanation of the different licences.
7 NBA will publish a case study on Molteno in the first quarter of 2019, which will be mounted on the ELRN website.
Storybook models, cost drivers, and variables

For the purposes of our analysis, we have grouped storybooks for young children into three categories: levelled storybooks to teach reading skills; storybooks for pleasure; and storybooks that focus on science, technology, engineering, and mathematics (STEM). Stories can be written by professional authors or by amateur, sometimes inexperienced individuals or communities. Cost drivers and total costs will vary, depending on the type of story and how it is produced. It is hard to tease apart or quantify cost driver because each kind of story will have different costs and values. This section delineates the key elements of storybook creation and explains why ‘one size does not fit all.’ Subsequent sections provide additional examples of costs incurred by different content creators. The purpose of these examples is not to give exact unit costs for each content creation model, but rather to illustrate the drivers and considerations that go into funding effective content creation.

Types of storybook models

We focus on three basic storybook models, which can overlap in purpose. Stories about science and numeracy, for example, can be created and read for pleasure. But they may require different kinds of expertise for author, illustrator, reviewers, and editors than would a folktale.

1. **Basic storybooks**

   Basic storybooks can be standalone books and cover a variety of topics. Most importantly, these books are meant to be read for enjoyment and follow no specific teaching or learning methodology. Examples in this report include stories mounted on platforms, such as *Saide’s ASb*, the Asia Foundation’s *Let’s Read!*, and Pratham Books’ *StoryWeaver*, as well as stories published by commercial publishers, such as Sub-Saharan Publishers.

2. **Levelled storybooks (graded reader)**

   These books are written using a specific methodology aimed at teaching children to read. Individual texts in a series become progressively longer and more difficult. Molteno,\(^8\) publishes levelled readers in English and nine South African languages from grades one to three.\(^9\)

3. **STEM storybooks**

   STEM is an acronym for science, technology, engineering, and mathematics. These books require additional research, typically including input from subject specialists. They teach children mathematical or scientific concepts through storytelling. These do not necessarily need to be written by specialists but may require specialist advice or intervention. Several content creators publish STEM stories. For example, the ASb’s new early mathematics collection is intended to teach pre-primary children early numeracy.\(^10\) StoryWeaver has a STEM collection with over 1,000 stories at different grade levels.\(^11\) Sub-Saharan Publishers incorporates environmental issues into several of the books it has published. The Asia Foundation also produces STEM stories.

Cost drivers per model

Each storybook model has different cost drivers. Although certain types of cost drivers are the same for each model, how they are handled varies.

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\(^8\) Molteno. (n.d.). Retrieved 4 December 2018, from [https://www.molteno.co.za/](https://www.molteno.co.za/)


<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Basic storybook</th>
<th>Graded reader</th>
<th>STEM storybook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management</td>
<td>A publisher will commission a storybook and facilitate the development process.</td>
<td>A publisher will commission authors who can write content according to a specific methodology and facilitate the development process.</td>
<td>An author may also approach a publisher with a draft storybook for development.</td>
</tr>
<tr>
<td></td>
<td>An author may also approach a publisher with a draft storybook for development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing fee</td>
<td>Writer receives a flat fee and/or a royalty.</td>
<td>A specialist author or authoring team may be required to ensure the methodology and approach is correct. This may cost more than a standard writing fee.</td>
<td></td>
</tr>
<tr>
<td>Illustration</td>
<td>Illustrator is paid per illustration or a flat fee for a whole title.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality control (editing and</td>
<td>Editing and proofreading is required. Some rewriting may be necessary.</td>
<td>Requires specialist editorial intervention and multiple language checks.</td>
<td>Requires specialist editorial intervention.</td>
</tr>
<tr>
<td>proofreading)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design and layout</td>
<td>Layout for print can be technical, depending on the layout design style. For example, text may need to be placed around images and may not conform to a template.</td>
<td>Layout is straightforward as the text occurs in the same place on each page, but specific fonts are used to teach reading.</td>
<td>Layout for print can be technical, depending on the design style. Specialist software may be required for mathematical symbols and notations.</td>
</tr>
<tr>
<td>EPUB creation/digital upload</td>
<td>If a book has been created for print, the PDF can be converted to EPUB format or the book can be mounted on a repository that generates EPUB and PDF.</td>
<td>These books are usually created for print and digital versions are PDFs.</td>
<td>If the book has been created for print, the PDF can be converted to EPUB format or the book can be mounted on a repository that generates EPUB and PDF.</td>
</tr>
<tr>
<td>Cost Driver</td>
<td>Basic storybook</td>
<td>Graded reader</td>
<td>STEM storybook</td>
</tr>
<tr>
<td>-------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Translation</td>
<td>This can vary depending on whether the story is a direct translation or a re-versioning of the story.</td>
<td>These books should not be directly translated because they might lose the principles the lesson is meant to convey. Books can be adapted but illustrations might need to change to match text. Strict quality assurance processes are required to ensure language is correct.</td>
<td>Subject specialists may be required to check that technical language is appropriate, accurate, and/or curriculum compliant.</td>
</tr>
</tbody>
</table>

**Process of storybook creation: content creation methods**

Various content creation methods can be employed to create the types of storybooks outlined above. Organizations use one or a combination of processes to create children’s storybooks. Each is described below, and a concluding table consolidates the cost drivers and a summary of strengths and weaknesses of each method.

1. **Traditional publishing**

This method of content creation employs traditional publishing processes. In Africa, many commercial publishers still focus on print rather than on digital distribution, but that is changing, as increasingly African publishers produce print and digital versions simultaneously, depending on the needs of the market. Many of the cost drivers are the same when creating content for print or digital distribution (except for the actual printing and distribution costs, of course). Most important, however, is that everyone gets paid for his or her work, although the terms may differ.

The process is typically facilitated by a commissioning editor or publisher, who contracts an author or team of authors to write a storybook or a series of storybooks. The manuscript is then reviewed before bringing in the language, series, or copy editor. Once the manuscript is finalized, the illustrator is then briefed. Further quality control might be necessary before the designer will typeset the text and illustrations, typically using a proprietary desktop publishing programme. This quality control may include additional language checking. Once the book has been typeset, it will be proofread to ensure the text and images have been placed correctly before the book is printed or made available online.

While the publishing team is usually located in-house, writing, editorial, artwork, and design activities can be carried out by external service providers. Thus, publishing companies do not carry the overhead costs for these

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12 The terms ‘publisher’ and ‘commissioning editor’ refer to the role of a person within a publishing house who will commission books and oversee the process of publishing a title. The terms are used interchangeably in much of the African publishing industry. A commissioning editor is not the same as a language or copy editor.

13 In some instances, the author and the illustrator are the same person, as is the case for Meshack Asare at Sub-Saharan Publishers. In addition, sometimes the author and the illustrator will work together. There are no hard and fast rules.

14 Adobe InDesign is a proprietary programme widely used for desktop publishing of books. It is now only available by subscription. Go to [https://www.adobe.com/il_en/products/indesign.html](https://www.adobe.com/il_en/products/indesign.html).
contractors, but may have marketing, sales, finance, production, warehousing, and editorial departments with staff to pay. More information on traditional publishing methods will be found in the Sub-Saharan Publishers organizational profile.

2. **Book Dash method**

Book Dash is a South African NGO that pioneered a way to produce large numbers of stories for African children rather than use traditional publishing processes, which can be time-consuming and expensive. Teams of volunteer authors, illustrators, designers, and editors create storybooks in one-day book-making events.

This method requires facilitation and experienced volunteers, but professionals can also be paid for certain roles in this process, including Book Dash staff. Translations are commissioned after the books are created. The book-creation process can be structured as a one-day event, but preparations for Book Dash events take place beforehand and work remains to be done afterwards. The Book Dash methodology is described in more detail in the organizational profiles for Book Dash and Books for Asia.

3. **Stories generated by communities**

In some instances, communities write stories, which may draw on local folktales, fables, traditions, and contexts. In other cases, people, such as parents and teachers, decide to write a story. But there can be both cost and quality implications for this method. Everyone has a story to tell, but not everyone has the necessary skills or talent to write a good children’s story.

To counteract this problem and to develop talent, some groups organize workshops for writers with little or no experience in content creation. African Storybook is a case in point. In March 2018, ASb organized a five-day workshop in Nigeria for authors and illustrators from West Africa, with funding from the British Council. Although participants were not expected to have experience writing children’s stories, eligibility criteria did require sets of skills that underpin producing a good children’s picture book.

CODE Ethiopia, an Ethiopian NGO, works with communities as a part of its community libraries (CL) programme. Librarians, teachers, and school directors participate in three-day workshops in Addis Ababa, after which they are responsible for training others in the community. The training CODE Ethiopia provides includes attention to community stories. In addition to training, CODE Ethiopia serves as a resource to the libraries and the communities with which it works. At a community library in Sheno, Ethiopia, a school principal explained the process this way:

> Local society generated ideas – then teachers wrote the ideas in clear language. ‘A village elder added: ‘We were motivated to write and express our cultures according to our context. Amharic. From the oral stories that were not written before.

Both ways require experienced facilitators and trainers. They may yield only a few books that will require extensive additional intervention to ensure they can be published. Thus, commitment to capturing local stories, which can have significant value to young readers, will typically require additional investment, even when the community authors volunteer their time.

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15 https://bookdash.org/
4. Software-facilitated method

Various software platforms, including African Storybook, StoryWeaver, and Bloom, allow writers and illustrators to create content and mount it directly onto the platform under an open licence. This process of storybook creation can be done online or offline, depending on the platform or software being used. Creators can choose to write, illustrate, translate, or even rewrite a story because the platforms use Creative Commons licences.

Organizations or funders can arrange workshops for writers or translators to facilitate this process to create more authentic or translated local-language titles, while not incurring costs of design and illustration. As an example, All Children Reading, a partnership of the US Agency for International Development, Australian Aid, and World Vision, has contracted with the US-based University Research Company (URC) to manage the enabling writers’ workshops to provide capacity building for local authors using the Bloom Library platform. URC also manages the Reading within Reach (REACH) initiative.

Platform owners can review and quality assure these stories to add them to a recommended or approved collection of storybooks. These books can also be translated or have original illustrations added to them to make them more appealing to children.

The platforms are typically free to use, and outputs include print-ready PDFs and EPUBs. These platforms accommodate a variety of local languages and fonts, which can be requested to enable the use of more languages as required. Uploading content is, though, not always simple; illustrations must be in specific formats and sizes, for example. In his report on the community library (CL) programmes in Uganda and Ethiopia, Professor Ken Harley pointed to several difficulties experienced by project leaders. The Ethiopia problems with uploading were striking because CODE Ethiopia was unable to upload any stories during the project implementation period:

One shortcoming is acknowledged in the [CODE Ethiopia] final report: ‘We have been failed in one very important activity that we were expected to do – uploading stories on StoryWeaver and ASb platforms.’ This was due to more than time constraints and the delay in transmitting stories from CLs. Although stories in PDF format have been uploaded to tablets, there were technical difficulties when it came to transferring these to online repositories. Cited difficulties include: the need to have stories in MSWord; mounting stories on ASb calls for a method of cut-and-paste, and there is a problem with providing one’s own pictures; in addition, SW doesn’t have Amharic fonts. Attempts are being made to address these problems.

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18 Bloom is basic page-layout software that can be used online or offline. It was designed to be used by novice computer users, so very little training should be required to produce simple books and translate them into multiple languages. Bloom Library contains templates of different formats and types of storybooks that users can easily adapt.


There are also costs associated with platforms, even if they are free to use. Content producers do not always want to use any of the images stored on them because they are not culturally appropriate, and illustrations can be expensive. In addition, although platforms provide tutorials, there is a learning curve involved in becoming skilled enough to use them, particularly for users who lack computer experience. Finally, even though stories can be written offline, Internet connectivity is required to mount them on the platform. As for platform owners, expenses associated with creating and maintaining them can be high.

**Translation considerations**


> *Picture books, where word and image work to produce an inseparable whole, are by far the largest category of children’s books and create particular challenges. The text needs to ‘talk’ or closely relate to the pictures on the same page and translators need to be able to ‘read’ this relationship. In addition, the space available for the translation can be problematic when different languages require different amounts of text. Translators also need to deal with visual cultural differences such as the symbolism of colours or different attitudes towards animals.*

Thus, good translations can be expensive and difficult to do properly because it is not just a matter of directly translating content but ensuring that the content is both at the correct level and culturally and contextually appropriate. Language specialists must be proficient in both the original language and the translated language, with experience at the early literacy level.

Some organizations offer online translation tutorials. StoryWeaver, for example, has a YouTube translation tutorial\(^{24}\) and ASb offers online documents to guide users through the process of translating books online.\(^{25}\)

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\(^{23}\) [https://core.ac.uk/download/pdf/47261799.pdf](https://core.ac.uk/download/pdf/47261799.pdf)


\(^{25}\) Go to [https://www.africanstorybook.org](https://www.africanstorybook.org) and click on Help and Notes. The document can be found in the How to guides, by navigating to Translating online. More on translation can be found in the in-depth guides.
Addressing the issue of graded readers, Jenny Katz of the Molteno Institute for Language and Literacy in South Africa believes that it is preferable to develop early literacy texts directly in African languages rather than translating from English-language texts. She used the example below to illustrate why direct translations from English to South African languages can be detrimental to literacy acquisition:

The Problem of direct translation from English into African languages

The vast majority of early readers in African languages are directly translated from an English source document. This leads to the creation of complex texts that are not commensurate with the learner’s level of reading.

<table>
<thead>
<tr>
<th>English</th>
<th>Soccer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isizulu</td>
<td>ibhola likanobhutshuzwayo</td>
</tr>
<tr>
<td>One word</td>
<td>Six Letters</td>
</tr>
<tr>
<td>Two words</td>
<td>24 letters</td>
</tr>
</tbody>
</table>

Lorato Trok made much the same point in a 2017 blog she wrote for ASb. In it, she quoted Xholisa Guzula, a doctoral student in language and literacy and bilingual education at the University of Cape Town in South Africa, who translated 21 ASb stories from isiZulu to isiXhosa:

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26 [https://www.molteno.co.za](https://www.molteno.co.za)


Xolisa said that this form of translation is re-telling the story for the target group and it did not feel like she was translating. Xolisa explains that isiXhosa translation is riddled with complexities. ‘There are issues of literal translation and of imposing English onto isiXhosa in ways that just do not make sense in the language. Translation is a constant negotiation between the source language and the target language’, she says.

In addition, because some languages, when translated, are longer than the original language, there are also implications for the amount of text on a page. If the text runs longer than the original, more illustrations and pages may be required, bearing in mind that neither the font nor the size of the text should be adjusted at the early grade reading level. These factors can affect publishing costs.

Another consideration when translating storybooks is that some languages contain symbols or diacritics that are not supported by certain fonts or programmes. The Bloom Library has an instructional video on inserting special characters in Latin or Roman script using a keyboard that does not support these characters.29

**Overhead costs**

All the methods of content creation discussed above carry organizational overhead costs, which need to be factored into costing models. But overhead does not mean the same thing to every organization. Therein lies a problem when discussing cost drivers for overhead and other organizational costs. The American Association of University Presses defines three different kinds of overheads that are relevant for the traditional publishers:30

1. **Fixed overheads**: ‘everything that recurs on a steady basis whether you ship no books or a million books - i.e. the salaries, rent, insurance, etc.’
2. **Direct variable overheads**: ‘those costs that rise almost linearly with sales - e.g. shipping, commissions, and more.’
3. **Indirect variable overheads**: ‘The quintessential indirect variable is promo[tion] - i.e. it tends to rise with sales, but isn’t locked in linearly; you elect to spend it or not, but tend to spend it if you think you see sales there.’

Thus, for traditional publishers, overhead costs usually cover staff time, warehousing, delivery costs, marketing, and other fixed or variable expenses.

Calculating overhead costs for NGO content producers is not always the same, particularly for those that receive grants or contracts to pay for platform or storybook production. In those cases, staff costs are usually a separate line item, for example. The UK Department for International Development (DFID), for example, defines two different kinds of expenses:

> In an organisation there are two types of costs. Direct programme costs that are incurred as a direct result of running a project or service, and overhead costs that are not attributable to a project (NPAC) but that are incurred by an organisation in order to support the projects that it runs. Expenditure in the budget should be classified as either a direct programme cost or NPAC.

Organizational overhead costs for specific content producers are discussed in more detail in the section on content producer costs, below.

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### Summing up cost models

The table below summarizes key cost drivers, strengths, and weaknesses of different methods of story production.

**Table 3: Key cost drivers for each model**

<table>
<thead>
<tr>
<th>Method</th>
<th>Key cost drivers</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional publishing</td>
<td>- Project management</td>
<td>- Rigorous quality control processes</td>
<td>- Expensive</td>
</tr>
<tr>
<td></td>
<td>- Writing fee</td>
<td>- List of experienced authors, illustrators, editors, and designers on whom to call</td>
<td>- Time consuming</td>
</tr>
<tr>
<td></td>
<td>- Illustration</td>
<td>- All parts in the chain are usually paid market-related rates</td>
<td>- Dominant voices (same authors and illustrators sometimes used)</td>
</tr>
<tr>
<td></td>
<td>- Quality control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Design and layout</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- EPUB conversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Book Dash</td>
<td>- Project management</td>
<td>- Process costs less because authors, editors and illustrators are not paid, so the</td>
<td>- Project management expensive, requiring marketing and screening, as well as workshop facilitation and managing of titles afterwards</td>
</tr>
<tr>
<td></td>
<td>- Workshop and travel</td>
<td>- Fast turnaround time for the creation of books.</td>
<td>- Writing and illustrating culturally authentic texts is problematic if volunteers are not familiar with the context</td>
</tr>
<tr>
<td></td>
<td>- Writing fee</td>
<td></td>
<td>- Diversity of contributions possibly reduced with reliance on volunteers</td>
</tr>
<tr>
<td></td>
<td>- Illustration</td>
<td></td>
<td>- Book Dash reliance on volunteers is unsuitable where and when experts are dependent on fees for their living and cannot volunteer their time</td>
</tr>
<tr>
<td></td>
<td>- Quality control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Design and layout</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- EPUB conversion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stories generated by communities</td>
<td>- Project management</td>
<td>- Creates capacity development opportunities</td>
<td>- Project management costs required to cover staff time and logistics</td>
</tr>
<tr>
<td></td>
<td>- Workshop and travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Writing fee</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Illustration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This work is licensed under a Creative Commons Attribution 4.0 International Licence
<table>
<thead>
<tr>
<th>Method</th>
<th>Key cost drivers</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Quality control&lt;br&gt;- Design and layout&lt;br&gt;- EPUB conversion</td>
<td>- Authentic stories created by and for local communities</td>
<td>- Quality of stories sometimes problematic&lt;br&gt;- Stories may not be relevant to other communities</td>
</tr>
<tr>
<td>Software facilitated</td>
<td>- Workshop costs&lt;br&gt;- Quality control&lt;br&gt;- Translation&lt;br&gt;- Illustration&lt;br&gt;- Platform creation and maintenance</td>
<td>- Authentic stories created by local communities&lt;br&gt;- Low content creation cost</td>
<td>- Labour intensive process of finding good stories to approve/recommend&lt;br&gt;- Extensive quality control is required as writers may be inexperienced&lt;br&gt;- Inputting stories sometimes difficult for technology, infrastructure and other reasons</td>
</tr>
</tbody>
</table>

**Capacity requirements and challenges**

All the storybook creation models outlined above have capacity creation implications, which can impact on cost, especially when people with less skill or experience are involved in the process (which may often be essential to ensure sustainability of content creation in many marginalized languages). A few are delineated below.

**Graded reading resources**

The creation of an effective graded reading series requires a linguist with early literacy experience who understands the cultural context and language issues in order to assess story lines and the illustrations.

**STEM**

When creating STEM storybooks, it is important to know precisely for whom the books are intended – language, level, and interests. Without understanding purpose and audience, it will be difficult to interest young readers.

In addition, experienced content developers and editors for STEM stories may be necessary and should ideally be local-language specialists. Science and mathematics concepts do not always transfer easily from one language to another. Organizations that do not have sufficient in-house expertise will need to recruit outside consultants.
**Producing good storybooks**

Inexperienced authors may require guidance, with suggestions on how to write a good children’s story. Book Dash has created a manual to guide authors and use its process to create storybooks.\(^{31}\) This manual delineates the roles of all volunteers and organizers involved in the process and supplies information on using CC licensing and a contributor’s agreement template. This manual provides recommendations and resources for the writing, design, and illustration of a good children’s storybook.

Room to Read has developed a set of best practice recommendations for children’s storybooks\(^{32}\) intended for use by publishers during book creation, development, and production, as well as by purchasers and librarians for collection development. The recommendations were derived from a REACH\(^{33}\) Consultative Workshop, held in November 2017, with representatives from the South African Department of Basic Education, the early literacy NGO sector, and commercial publishing (through the Publishers’ Association of South Africa).

In addition to the online guidance referred to above, promising authors and illustrators can benefit from workshops, such as the ones organized by ASb. Mentoring is another possibility to raise capacity. Sub-Saharan Publishers, for example, received a grant (described in the Sub-Saharan Publishers profile) from the Danish International Development Agency (DANIDA) through its Private Sector Development Programme, which entailed mentoring in the fundamentals of publishing children’s books by a Danish children’s book publisher. As another example, the 16 organizations that were selected to participate in StoryWeaver’s 2019 Mother Tongue Translation initiative will be mentored and helped in a number of ways. StoryWeaver:\(^{34}\)

*will support teams by sharing translation and editorial knowledge, help curate content for translation and by guide partners in running translation hackathons and workshops. Additionally, partners will also receive promotional support and be a part of StoryWeaver’s Freedom to Read 2019 online activities. Selected partners will feature in our special report on leading organisations working to create mother tongue literacy resources for children.*

**Quality and funding**

Training, mentoring, and other interventions require sufficient funding, which is often substantial. These expenses must be understood by both project implementers and donors and written into project budgets. ASb’s training costs are detailed in the ASb profile as an example of the funds necessary. In addition, using an approach similar to the the Book Dash method may not be suitable everywhere. It is feasible in South Africa because there is a sufficient supply of qualified authors, illustrators, and designers who can volunteer their time. The same cannot be said for other countries on the continent. Provision should be made to ensure that good stories about Africa or elsewhere in the global South can be produced and sustained locally.

Quality and the capacity-building necessary to produce it come at a cost. It is not clear how much international donor funding reaches local content creators. The emergence of sustainable revenue models for local content creators is essential not only to put in place organizational mechanisms to keep producing new materials, but

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\(^{31}\) Book Dash Manual. (n.d.). Retrieved 4 December 2018, from https://docs.google.com/document/d/1oQB_9MFuthF2X9szm0i4aMRNMS_dTLgbqzmzko0zyh/edit (licensed with a CC BY licence)

\(^{32}\) What makes a Great Storybook? Retrieved December 4, 2018, from http://www.earlyliteracynetwork.org/content/what-makes-great-storybook (licensed with a CC BY license)

\(^{33}\) The Reading within REACH project serves as the secretariat for the Global Reading Network, which is funded by the US Agency for International Development. For more information go to: https://www.usaid.gov/sites/default/files/documents/1865/GRN.pdf

also to ensure that global initiatives contribute not only to initial literacy acquisition but also to the development of vibrant local cultural industries that can sustain that literacy over the lifetime of a reader and ensure that marginalized local cultures find a niche for themselves in a rapidly globalizing world.
Content producer costs

The previous section delineated cost drivers by model. In this section, we delve into how content producers view and calculate their costs. The information included in this section is derived from the organizational profiles contained in this report.

All content producers incur costs, which must be covered to ensure sustainability; sometimes through sales, other times through grants, donations, contracts, and/or voluntary contribution of time. It is extremely difficult to compare production costs across organizations or even to know whether the price of a book reflects the full cost of production (including organizational overhead costs).

For publishers attempting to sell books direct to market, price points and the target audience are important considerations. In Ghana, for example, parents will not purchase books for their children if they are too expensive. Sub-Saharan Publishers has a sliding scale of prices, depending on where books are purchased. *Fati and the Honey Tree* costs $10 internationally (US or Canadian), but it is sold in Ghana for ten Cedi ($2.60).[^35] *Gizo-Gizo*, Sub-Saharan Publishers’ 2018 prize-winning book, which is in hardcover and therefore more expensive, sells for 20 Cedi locally, but for $18.95 internationally.[^36]

Calculating NGO costs is complicated because content creation models vary. Some make ample use of volunteers, expert or otherwise. Examples include ASb, Book Dash, and the Asia Foundation. Others, such as the Molteno, create content primarily in-house with salaried staff who are expert in African languages and early literacy. When necessary, Molteno also uses sub-contractors. Administrative staff salaries are another cost, as are training workshops. These expenses are not always factored into production costs. Thus, although NGO direct costs might appear lower than those of a commercial publisher, the truth might be otherwise and is often hard to ascertain.

Noting these caveats, below are two tables, one with cost drivers and actual expenses for a commercial publisher (Sub-Saharan Publishers) and one for an NGO (the Asia Foundation programme, Books for Asia).

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**Table 4: Sub-Saharan Publishers costs for a 32-page book and minimum print run of 5,000 copies**

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royalty</td>
<td>10 percent of net sales up to 10,000 copies</td>
</tr>
<tr>
<td></td>
<td>12.5 percent of net sales exceeding 10,000 copies</td>
</tr>
<tr>
<td>Illustrator’s fee</td>
<td>$1,113 per full-colour book title</td>
</tr>
<tr>
<td>Editorial fee</td>
<td>$22 per page</td>
</tr>
<tr>
<td>Translation fee</td>
<td>$668 per title</td>
</tr>
<tr>
<td>Translation review</td>
<td>$223 per title</td>
</tr>
<tr>
<td>Proofreading</td>
<td>$111 per title</td>
</tr>
</tbody>
</table>

[^36]: Akoss Ofori-Mensah, Sub-Saharan Publishers, email to Lisbeth Levey, 4 December 2018
<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and layout</td>
<td>$1,103 per title</td>
</tr>
<tr>
<td>Typesetting</td>
<td>$780 per title</td>
</tr>
<tr>
<td>Pre-press review</td>
<td>$446 per title</td>
</tr>
</tbody>
</table>

Sub-Saharan Publishers includes overhead costs of ten percent in the amount given for each individual line item. Overhead covers staff time, warehousing, delivery costs, and other expenses.

**Table 5: Asia Foundation ‘e-book hackathon’ costs**

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management</td>
<td>The annual cost of a project manager for the Cambodia e-book hackathons and translations is $13,000.</td>
</tr>
<tr>
<td>Writing fee (honorarium)</td>
<td>$150 to $200 for a hackathon, with a one-day pre-event meeting and a draft story submitted before the hackathon.</td>
</tr>
<tr>
<td>Editorial fee (honorarium)</td>
<td>$50 per title for a hackathon. Editors work on approximately four books, so get paid $200 for an event.</td>
</tr>
<tr>
<td>Translation</td>
<td>$10 per 250 words if not crowdsourced, and free if they are.</td>
</tr>
<tr>
<td>Proofreading</td>
<td>16c per word.</td>
</tr>
<tr>
<td>Design and layout</td>
<td>$50 per title.</td>
</tr>
<tr>
<td>Full colour illustration (honorarium)</td>
<td>$200 to $250 for a hackathon title.</td>
</tr>
<tr>
<td>EPUB creation/conversion</td>
<td>$130 per title for a developer to convert simple image and text files into standalone EPUBs. $20 per title to create a very basic EPUB from existing content and images.</td>
</tr>
<tr>
<td>Overhead costs</td>
<td>16 percent is the basic overhead rate.</td>
</tr>
</tbody>
</table>

The Asia Foundation table above does not reflect the salaries or administrative costs for staff at the organization’s San Francisco offices. Management of content creation projects requires two or three full-time US-based management positions. It also does not include costs incurred in creating and maintaining the Let’s

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37 An e-book hackathon is a two-day event that gathers individuals from a variety of industries to create high-quality children’s stories. Teams of writers, artists, graphic designers, and coders work together to develop a number of children’s e-books, reducing the time and resources needed to produce children’s books.
Read website\(^{38}\) via which Book for Asia’s stories are distributed; books are not printed by the Asia Foundation but made available as e-books and for users to print from the Let’s Read platform.

How and whether authors and illustrators are paid varies widely across the content-producer spectrum. Although commercial publisher authors typically receive royalties, the amount varies, as does the flat fee payments that illustrators receive. Some examples are given in the table below.

**Table 6: Commercial publisher author and illustrator remuneration**

<table>
<thead>
<tr>
<th>Content Producer</th>
<th>Form of Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>East African Educational Publishers, Kenya(^{39})</td>
<td>Authors receive a royalty of 12.5 percent. Illustrators receive a flat fee of Ksh800 (about US$8.00) per full page colour illustration.</td>
</tr>
<tr>
<td>Smartline Publishing, Ghana(^{40})</td>
<td>Authors receive a royalty of between 8 and 15 percent. Illustrators receive a flat fee of between USD$70 and $150 per full-page colour illustration, depending on complexity.</td>
</tr>
<tr>
<td>Éditions Graines de Pensées, Togo(^{41})</td>
<td>Authors receive a royalty of ten percent. Illustrators receive CFA 15,000 (about US$26) per full-page colour illustration.</td>
</tr>
<tr>
<td>Indwa Publishers, South Africa</td>
<td>Authors receive a royalty of twelve percent. Illustrators receive up to ZAR1,000 (about $67) per full-page colour illustration.</td>
</tr>
</tbody>
</table>

The table below delineates author and illustrator practices for three NGOs, each of which uses Creative Commons licensing.

**Table 7: NGO author and illustrator remuneration**

<table>
<thead>
<tr>
<th>Content Producer</th>
<th>Form of Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book Dash, South Africa(^{42})</td>
<td>All authors and illustrators are experienced in their field and volunteer their time.</td>
</tr>
<tr>
<td>CODE Ethiopia, Ethiopia</td>
<td>Some authors are volunteers from the community. Some are commissioned and receive 90 birr (about $3) per page. All illustrations are done by professionals and cost 393 birr (about US$14) per half-page full-colour illustration. These fees are lower than those paid by commercial publishers because CODE Ethiopia is</td>
</tr>
</tbody>
</table>

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\(^{39}\) East African Educational Publishers cost questionnaire, completed by Kiarie Kamau, Chief Executive Officer

\(^{40}\) Smartline Publishing cost questionnaire, completed by Elliot Agyare

\(^{41}\) Éditions Graines de Pensées cost questionnaire, completed by Christiane Akoua Ekué

\(^{42}\) Book Dash cost questionnaire, completed by Julia Norrish
<table>
<thead>
<tr>
<th>Content Producer</th>
<th>Form of Remuneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>an NGO and negotiates for lower rates when commissioning more illustrations.</td>
<td></td>
</tr>
</tbody>
</table>

StoryWeaver, India  

Some authors are volunteers from the community. Some are commissioned and receive INR 5,000 (about US$69.00) per title. The same is true for illustrators. Professional illustrators receive INR 1,000 (about US$14) per full-colour page.

**STEM stories**

As noted above, several organizations create stories for young children in a variety of STEM topics, such as numeracy and the sciences. Five organizations profiled in this report produce STEM stories. Four are not-for-profit (ASb, Asia Foundation, StoryWeaver, and Ubongo) and one is commercial (Sub-Saharan Publishers). Below is a description of StoryWeaver’s experience in producing STEM stories over the last five years, which offers a snapshot of what goes into producing a good science or mathematics story that young children will want to read.

*Figure 3: Jadav and the Tree Place*

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43 StoryWeaver cost questionnaire, completed by Suzanne Singh, Chair Pratham Books
StoryWeaver has been producing STEM stories since 2015; there are currently over 1,000 stories on the site in ten languages commissioned by StoryWeaver. Community volunteers have translated these stories into 30 additional languages.\(^{44}\) Story topics include nature and the environment, numeracy, engineering, wildlife, technology, and biographies. Some of these stories are very popular. The English-language version of *Jadav and the Tree-Place*, shown above, has been read almost 7,000 times and translated into 18 languages.

StoryWeaver’s goal is to:\(^{45}\)

*Nurture curiosity in children by creating simple yet engaging picture books that explore STEM topics creatively. The challenge with these stories is to constantly balance good storytelling while explaining STEM concepts. It also difficult to find good writers who are also subject matter experts and able to storify complex concepts. It’s equally important to check the illustrations, since it has to be in sync with the text. In general though, our approach has been to “show, and not tell” and avoid over-explanation of topics.*

StoryWeaver capitalizes on national events, such as India’s National Science Day. For example, at the 2018 National Science Day, StoryWeaver organized its third ‘Wonder Why Week’, which involved launching three new stories, conducting storytelling events, and running STEM contents via social media.

Although not all STEM authors are experts, many are. In addition, all STEM titles go through thorough fact-checking:\(^{46}\)

*All the STEM titles go through several rounds of rigorous fact-checking by the editorial team and the manuscript goes back and forth between the author and the editorial team. If required, the manuscript is then further vetted by another subject matter expert.*

Because STEM stories require additional fact checking, they are more expensive to produce. Both Cisco and Oracle have provided grants to assist StoryWeaver with STEM-story creation:\(^{47}\)

*Both Cisco and Oracle have provided Pratham Books with grants to produce STEM titles. Currently in the 4th year of the Oracle grant, we have produced 65 titles in 10 languages and 25 more will be published on StoryWeaver by March 2019. CISCO has also provided Pratham Books a grant for 25 titles in 9 languages. This is the second year of the grant and will produce 30 titles in 6 languages. All stories are licensed under the CC BY 4.0 and will be available on the StoryWeaver platform.*

Finally, although STEM stories for younger children may not require special symbols to convey numeracy or scientific concepts, the same may not be the case for STEM stories for older children. Writing equations, for example, requires special fonts. Online platforms, such as ASb and StoryWeaver, might not have them and it might be impossible to cut and paste them into a text. In addition, although some mathematics fonts are free, not all are. In addition, the layout programme needs to allow for entering equations; there are specific maths layout programmes. Choosing and knowing about special fonts and programmes have cost implications.

**Print costs**

Many African publishers print outside Africa because they can obtain high-quality results for less money than printing in-country. The reasons are varied. Some governments tax paper and other consumables, thus making

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\(^{44}\) StoryWeaver STEM stories. (n.d.). Retrieved December 12, 2018, from https://storyweaver.org.in/search?query=STEM and also personal communication from Purvi Shah to Lisbeth Levey, 18 December 2018

\(^{45}\) Personal communication from Purvi Shah to Lisbeth Levey, 18 December 2018

\(^{46}\) Personal communication from Purvi Shah to Lisbeth Levey, 18 December 2018

\(^{47}\) Ibid.
off-shore printing more cost-effective. Ghanaian printers, for example, must import paper and other printing inputs, such as ink, films, and plates, for which there are import duties. Printed books, however, can be imported without any duties because Ghana and many other countries are signatories to UNESCO's *Florence Protocol on the Importation of Educational, Scientific and Cultural Materials*. The Ghanaian government has now removed VAT on paper and printing materials, but only for textbooks. According to Akoss Ofri-Mensah, founding director of Sub-Saharan Publishers:

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*The cost of print in Ghana is definitely much higher than in the Far East or elsewhere; but since the essence is to give jobs to Ghanaian printers, the policy is bound to stay. Even without shipping costs printing in Ghana is more expensive than offshore.*

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In Kenya, printers must contend with both the high cost of consumables and the Indian government’s interest in promoting its country’s exports. Kiarie Kamau of East African Educational Publishers notes:

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*It is cheaper to print in India, even after factoring in cost, insurance and freight, than to print in Kenya. This is because Indian printers enjoy certain tax incentives from their government. Since publishers are keen to maximise on returns, they have given huge printing work to Indian printers, at the expense of the locals.*

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Concerning in-country printing costs and overall book prices, the Chief Executive Officer of WordAlive Publishers and Chief Learning Officer of Will to Win, David Waweru recently wrote in the *Daily Nation* newspaper:

---

*Paper is like a middleman through whom information is transferred, in the form of books, to become the knowledge in our minds. So why is Kenya hell-bent on taxing books so heavily?*

---

Waweru laid the blame on the government’s high import tax on paper and VAT on books. He wrote that, in 2014, Kenya increased the import duty on paper from 10 percent to 25 percent. Then, in 2018, the Cabinet Secretary for Treasury announced an increase to 35 percent. According to Waweru, printers and publishers pass on these costs to the purchaser. Added to this, Kenya levies a VAT of 16 percent on books, which is applied both on production costs and the final product.

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In Nigeria in 2014, there were also concerns that government policies were going to cripple the publishing sector. Although Nigeria is a signatory to the UNESCO protocol referred to above, the Ministry of Finance planned to institute a tariff of 62.5 percent (a mix of levies, duties, and VAT) on imported books, when there had been none before. In a blog by Jeremy Weate, one of the co-founders of Cassava Republic, titled ‘How to Kill the Nigerian Publishing Industry,’ he explained why that publishing house would not print locally after one attempt to print in Nigeria resulted in 10,000 copies of inferior books that had to be trashed:

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*Nigerian publishers who wish to sell good quality books at an affordable price are forced to print overseas. There’s nothing particularly innovative or unusual in this: many Western publishers now print in Asia too. Cheap electricity and labour, access to international paper markets as well as technical know-how limit globally competitive print facilities to a small group of countries. Nigeria has no hope*
of competing with these countries any time soon. A wiser alternative policy decision would be to not even try.

This government decision was dropped after the Nigerian Publishers Association lobbied the Ministry of Finance to protest the tariff.

Paper and ink costs in Nigeria also militate against local printing. In a 2017 article titled ‘Printers, Publishers, Bookstores and Writers Suffer as Nigeria’s Economy Bites’, Nathaniel Bivan quotes Richard Ali, a local publisher:

‘At this time last year, the price for a ream of paper was about N12,000. Now it’s almost double the amount. The same thing for the ink where what would have cost N120,000 a year ago is now over N200,000’, Ali says, adding that the cost of producing books has basically doubled.

Just as the cost of consumables can impact on what it costs to produce a book (and where), so too does the size of the print run. Large print runs can result in economies of scale and lower costs. Cassava Republic published two books that were compulsory textbooks for the Joint Admissions and Matriculations Board (JAMB) over a four-year period. Last Days at Forcados High sold over 2.5 million copies and In Dependence sold over 3.6 million copies. Bibi Bakare-Yusuf wrote:

When the books were recommended, we suggested a bundling package so that the books would not fall foul of piracy. We asked the examination board if the books could be paid for at source when students are paying for their examination fee to collect with their other exam materials. Because of the volume, we were able to lower the price and charge N500 and N350.

Some publishers will opt to print books more cheaply and print in-country, by using cheaper paper; using black-and-white illustrations; and using formats that do not require double-page spreads.

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54 The Joint Admissions and Matriculations Board (JAMB) is the Nigerian entrance examination board for tertiary-level institutions.
55 Bibi Bakare-Yusuf, personal communication to Lisbeth Levey, 11 September 2018
Mango Tree Literacy Lab, an NGO that works at the primary one to three levels in Lira in northern Uganda, aims for high quality in terms of content, but the cheapest possible printing output to maximize the number of books in the hands of young children. Mango Tree found a local printer that charges US$.19 per book. Illustrations are in black and white, while extent is between 20 and 32 pages. Books are printed in A5 format and have a manila cover.

Mango Tree believes that there is a market for its books if it can keep its price point to about 60 US cents. Mango Tree has also employed a novel sales strategy, which worked successfully on a small scale. Nine thousand copies of an initial Leblango alphabet book were sold to ‘guys on bikes’ at cost (US$.25), who run boda-boda taxis and marketed the books as a side line. In 2018, Mango Tree decided to employ open licensing and will mount its digital resources on both StoryWeaver and ASb. Mango Tree would also like to keep experimenting with selling through ‘guys on bikes’.

Book Dash keeps its print costs down by initiating what it calls ‘collaborative print runs’. It puts forward titles to print, for which anyone can place an order for copies. As orders attain different quantity thresholds, everyone benefits from cheaper prices. For example, when one book reaches 3,000 copies, everyone gets that book for R10 (US$0.75) per copy. In this way, Book Dash harnesses the power of printing in bulk.

**Sustainability**

In a 2016 blog for the African Books Collective (ABC), its founding director Mary Jay and Walter Bgoya, the distinguished Tanzanian publisher and founder of Mkuki na Nyota Publishers, wrote:

> Relative to the total output of all publishing on the continent, the number of non-textbook titles produced by indigenous publishers is small. A survey in 2000 by the Association for Development of Education in Africa (ADEA) and the African Publishers Network (APNET) estimated that up to 95% of books published in Africa were educational, as compared to the broad ratio in the north of 60:40 textbooks to non-textbooks.

More current data is hard to come by because most African publisher associations and the book sector do not keep statistics or make them publicly available. In October 2018, Hans Zell wrote:

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56 Presentation by Ineke Aquarius, Managing Director, Mango Tree at workshop on early literacy and open licensing, Johannesburg, South Africa, organized by Neil Butcher & Associates, 24 August 2018


Reliable figures of book publishing output for the continent of Africa do not exist at the present time, with the exception of a very small number of countries, notably South Africa and Morocco. Meantime the state of African national bibliographies, which can form the groundwork of book industry data, presents a picture of neglect for the most part, with many national bibliographies seriously in arrears, currently dormant, or having ceased publication altogether. Only a small number are accessible in digital formats.

However, the consensus appears to be that textbook publishing still constitutes the major share of a publisher’s business in many countries. In 2012, the Goethe Institute conducted a survey of the publishing industries in eight African countries. In six of the countries covered (Cameroon, Ghana, Kenya, Mozambique, Senegal, and Tanzania), textbook and educational publishing made up the bulk of the country’s publishing output.\textsuperscript{60}

Depending on government to sustain one’s business can be risky, as experience in Tanzania illustrates. From 1986 until 1995, the government maintained a monopoly on textbook publishing, after which textbook publishing became part of a free market system. In 2014, the government reverted to a state monopoly on textbook production, thus jeopardizing the incomes of those Tanzanian publishers that had become dependent on textbook profits for their survival. In his 2017 blog titled ‘Publishers, Authors and Africa’s Cultural Development,’ Walter Bgoya wrote about the vicissitudes of educational publishing in Tanzania, as follows:\textsuperscript{61}

\begin{quote}
My intention is to explicate the effect that such policy insecurity can have on any publishing industry that relies heavily on textbooks, which is pretty much the situation in all African countries. The disruption of the process of building up human resources capacity: publishing managers, editors, typesetters, book designers, illustrators, book distributors and bookshops, will have a far-reaching negative impact on developing a book and literary culture. And this is the experience in most countries, including South Africa, which has the most developed publishing industry in Sub-Saharan Africa.
\end{quote}

In South Africa, government control over which resources can be purchased in the educational system using government-allocated funds has been problematic. Molteno, for example, publishes \textit{Vula Bula}, highly regarded Foundation Phase learning materials, developed using a phonics-based approach to teaching reading in the orthographies of South Africa’s indigenous languages. Molteno produces alphabet friezes, Big Books, graded readers, and vocabulary posters in ten languages, including English.

Figure 5: Vula Bula languages

Vula Bula is not included in the Department of Basic Education’s (DBE) national Learning and Teaching Support Materials (LTSM) catalogue. Although the Vula Bula series complies with the DBE’s requirements for teaching South African languages, the national catalogue for Grades 1-3 was closed in 2011 before the series was completed. Despite Vula Bula’s popularity with teachers, schools are not permitted to spend government funds allocated to purchase learning materials to purchase books that are not listed in this catalogue. The series is available online free of charge with a Creative Commons licence.62

Reliance on donors can be even more problematic for local publishers than reliance on government because donor priorities can change more rapidly, either because of a shift in focus or because of a change in the countries in which a donor works.

In addition, there appears to be an ongoing trend in literacy donor funding to spend money through international initiatives, rather than building local content creation. For example, all three REACH for Reading grants awarded in 2017, which focus on results-based funding for the provision of textbook and supplemental reading materials, were awarded to international NGOs.63 The All Children Reading: Grand Challenge for Development is another donor example. The 2017 awards for technology solutions to assist deaf children in low-resource settings all went to US-based organizations, among them – eKitabu (two grants), SIL LEAD (creator of the Bloom Library), and the Asia Foundation.64

62 Jenny Katz, personal communication to Kirsty von Gogh, 8 October 2018
In Kenya, the US-based RTI early reading programme, Tusome, is responsible for developing literacy materials in English and in KiSwahili on behalf of the Kenyan government. Although Kenyan publishers have been involved in this project, there are none listed as a ‘key partner,’ nor is the Kenya Publishers’ Association. However, after a spate of articles in the Kenyan press at the same time as the 2017 Nairobi International Book Fair and protests from the Kenya Publishers’ Association, Kiarie Kamau wrote:

Publishers have been assured that the Tusome project is time-bound, but not the standard to be adopted going forward.

Important here is the ability of the publishers to use their organizations to create an effective lobby. The Nigerian Publishers’ Association pressured the Ministry of Finance to rescind unreasonable tariffs on books; the Kenyan Publishers’ Association exerted pressure about being closed out of donor-funded projects. The Publishers’ Association of South Africa has battled against the Department of Basic Education’s attempt to eliminate the national catalogue of eight books per subject per grade and to approve only one book, with no final decision on the DBE’s part at this writing.

Nationally, publisher associations have a critical role to play in negotiating with and pressuring government. Functional regional organizations are equally essential – to collate publishing data across the continent, to advise on formulation and implementation of national book policies, to conduct research, and to speak with a strong collective voice to donors, many of whom now operate regionally. The ADEA Working Group on Books and Learning Materials meets some of those needs, but African content producers require their own association, one that they will own. They had such an association in the African Publishers Network (APNET). But after donor funding ended, APNET became less active and more scattered. There are now attempts to bring it back to life.

Finally, as Bibi Bakare-Yusuf wrote about interactions with governments and donors:

Publishers need to stop our over-reliance on government and instead see them as just one of the markets rather than the primary one. Our focus should be on producing early literacy books that we

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66 Kiarie Kamau, Chief Executive Officer, East African Educational Publishers, cost questionnaire
68 Bibi Bakare-Yusuf, personal communication to Lisbeth Levey, 11 September 2018
can market directly to parents so that they can get into the habit of buying books. We therefore need to create a robust marketing campaign targeted at parents. Use donor funding as seed funding to jump start our initiatives and use it to develop long-lasting marketing campaigns the way we do for fiction and other products.
Conclusion

This study and the accompanying organizational profiles weave together the different strands involved in producing good stories for young children in the global South. Cost drivers vary, depending on the type of content producer, type of story, audience, and formats. Very little is standardized. Some organizations pay authors and illustrators, others do not, and still others employ a mix of the two. Quality assurance is also handled in different ways.

Open licensing is another variable. Some organizations believe strongly in CC BY licensing. In addition to the Molteno example, given in the section on open licensing, others, such as Ubongo (Appendix Seven) will use a CC licence, but restrict their resources to a non-commercial and a non-derivative (CC BY-NC-ND) licence. Sub-Saharan Publishers (Appendix Six), a traditional publisher, agreed to experiment with a mix of licensing to explore the impact of open licensing on its visibility and business. Here, too, there is no standard solution.

What about use? The goal is to make stories available to children who will want to read and enjoy them. What is the evidence that this is happening? Numbers of downloads are telling, but we do not know what happens after a resource is downloaded. But this study is about costs, not use. A separate study will focus on issues of use.

In summary, our research has indicated clearly that there is no simple, one-size-fits-all approach to costing effective development of high-quality learning resources, while also illustrating that, despite advances in technology, developing such content requires proper investment by those interested in building sustainable solutions to literacy acquisition amongst young learners. As importantly, if this spending does not find its way to local organizations, authors, illustrators, and other players, initiatives that seek to solve short-term problems of book supply run the risk of perpetuating the problems they seek to solve in the long run because they will not leave behind a sustainable legacy of high-quality local content creators for the future.
Appendix 1: The Asia Foundation
Non-profit publisher
Based in the United States with 13 offices in Asia
http://asiafoundation.org/

Introduction
The Asia Foundation is a non-profit international development organization ‘committed to improving lives across a dynamic and developing Asia’. With headquarters in San Francisco and offices in Washington DC and 18 Asian countries, the Asia Foundation works with public and private partners. Working in Asia since 1954, its goals in the region are to strengthen governance, empower women, expand economic opportunity, increase environmental resilience, and promote regional cooperation.69

Through the Books for Asia programme, The Asia Foundation puts books and resources into the hands of students, educators, and community leaders each year through the contributions of publishers and private donors. Books for Asia donations support educational programmes in 18 countries70 and reach institutions in 20 countries.71 Books for Asia donates books to all ages of students and at all levels of learning.

The Let’s Read! initiative is part of the Books for Asia programme. This initiative empowers underserved communities to build digital libraries in their own language and enables rural communities to access books via mobile devices through the Let’s Read! Android platform. The platform contains books in local languages and facilitates the community to easily translate these titles.72

Figure 7: The Let’s Read Android app on the Google Play Store

69 http://asiafoundation.org/about/
70 http://asiafoundation.org/publication/books-for-asia/
71 http://asiafoundation.org/resources/pdfs/BooksforAsia.pdf
72 https://letsreadasia.org/
What does Books for Asia do?

The Asia Foundation, through the Books for Asia programme, sources original content for the Let’s Read! platform in two ways. First, Let’s Read! workshops and e-book hackathons bring together local authors, illustrators, and publishers to create original local books. Second, the Foundation collaborates with local organizations, including publishers, to digitize their existing print children’s books. These titles are then uploaded to the Let’s Read! platform.

The Asia Foundation also uses translation to quickly build up local language collections. It designed and built an innovative translation engine into the Let’s Read! platform that works on mobile phones or computers, so that local languages speakers can initiate a translation or join one in progress on the web app. The platform crowdsources translations from volunteer online community members and uses collaborative tools and a peer-review system to streamline the editorial process. The platform’s mobile-first system facilitates quick translations of books. Individuals can translate as little or as much text as they want. Contributions are aggregated into a single view for community editors, who draw from the most culturally representative translations to finalize the books. Editors can discuss the stories through a built-in messaging system. In this way, communities can use the translation platform to produce culturally relevant adaptions of international books in the library.

Figure 8: Let’s Read! library platform: searchable by language, reading level, type (tag), and title

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73 An e-book hackathon is a two-day event that gathers individuals from a variety of industries to create high-quality children’s stories. Teams of writers, artists, graphic designers, and coders work together to develop a number of children’s e-books, reducing the time and resources needed to produce children’s books.

74 https://asiafoundation.org/what-we-do/books-for-asia/lets-read/
Before the Let’s Read! library platform was established, the Asia Foundation used a WordPress blog site, specifically for a Khmer audience. The site was used to host books and information about the authors and illustrators, as well as videos showing the first two hackathons.\(^7^5\)

In 2016, the Asia Foundation assembled nearly 20 publishers, editors, writers, and coders in Phnom Penh for Cambodia’s first children’s e-book hackathon, as part of the Let’s Read! initiative’s effort to use technology to stimulate reading. During the one-day event, participants created four original children’s books in electronic format, in the Khmer language. The second hackathon produced eight books.

\(^{75}\) [https://letsreadbooks.org.wordpress.com/about/](https://letsreadbooks.org.wordpress.com/about/)
Hackathons provide an opportunity for budding illustrators and authors to work together in teams under the guidance of book directors and editors. Unlike work usually done with publishers, where the illustrator and author are commissioned to work separately, the illustrator and author collaborate to create books. Each event tackles a storybook genre lacking from the marketplace, such as girls’ empowerment, tolerance, environmental stewardship, science, and technology. The Asia Foundation has also held hackathons to create pattern books with word language patterns, as well as to complete illustrations and translations.

Training of authors, editors, and translators happens during the day of the hackathon and on scheduled days before the event. Authors are trained before the event and will write their stories ahead of the hackathon. Editors can also preview content before the hackathon. On the day of the hackathon, the cover and storyboard are created. The Asia Foundation faces a shortage of local language editorial skills at these events, so editing can be done after the event.

The illustrated stories are finalized and digitized no more than two months after the hackathon. E-book and print-ready versions are made available to online libraries, and the Asia Foundation hosts a book release party, inviting creators to come and view their own work. Since the Asia Foundation focuses on its online library, the organization does not often print these books, but the print-ready versions are available for other organizations or individuals to print. It also actively shares content and encourages local publishers, such as Sipar and the government Publishing Distribution House in Cambodia, and Safu in Nepal, to print and sell the high-quality books to support the industry and reach readers through as many channels as possible.

As of April 2018, there were nearly 1,000 books on the Let’s Read! platform in 12 languages and scripts. Communities and partners in five countries have participated in 17 e-book creation and translation events. The library grows rapidly and exponentially, as each title that gets added to the library becomes immediately available for translation into other languages on the platform. About 88 percent of the books on the platform have been created or sourced in Asia, with 12 percent coming from other regions of the world. The full Let’s Read! initiative – building up local language content, partnering with local and international education organizations that need local-language books, and promoting reading and the library directly to the public – is running in Cambodia, Indonesia, Thailand, and Nepal; translation activities are also occurring in Laos and Bangladesh to build up local libraries in these countries. All of these components and relationships are facilitated by local Asia Foundation staff resident in their countries and working out of the Asia Foundation’s long-established offices in them.

In addition to catalysing the creation of new, original books, content is sourced from local publishers and NGO where possible. The Asia Foundation approaches publishers, directly or through publishers’ associations, and appeals to them to supply content, which previously may have been copyright protected, under an open licence. The approach varies from country to country, depending on the size of the publishing industry. The Asia Foundation discusses possible short- and long-term benefits of loading content on the Let’s Read! platform. These benefits include the chance to serve markets the publishers may not normally be able to reach across Asia and internationally, access to big data and analytics provided by the platform, and even donating content as a corporate social responsibility (CSR) initiative.

77 http://www.sipar.org/en
In Cambodia, Let’s Read! is supported by Smart, a Cambodian mobile telecommunications company, while qualified individuals and community partners, Room to Read, and Pratham Books lend editorial expertise. The books are available on the Let’s Read! Website, the Ministry of Education, Youth and Sport website, and multiple digital libraries in Cambodia.

In Cambodia, Publishing and Distribution House (PDH), the state printer and distributor of educational materials, has bundled sets of four hackathon titles to print and distribute to schools. PDH paid for a small print run and the distribution of these titles.

Due to the shortage of children’s STEM skills, in August 2017, the Asia Foundation in Cambodia hosted the third Let’s Read! e-book hackathon, themed ‘STEM for Kids’. During the two-day hackathon, a team of locals working in the creative industry collaborated to produce eight original, local-language children’s stories designed to spark an interest in STEM in young readers. Room to Read and Pratham Books provided editorial guidance.

In September 2017, the Foundation announced the Indonesia launch of Let’s Read! with 150 books available to read in Bahasa Indonesian. Local publishers, educational institutions, NGOs, and other agencies, including UNICEF, support the Let’s Read! initiative, contributing over 100 storybooks mounted on the platform along with 36 international books translated into Bahasa Indonesia, and nine newly created titles, added to the library of nearly 1,000 children’s books in twelve languages and scripts.

More than 700 diverse languages are spoken in Indonesia. Speakers of minority languages face challenges accessing children’s books in their mother tongue. The language of instruction in Indonesian schools is Bahasa Indonesia, so books need to be made available in that language, to enable book translation into minority languages. At an event in Bandung, the project brought together 35 translators from across Java, where they received training in children’s book publishing and translation, then proceeded to translate 36 books from English to Bahasa Indonesia, using the Let’s Read! translation tool. The Asia Foundation is also catalyzing the creation of new, original books directly in Bahasa Indonesia, Minang, and Javanese with local communities and partner organization, the Litara Foundation.

Minority languages spoken in Northern Thailand were targeted for a pilot of the Let’s Read! software. Here, the Asia Foundation worked with an NGO, the Foundation for Applied Linguistics (FAL) and the Inter Mountains Peoples Education and Culture in Thailand Association (IMPECT) as there are not many publishers creating content in languages that are not standard Thai. Let’s Read! is still not publishing titles in standard Thai.

In Nepal, the Asia Foundation has been working with organizations such as Room to Read, Srijanalaya, and Rato Bangala Kitab to create e-books for the Let’s Read! platform. The first two organizations are NGOs, while Rato Bangala Kitab is a children’s literature publisher, publishing books in English and Nepali. While Srijanalaya

78 https://www.roomtoread.org/
79 http://prathambooks.org/
82 http://asiafoundation.org/2017/09/05/lets-read-digital-library-brings-childrens-books-indonesia/
84 http://litara.or.id/
86 http://srijanalaya.org/
87 https://www.ratobangalakitab.com/
is not a publisher, it promotes art education and learning through art, working with authors and illustrators to create books.

**Intellectual property rights**

Let’s Read takes advantage of the rapidly growing popularity and accessibility of smartphones by providing e-books for free under an open licence for anyone to read, download, and adapt. All titles, including indigenous and international storybooks, in the Let’s Read! library are openly licensed.

Content is also sourced from StoryWeaver, available under a Creative Commons CC BY licence, and from local publishers, local and international NGOs, governments, universities, and content creators who agree to assign Creative Commons licences to their content. Some titles on the Let’s Read! library ‘encourage the sharing of this book and translation of the text, but... request that the images themselves not be altered.’

**Business model: costs and revenue**

The Asia Foundation believes that hackathons have the potential to invigorate children’s book creation in local languages in countries where few children’s books are published. By using a collaborative publishing model, development and production costs are reportedly lower and the turnaround time is shortened. The costs reported include project management costs but do not include the NGO management staff costs, as the Asia Foundation Books for Asia programme directors are involved in the hackathons and work in-country during these events.

Hackathons are all donor-funded. Local companies have also provided support for hackathons by providing prizes, press support, and publishing expertise.

**Cost analysis**

The following table lists some of the costs incurred while creating e-books for the site.

*Table 8: Costs involved in creating hackathon titles in US$*

<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project management</td>
<td>The annual cost of a project manager for the Cambodia e-book hackathons and translations is $13,000.</td>
</tr>
<tr>
<td>Writing fee (honorarium)</td>
<td>$150 to $200 for a hackathon, with a one-day pre-event meeting and a draft story submitted before the hackathon.</td>
</tr>
<tr>
<td>Editorial fee (honorarium)</td>
<td>$50 per title for a hackathon. Editors work on approximately four books, so get paid $200 for an event.</td>
</tr>
<tr>
<td>Translation</td>
<td>$10 per 250 words if not crowdsourced, and free if they are.</td>
</tr>
</tbody>
</table>

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88 [https://storyweaver.org.in/](https://storyweaver.org.in/)
<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proofreading</td>
<td>16c per word.</td>
</tr>
<tr>
<td>Proofreading</td>
<td>$50 per title.</td>
</tr>
<tr>
<td>Full-colour illustration (honorarium)</td>
<td>$200 to $250 for a hackathon title.</td>
</tr>
<tr>
<td>EPUB creation/conversion</td>
<td>$130 per title: An e-book developer in Cambodia was paid to convert simple image and text files into standalone EPUB.</td>
</tr>
<tr>
<td></td>
<td>$20 per title: In Thailand, the Asia Foundation provided simplified training on how to create a very basic EPUB from existing content and images.</td>
</tr>
<tr>
<td>Overhead costs</td>
<td>16 percent is the basic overhead rate, excluding salary or administrative costs for staff at headquarters that supports the structure and operation of Books for Asia activities throughout all country offices. Management of content creation projects requires 2-3 full-time US-based management positions.</td>
</tr>
</tbody>
</table>
Appendix 2: BookBox
For-profit social enterprise
India and the United States
https://www.bookbox.com/

Introduction

BookBox, based in India and California, is a social enterprise that creates animated stories with subtitles, called ‘AniBooks,’ to support reading and early literacy. BookBox makes these stories available on YouTube, broadcast television, and mobile channels. This allows for mass distribution at minimal cost.

BookBox was founded in 2004 after winning a student business plan competition at Stanford University, called the Social e-Challenge. The prize money awarded by the Business Association of Stanford Entrepreneurial Students (BASES) was $6,000. This helped BookBox to produce the first AniBook in six languages – English, Spanish, French, Mandarin, Hindi, and Bengali.89

BookBox, as a social enterprise, has pledged to reinvest 55% of its profits from sales and advertising into producing more AniBooks, and research and development to ensure that content is compatible with new technologies and platforms.90

BookBox and partner organization PlanetRead (www.planetread.org) have the same top management structure. Both organizations were founded by Brij Kothari. PlanetRead is a non-profit and uses Same Language Subtitling (SLS) to teach literacy on television by subtitling songs in movies. Unlike BookBox, PlanetRead does not own content, but subtitles existing content. For example, PlanetRead adds subtitles to the songs in Bollywood movies, which constitute around half an hour of content per movie. PlanetRead does not own the lyrics, and does not use the lyrics for commercial purposes, but offers the lyrics online as part of its literacy development initiative.

Figure 11: Anibook of The Moon and the Cap on YouTube91
What does BookBox do?

BookBox bases its work on Same-Language Subtitling (SLS) techniques for early literacy and second language instruction.\(^2\) AniBooks highlight every word in perfect timing with the audio. It believes that hearing a story and simultaneously reading it reinforces literacy acquisition and reading skills. SLS has been innovated and pioneered by BookBox’s partner non-profit, PlanetRead.

The BookBox AniBooks can be mass distributed on any audio-visual media such as broadcast TV, DVD/VCD, mobile phones, tablets, the Internet, and even print. It is also possible to make them available in multiple languages. AniBooks can form part of a supplementary reading programme for children, by being used alongside existing titles to which children, parents, and teachers have access.

BookBox has so far produced over 75 AniBooks in more than 45 languages, including ten Indian languages. There are 15 languages with a substantial amount of content. BookBox sources existing storybooks to create content. The illustrations are converted to animations and the narration, subtitles, and soundtrack are inserted. The first language in which the AniBook is made is in the range of US$4,500, as this includes costs of the animation and soundtrack. Creation of stories in additional languages requires only narration and insertion of subtitles as the new audio track is added to the translation, and the cost of production is one quarter of the cost of the first AniBook.

BookBox’s main aim is to help improve reading and make it fun, and thereby improve literacy levels. In India, 780 million people have access to TV, while almost 300 million people have smart phones. The fact that there are far more children in India with access to TV than to the internet indicates that airing AniBooks on TV would reach a far wider audience, and do a lot more to promote early literacy.

BookBox aims to create sufficient content to be able to establish TV programmes containing AniBooks in India. Approximately 50 to 100 hours of content is needed for a three- to six-month programming slot, which would be 30 minutes with six minutes of advertisements. BookBox would be required to pay for the broadcasting time, and would target advertisers to recover costs. A challenge now for BookBox is to create sufficient content to be able to secure a slot on a broadcast TV channel and getting advertisers to support the venture to cover the costs of this exercise.

Intellectual property rights

BookBox uses openly licensed content from platforms such as StoryWeaver to create AniBooks. While BookBox does license some content, mainly from the USA, it prefers to use openly licensed content. Where BookBox does not own content, it may consider buying content outright or share the revenue after recouping costs. If content is licensed rather than available under an open licence, BookBox only receives 50% of the profit, as the other half goes to the copyright holder.

The BookBox website offers the function to ‘Add my language’. Add my language is a volunteer-driven activity, allowing people to add any language to the AniBook stories. Language experts are consulted to verify the quality of the translations. BookBox credits translators and narrators at the end of each story. All forms of copyright and international proprietary rights for any type of contribution, including translation and narration, are held by BookBox.\(^3\)

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\(^3\) [http://www.bookbox.com/add-my-language](http://www.bookbox.com/add-my-language)
Business model: costs and revenue

AniBooks are can be viewed free on YouTube. Income generated via YouTube is dependent on the source of viewers, with views from the USA and Europe typically paying 100 times more than views from India or Africa. Advertising rates on YouTube are $3 to $5 per thousand views for content viewed in developed regions, such as Europe or the USA. BookBox creates approximately 15 to 20 AniBooks a year, but aims to scale up production through more partnerships and more revenue.

Figure 12: BookBox’s YouTube channel features stories in English, Spanish, Mandarin, German and French, as well as Indian languages, Tamil, Hindi, Gujarati, Marathi, Bengali, Urdu and Kannada.

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94 Annual revenue figures have not been made available to NBA.
95 Nirav Shah, personal correspondence to Kirsty von Gogh, 9 August and 11 October 2017
96 Nirav Shah, personal correspondence to Kirsty von Gogh, 23 October 2017
BookBox sells videos and e-books on its website, as well as printed books. This allows the customer to download the file to be able to access it at any time and across devices, which is important in countries like India where there is poor connectivity in rural areas.

AniBooks are also sold globally through the BookBox app in iTunes and the Google Play Store. AniBooks are also sold via mobile networks, but these platforms vary by country, partnership, and language. On Vodafone and Airtel, AniBooks are sold as VAS (value added services). Instead of pitching directly to mobile companies, BookBox uses content aggregators to distribute their content to reach a wider audience.

Publishers can partner with BookBox and use this method of content creation and distribution to broaden their audience, and find additional revenue streams. By partnering with more publishers, BookBox can reach a wider market, particularly in the developing world, and diversify their product offering. Where BookBox works with publishers, a revenue sharing model is used. The publisher pays for the digitalization of the content. Both parties promote and use the content in any way they would like.
Cost analysis

The table below indicates the cost of developing AniBooks. The cost of a licensed AniBook is far higher than an openly licensed title, and the first language costs more to develop than a second language in either scenario.

Table 9: The costs involved in developing AniBooks, in US$

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Licensed 1st language</th>
<th>Licensed 2nd language</th>
<th>Creative Commons 1st language</th>
<th>Creative Commons 2nd language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Story</td>
<td>1000</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Story Editing</td>
<td>150</td>
<td>0</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Artwork</td>
<td>500</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Artwork Editing</td>
<td>150</td>
<td>0</td>
<td>150</td>
<td>0</td>
</tr>
<tr>
<td>Extra Artwork</td>
<td>200</td>
<td>0</td>
<td>200</td>
<td>0</td>
</tr>
<tr>
<td>Animation</td>
<td>1,500</td>
<td>500</td>
<td>1,500</td>
<td>500</td>
</tr>
<tr>
<td>SLS (Same Language Subtitles)</td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Translation</td>
<td>0</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
<tr>
<td>Narration</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Music</td>
<td>300</td>
<td>0</td>
<td>300</td>
<td>0</td>
</tr>
<tr>
<td>Audio Mixing</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Video Editing for YouTube</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Overall management &amp; QC</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>In Dollars</td>
<td>4,400</td>
<td>1,150</td>
<td>2,900</td>
<td>1,150</td>
</tr>
<tr>
<td>Cost per title for 5-10 stories</td>
<td>4,400</td>
<td>1,150</td>
<td>2,900</td>
<td>1,150</td>
</tr>
<tr>
<td>Cost per title for 10-25 stories</td>
<td>3,520</td>
<td>1,035</td>
<td>2,320</td>
<td>1,035</td>
</tr>
<tr>
<td>Cost per title for above 25 stories</td>
<td>2,640</td>
<td>920</td>
<td>1,740</td>
<td>920</td>
</tr>
</tbody>
</table>

As can be seen in the table, there are cost advantages for developing more than one story at a time. In addition, the second language is cheaper than the first, for both licensed and openly licensed stories.

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Nirav Shah, personal correspondence to Kirsty von Gogh, 20 July 2017
Appendix 3: Book Dash
Non-profit publisher
South Africa
http://bookdash.org/

Introduction

Book Dash is a non-profit volunteer organization, established in 2014 as a project by friends who wanted to use their publishing skills to create accessible, well-written, easily translatable African storybooks. The Book Dash founders believe that every child should own 100 books by the age of five. In South Africa, that means giving 600 million free books to children who could never afford to buy them.\(^98\) The project intends to put culturally relevant, mother-tongue children’s books directly into the hands of South African children.

Book Dash is an ambitious experiment that aims to contribute to tackling the literacy crisis in the country and has set out to supply South Africa with new, high-quality storybooks.\(^99\) Book Dash creates content by hosting events at which a volunteer crew of approximately 40 creative professionals congregate for twelve hours to create at least eight openly licensed storybooks.

As of 2018, Book Dash has hosted ten Book Dash events, published 97 original titles, and created approximately 250 translations of these titles. Including these translations, the Book Dash library contains over 350 titles. With the support of financial and distribution partners, Book Dash has distributed 200,000 printed books to children through early childhood development (ECD) centres, schools, literacy programmes, hospitals, and other non-profit organizations.

What does Book Dash do?

Book Dash is a ‘digital-first’ publisher, choosing to distribute storybooks online in the first instance. It only commits to printing books when it has funding to do so. Either organizations or individuals will donate money for a print run or request a print run of their books for their beneficiaries. Book Dash also initiates what it calls ‘collaborative print runs’. In this case, Book Dash will put forward some titles for print, and anyone can place an order for copies of these books. As orders reach different quantity thresholds, everyone benefits from cheaper prices. For example, when one book reaches 3,000 copies ordered, everyone gets that book for R10 (US$0.75) per copy. In this way, Book Dash is harnessing the power of printing in bulk.

To create content, Book Dash organizes Book Dash days, for which it receives donor or sponsor funding. It puts out a call for volunteers to apply to join a Book Dash day and uses their time and skills to create free books for children. The application process is important because not everybody is able to make a good book in such a short time. Book Dash screens applicants and requests samples of their work. Writers should know how to write for children. Illustrators should have a great deal of experience and be versatile in terms of style. Designers should be competent in typography and be comfortable working in InDesign, a widely-used desktop publishing software application. Editors should be experienced book editors, preferably with experience in editing for


\(^99\) Book Dash. (2017). Prospectus. Available at https://docs.google.com/document/d/104-3VQLqActUGetdl9taw8ZZu_z49CO9iO80zMr2S-c/edit#
children. Book Dash also keeps a list of creative professionals who have volunteered at previous Book Dash events, and thus who can be approached directly and invited to apply.

While its first priority is the quality of the books produced, Book Dash also considers diversity of language, age, and race when selecting teams because it is essential to have a variety of voices present in the room and represented in the stories. Although the books are often created in English first, writers can choose to write in their mother tongue provided a competent editor with the same language skills can be found to participate on the day. Book Dash books are then translated into additional South African languages for a wider audience.\(^{100}\)

Book Dash lays out strict guidelines to ensure that content is at the correct level and appropriate for the intended audience. These guidelines apply to design, text, and illustrations. The editors and art director ensure that the creative teams adhere to these specifications.

Book Dash appoints volunteers to all the support roles, including a videographer, photographer, editors, a storyteller to document the event on social media, a technical director, and an art director. These volunteers also apply through the initial application process. The core Book Dash team (comprising founders, employees, and regular volunteers) act as facilitators on the day, ensuring that the day runs to plan and that all volunteers are appropriately briefed. Curating teams, event planning and management, and completing post-production of books can be a full-time job for a month. Book Dash currently employs one full-time staff member to conduct this work, along with managing the other aspects of the organization.

On the day of a Book Dash event, each team has twelve hours to create a finished storybook. Each team consists of a writer, an illustrator, and a designer. The writer on each team drafts the story beforehand and finalizes it with the editor on the day. The illustrator might create rough character sketches before the event, and the designer will receive the InDesign templates designed by Book Dash in advance. While Book Dash is digital first, it is print focused, so it creates all books with the intention to print them. InDesign enables text and illustrations to interact in ways that e-book formats do not allow.

The process of working collaboratively enables various kinds of skills transfer. Designers, editors, and illustrators from a variety of creative environments will learn about the publishing process and open licensing. Volunteers with less experience can gain knowledge from their more experienced counterparts. Book Dash events also provide an opportunity to connect with other creative professionals and collaborate on other projects.

\(^{100}\) In a personal communication to Kirsty von Gogh, Julia Norrish wrote: ‘All our books, whichever language they are created in, have professional editors who work with the team on the Book Dash day. When translating, there are always at least two people involved in the process: an initial translator, and then someone to edit, back to the original translator, and back to the editor for a proofread.’
After the event, the organizers pay for final post-production on the completed files and prepare them for distribution and printing, even if they will not be printed immediately. This includes:

- Artwork scanning, and/or touch ups;
- Proofreading;
- Sign-off on text;
- Assigning International Standard Book Numbers (ISBNs) and generating barcodes;
- File export in various formats (print-ready PDF, web PDF, HTML, low-res JPGs);
- Storage of all files to the Book Dash Dropbox, creating a page for each book on [http://bookdash.org/](http://bookdash.org/) with images of each spread; and
- Social media marketing, including distribution of a press release and a report on the day.

Depending on the amount of work required on the book after the event, it can take between a few days and a few weeks for books to be ready to share. Book Dash aims to translate titles into all South African languages, but prioritizes languages that are required by its distribution partners. Translations are also paid for by donors, or done by partner organizations such as Nal’ibali.101

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Digital copies of Book Dash books are available on its website, as both print-ready and PDF e-books, and via its Android mobile app. These titles are also available on other organizations’ platforms, including StoryWeaver,102 African Storybook,103 Nal’ibali national newspaper supplements, the FunDza mobisite,104 Vodacom’s Digital Classroom,105 the Worldreader106 mobile app, the Snapplify store,107 and on https://freekidsbooks.org/. Each organization downloads the content from the Book Dash website to upload to their platform when Book Dash releases new material.

102 https://storyweaver.org.in/
103 http://www.africanstorybook.org/
104 https://live.fundza.mobi/
105 http://digitalclassroom.co.za/digitalclassroom/
106 https://www.worldreader.org/
107 https://www.snapplify.com/
Figure 17: Book Dash has a free app on the Google Play Store with stories in all eleven South African languages: English, isiZulu, Afrikaans, Sepedi, isiXhosa, Sesotho, isiNdebele, Setswana, Siswati, Tsivenda and Xitsonga.\textsuperscript{108}

![Book Dash app on Google Play Store](https://play.google.com/store/apps/details?id=org.bookdash.android&hl=en)

**Book Dash sources of funding**

Book Dash receives funding from donors and sponsors for its events and for translations. It has also made use of crowd-funding, and there is a donations link on its page. Book Dash sources funding from its funding and distribution partners to print books. Some funders request that specific titles be printed for organizations that they select, while others provide funding to Book Dash with no specific requirements, enabling Book Dash to print stock for donations to organizations who sign up for books via their website. Available stock can also be purchased by partner organizations, the public, or retailers. Book Dash will work out the most cost-effective way to print as many books as possible, while retaining a variety of titles. Book Dash may print extra copies to retain for its own stock for donation or resale with funding it receives where feasible.

Currently, the most popular print title is *My special hair* (pictured in Figure 16). Book Dash had printed 6,750 copies of this title at the time of writing, closely followed by *uMtshato weNtlanzi neNkukhu* (a book that was originally written in isiXhosa), at 6,000 copies. The ideal minimum print run is 2,500 copies.

Partners donate and distribute Book Dash books to various activities and organizations, including giving books to children who attend their programmes, sending books to remote areas of South Africa and Lesotho, giving books to paediatric patients and their families, distributing books to children through reading clubs, using books for reading programmes, stocking ECD centres, and for parent-training workshops. Any non-profit literacy organization can apply to receive a donation of printed Book Dash books. The organization’s ability to respond to such applications depends on prior availability of stock or available sponsorship. When it can meet a request, all it requires in return is a letter of acknowledgement of receipt of the books detailing what they will be or have received.

been used for, together with photographic evidence of how the books were used or to whom they were given. Given the beneficiaries with which it works, Book Dash strives to make it simple for organizations to apply for, receive, and use books.

*Figure 18: Recipients of Book Dash storybooks*\(^{109}\)

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**Intellectual property rights**

All Book Dash content is openly licensed. All content creators sign a simple memorandum of understanding, agreeing to license all the work they create or adapt at a Book Dash event under the CC BY 4.0 licence.

No royalties are paid on any titles.

**Business model: costs and revenue**

Book Dash has a board of directors, consisting of its three co-founders. Day-to-day running of the organization is done by the Programme Director. There are no other employees.

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\(^{109}\) https://www.instagram.com/p/BBXmFJwr2HV/?taken-by=bookdash
It costs R100,000 to host a Book Dash event, which is covered through sponsorship. This fee covers: event promotion, preparation and management; technical support, facilitation, art, and editorial direction; team selection and volunteer management before and after the event; venue, logistics, and catering for 50 people; ten or more book-making teams at the event; book finalization, including layout, ISBN and barcode-assignment; and print-ready and e-book PDF output. Funding excludes transport and accommodation for the Book Dash team of four, which costs an additional R20,000 for all events happening outside Cape Town, but within South Africa. Book Dash commits to producing eight completed books in one day, but usually produces between ten and twelve books, depending on how many teams attend. To date, of the 99 books created at Book Dash events, only two have not been completed.

Book Dash has created an openly licensed manual[^10] on its model, which anyone can use to organize a similar event. This manual describes how the entire process works, provides templates for the content, offers guidance on selecting teams, and even recommends what food to serve and when to keep energy levels high.

Book Dash outsources translations to a translation agency or freelance translators. The agency or translators ensure the quality of translations by having another translator review and edit the translation. The translator will then proofread the titles after they have been typeset by a designer.

### Cost analysis

The table below indicates costs involved in creating Book Dash titles.

**Table 10: Costs involved in creating Book Dash titles, in South African Rand and US Dollars[^11]**

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost in ZAR</th>
<th>Cost in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development cost per title</td>
<td>R8,333-R15,000</td>
<td>$625-$1,126</td>
</tr>
<tr>
<td>Translation</td>
<td>80c per word/R350 per title</td>
<td>6c per word/$26 per title</td>
</tr>
<tr>
<td>Translation review</td>
<td>20c per word/R100 per title</td>
<td>2c per word/$7,50 per title</td>
</tr>
<tr>
<td>Proofreading</td>
<td>10c per word/R50 per title</td>
<td>1c per word/$3,75 per title</td>
</tr>
<tr>
<td>Typesetting</td>
<td>R30 per page/R1,000 per title (post event)</td>
<td>$2,25 per page/$75 per title (post event)</td>
</tr>
<tr>
<td>EPUB creation/conversion</td>
<td>R1,000 per title for the refinement and digital publication: including PDF, e-book and print-ready files</td>
<td>$75 per title for the refinement and digital publication: including PDF, e-book and print-ready files</td>
</tr>
<tr>
<td>Printing</td>
<td>R10-R100 per copy (see figure below)</td>
<td>75c-$7,50 per copy (see figure below)</td>
</tr>
</tbody>
</table>

These costs include Book Dash’s overhead costs.

All Book Dash stories are 32 pages, while the size of printed copies is 150mm x 150mm.

[^10]: Book Dash Manual, available at: [https://docs.google.com/document/d/1oQB_9MFuthF2X9szm0i4aMRNMS_dTgbkqmzko0zyhl/edit#](https://docs.google.com/document/d/1oQB_9MFuthF2X9szm0i4aMRNMS_dTgbkqmzko0zyhl/edit#)

[^11]: This is based on the average exchange rate for 2017 of $1 = R13,32.
Book Dash tries not to print fewer than 100 copies at a time to take advantage of cheaper costs on higher print runs. The graph below indicates how much the cost per title drops as more books are printed.

*Figure 19: Print costs for Book Dash storybooks*¹¹²

In 2017, Book Dash initiated the first Book Dash-facilitated collaborative print run, allowing a group of organizations to coordinate their book-printing needs to increase numbers and decrease costs. Five titles¹¹³ (one title each in English, Afrikaans, Sepedi, isiXhosa, and isiZulu) were printed in the initial collaborative print run, with 30 organizations participating. Most of these orders were for 100 copies of books, which would usually cost R65 per copy if printed in isolation. With the collaborative print run, copies cost R10 each. There were 35 orders of 100 copies each, and these were printed collaboratively, resulting in a total saving of R192 500 for those orders alone.¹¹⁴


¹¹³ Both *My special hair* and *uMtshato weNtlanzi neNkukhu* were part of the collaborative print run.

¹¹⁴ Julia Norrish, personal correspondence with Kirsty von Gogh, 8 November 2017
### Table 11: An example of costs savings achieved by a collaborative print run for one order\textsuperscript{115}

<table>
<thead>
<tr>
<th></th>
<th>Afrikaans</th>
<th>English</th>
<th>isiXhosa</th>
<th>isiZulu</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Printing in isolation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copies</td>
<td>100</td>
<td>780</td>
<td>400</td>
<td>360</td>
<td>1640</td>
</tr>
<tr>
<td>Price per copy</td>
<td>R65</td>
<td>R25</td>
<td>R37</td>
<td>R40</td>
<td></td>
</tr>
<tr>
<td>Total cost</td>
<td>R6,500</td>
<td>R19,500</td>
<td>R14,800</td>
<td>R14,400</td>
<td>R55,200</td>
</tr>
<tr>
<td><strong>Printing as part of the collaborative print run</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copies</td>
<td>100</td>
<td>780</td>
<td>400</td>
<td>360</td>
<td>1640</td>
</tr>
<tr>
<td>Price per copy</td>
<td>R10</td>
<td>R10</td>
<td>R10</td>
<td>R10</td>
<td></td>
</tr>
<tr>
<td>Total cost</td>
<td>R1,000</td>
<td>R7,800</td>
<td>R4,000</td>
<td>R3,600</td>
<td>R16,400</td>
</tr>
<tr>
<td><strong>Saving</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R38,800 / US$2,913</td>
</tr>
</tbody>
</table>

\textsuperscript{115} Julia Norrish, personal correspondence with Kirsty von Gogh, 8 November 2017
Appendix 4: Saide’s African Storybook Initiative

Non-profit publisher
South Africa
www.africanstorybook.org and www.saide.org.za

Introduction

Saide is a non-governmental organization, based in South Africa, which works throughout sub-Saharan Africa. According to its website, Saide facilitates change in existing educational practices, with the task of contributing to the development of new models of open learning, including the use of distance education methods, educational technology, and open educational resources.\(^{116}\)

According to Saide, African children have inadequate reading literacy levels after the first three years of schooling, offering the following reasoning:\(^{117}\)

> It is generally acknowledged that one of the key reasons for these low literacy levels is the shortage of appropriate storybooks for early reading in languages familiar to the young African child. Because there is very little reading material, children do not learn to read well or enjoy reading. There is therefore no demand for books. If there is no demand, publishers will not invest in producing books (particularly African language books) to support children learning to read. This vicious cycle results in a continuing dearth of sufficient reading material for young African children to embed reading practices.

Started in 2013 with funding from the British charity, Comic Relief, Saide’s African Storybook initiative (ASb) aims to contribute to improving literacy among children in sub-Saharan Africa by intervening in this vicious cycle. Saide is tackling this scarcity of reading material in African languages through an alternative publishing model, by providing digital openly licensed storybooks. This model provides increasing numbers of storybooks to young readers, teachers, parents, and librarians, without having to consider the size and buying power of the market for a particular language.\(^{118}\) ASb is recognized as an official partner of the South African Department of Basic Education’s Read2Lead Campaign.\(^{119}\)

What does African Storybook do?

The African Storybook website is central to ASb’s work. On 10 August, 2018, it hosted 1,040 original storybooks in 156 languages, as well as 4,666 translations of those stories.\(^{120}\) The platform allows users to read, adapt, translate, download, and print these storybooks. Users can print story booklets on simple printers for use with children without paying any licensing costs or fees. The website also offers basic publishing tools for users to create and translate their own stories.

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\(^{120}\) [https://www.africanstorybook.org/](https://www.africanstorybook.org/)
There are four main ways in which African Storybook obtains storybooks/manuscripts for preparation and publishing on its website:

1. Harvesting of manuscripts through the country coordinators (not in use now that there are no longer country coordinators);
2. Story development workshops;
3. Translation (and quality assurance) of titles on the African Storybook website;
4. Independent activity on the site (users creating, translating and adapting storybooks themselves, a proportion of which are quality assured by the African Storybook team).

Figure 20: The African Storybook website homepage

As explained by Tessa Welch, African Storybook Project leader:

Independent activity accounts for the largest proportion of new storybooks added to the site. For example, in 2018 the African Storybook team published 31 new unique storybooks as a result of three story development workshops. However, the number of unique storybooks on the site increased by 232. Similarly in 2018, while the African Storybook team commissioned 100 translations for the Global Digital Library, 100 translations as part of an ECD project in Namibia, and 50 translations into Ethiopian and Kenyan languages, the number of translations on the site increased by 1711.

In 2014 and 2015, ASb worked in 14 pilot sites, including schools and community libraries in rural and peri-urban contexts, in Kenya, Lesotho, South Africa, and Uganda. These sites were used to test methods of delivery and supported storybook creation, translation, adaptation, and use. ASb has a network of African, US and UK

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121 Personal communication from Tessa Welch to Neil Butcher and Kirsty von Gogh, 17 December 2018
122 Ibid.
partnerships, facilitating the sharing of print and digital stories, but also sharing ways of creating, translating, printing, and using storybooks to improve literacy development in primary schools and community contexts.\textsuperscript{123}

ASb has built a strong set of partnerships. Partners include organizations that work directly with teachers, teacher educators, education departments, or distribute ASb titles to wider audiences through web-based distribution. For ASb, these partnerships assist sustainability because local-language storybooks are offered through an open-resource model that will continue to be used, at no additional cost to ASb. The initiative has also established partnerships with educational and literacy development initiatives to ensure that its stories are widely distributed to teachers and learners, as well as implementing literacy work using their storybooks.\textsuperscript{124}

The number of partnerships has grown significantly since ASb’s establishment. Partnership models vary widely, ranging from closely managed pilot sites or hubs (2013 to 2016) to formal organizational agreements (distributors and implementers), provincial and national government departments, and even publishers.

ASb’s strategy for encouraging use of its website and storybooks in new countries is to establish a network of partners and ensure that there is a representative collection of its storybooks translated into local languages. Local story development workshops are also carried out so that people can create their own storybooks, and contribute to the website by creating, translating, adapting and commenting on stories.\textsuperscript{125} A table delineating workshop development costs can be found below.

Some partners work with ASb to integrate mother tongue storybooks into teacher education, and other partnerships focus on implementation in schooling, where ASb works with national and provincial education departments to encourage them to use African storybooks, and to begin implementing an open publishing approach to textbook provisioning.\textsuperscript{126}

ASb partners with organizations to supply its services to supplement its core funding. To date, ASb services have been sought by various organizations:\textsuperscript{127}

- The Norwegian Digital Learning Arena (NDLA), which manages the Global Digital Library (GDL)\textsuperscript{128} requested ASb to quality assure Ethiopian language storybooks, as well as South African and Kenyan storybooks approved by government officials in these two countries.
- Room to Read\textsuperscript{129} contracted ASb to train the publishers with which it is working in its REACH for Reading project in South Africa, and to prepare resource materials to support participants as they train their own translators.
- The Roger Federer Foundation\textsuperscript{130} contracted ASb for the development of a course on school readiness for Namibian Early Childhood Development educators – an element of which will be getting African Storybooks into local Namibian languages and used through the course.

\textsuperscript{127} Personal correspondence from Tessa Welch to Kirsty von Gogh, 10 August, 2018.
\textsuperscript{128} \url{https://www.digitallibrary.io/}
\textsuperscript{129} \url{https://www.roomtoread.org/countries/south-africa/}
\textsuperscript{130} \url{http://www.rogerfedererfoundation.org/en/home/}
• In the Reading Support Programme, Saide took responsibility for the LTSM component. This involved use of skills of Saide staff, not only dedicated ASb staff, and provided Saide the opportunity to explore effective printing and distribution at scale, as well as the relationship between methods of distribution and use.

• ASb led a Story Making West Africa workshop process, organized by the British Council for writers and illustrators from Nigeria, Ghana, and Sierra Leone. From its core funding, ASb paid for staff time and for the illustration of five storybooks, and the British Council paid for all expenses of participants (including ASb), and for a further ten sets of illustrations. This enabled ASb to publish all 20 storybooks generated in the workshop in two or more languages.

• The Open University has partnered with ASb for the development and dissemination of the TESSA Badged Open Course on Teaching Reading.

African Storybook runs its own centralized publishing programme that produces between 30 and 50 new storybooks each year. The ASb team sources and develops story manuscripts in writing workshops and through work with local partners in multiple African countries, including Ethiopia, Ghana, Nigeria, Rwanda, and Zambia. Stories are developed and written by the communities that will use the storybooks, with a focus on local content. ASb also offers translation workshops depending on African Storybook or partner capacity. Wherever possible, storybooks are illustrated by local illustrators. Manuscripts produced in these workshops are sent to Saide’s central office for production and online publishing.

Most story development workshops have been held jointly between ASb and another partner. For example, the British Council in Abuja and Imagine1Day in Ethiopia. ASb and partners pay for accommodation, travel and subsistence costs, but not for the writing. Authors are guided in the writing process. Translations are commissioned and quality assured so they can be ASb approved.

Every title forming part of the ASb approved collection is published in English and an African language. ASb staff can check languages with which they are familiar, but, if the languages are not spoken internally, then an additional check is done by an external language expert.

Storybooks and translations that ASb mounts on the platform are ‘ASb approved,’ while stories from other users are called ‘Community storybooks’.

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131 https://www.foundation.co.za/reading
132 https://www.britishcouncil.org.ng/english/story-making-workshop
133 http://www.open.edu/openlearncreate/course/view.php?id=3287
The ASb website provides guidelines for community users when developing and using storybooks on the African Storybook website. The following guides are available under a CC BY licence: Developing, translating and adapting African Storybooks, Preparing to use African Storybooks with children, Using African Storybooks with children, and Guide to translation.

ASb also reviews a selection of community stories for possible approval. If these stories pass the basic quality check, they can be approved. Publishers and other content creators can also upload and submit stories for approval. Publishers and NGOs with content on the ASb platform include Book Dash, CODE Ethiopia, and Little Zebra Books.

Stories are available on the website at five reading levels:
1. First words – single words or a short simple sentence (up to 11 words)
2. First sentences – two or three short sentences (11–25 words per page)
3. First paragraphs – one or two short paragraphs (26–51 words per page)
4. Longer paragraphs – two or more paragraphs (52–75 words per page)
5. Read aloud – fewer pictures, more text (76–150 words per page)

Each story is available for download as a low-resolution PDF file in landscape format, a booklet print-ready PDF file, or as an EPUB file.

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136 All four guides are located on the ASb website: https://www.africanstorybook.org/. Click on the help and notes icon and go to indepth guides.

137 https://code.ngo/program/ethiopia

138 https://www.littlezebrabooks.com/
Figure 22: The front cover of an ASb-approved title, indicating the language in the bottom left-hand corner

Figure 23: The back cover, indicating the licence, attribution, and level of the story
The ASb team supports users to read storybooks offline, online, or from print copies, and will assist in getting books cost-effectively printed and delivered for large-scale projects through its publishing network, although it does not sell books direct to market. The platform provides various methods of delivery and distribution, including digital offline and online, as well as low-cost printing in booklet form.

Because all ASb titles are published digitally under an open licence, storybooks can easily be re-published on other sites and preloaded on devices for distribution in schools and libraries. For example, the Kenyan Institute for Curriculum Development has approved for re-publishing 175 ASb titles in three languages (Kiswahili, Ng’aturkana and English) on the Kenya Education Cloud and is loading ASb titles onto tablets for distribution to all Kenyan public primary schools through the Digital Literacy Program (DLP). It is unclear how many tablets are loaded with ASb titles. In South Africa, the Department of Basic Education, which recognized African Storybook as a key partner in its Read2Lead campaign, has uploaded 30 titles in six African languages and English on its website. However, 30 titles in all eleven official languages are on Vodacom’s Digital Classroom.

In a report from the ASb website 31 August 2018, there were 3,693 registered users, up from 2,110 in March 2017. The site had 1,127 active users and contained 493 government-approved stories. There were 1,030 unique stories, and 3,440 approved stories on the site. English storybooks accounted for 535 approved storybooks, followed by Kiswahili with 334 titles and IsiZulu with 145 titles. There were 89,437 downloads during the month, but this does not account for offline use, redistribution of downloaded titles, and content stored on other sites, such as World Reader.

In 2016, ASb released a Reading app on Android and iOS to facilitate offline reading on mobile devices. As of August 2018, there are 968 active users of the app.

**Intellectual Property Rights**

All content on the African Storybook platform is licensed under Creative Commons licences. Users can upload content under a Creative Commons Attribution (CC BY) licence, which allows use, translation, and adaptation without payment or permission. The CC BY licence allows users to distribute, remix, tweak, and build upon the original work, even commercially, with attribution to the original creation. There are some storybooks with a

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139 Personal correspondence from Tessa Welch to Kirsty von Gogh, 10 August, 2018.
140 http://icta.go.ke/digischool/digital-content/
143 Download stats report received from African Storybook, August 2018.
144 Download stats report received from African Storybook, August 2018. Active App downloads are the number of users who currently have the App on their device, not the total number of times the App has been downloaded. Users sometimes download and then delete.
non-commercial restriction on the CC licence (CC BY-NC), allowing users to distribute, remix, tweak, and build upon the original work, but not commercially, and with attribution to the original creation.

All tools for translation, adaptation and creation are free to users. ASb also provides its guides for developing, translating and using storybooks for teachers and content creators on its website, under a CC BY licence.

**Business Model: Costs and Revenue**

Currently, African Storybook secures funding for its core activities from two main funders. UK-based Comic Relief\(^{145}\) is the African Storybook Initiative’s primary funder and fully funded the first four years.\(^{146}\)

To remain sustainable, Saide needs to diversify funding for the African Storybook. It is working on this through:\(^{147}\)
- Collaborative project procurement for integration into large-scale literacy development programmes for schools and libraries; developing and marketing publishing services such as illustration, translation, storybook selection for printing, management of printing, and pooled procurement services; and
- Testing crowd-sourced funding for non-project related storybook illustration, translation and creation.

According to an external accountability evaluation of the African Storybook initiative:\(^{148}\)

*There is no doubt that African Storybook have considered sustainability and actively worked towards making the project less reliant on the central office over time. This is evident in the minimalist resourcing of pilot sites, and then gradually weaning sites off central office support; in the attention paid to building partnerships with organisations that can distribute storybooks widely and/or implement literacy work using their storybooks; in the building of skills of key people through their training (that was widely commented upon); in their research of alternative income revenue models and/or funding sources; and, especially, in the arduous work associated with integrating the project into existing state education systems. This work is hard because while educational authorities recognize that children need to read a lot – and for pleasure (African Storybook’s mandate) – in order to embed new reading practices, a range of constraints push policymakers in the direction of strong preference for graded readers at the expense of storybooks.*

*There is little doubt that the project is sustainable. But, funding is required to move a strong project on the cusp of take-off, to a level where it can make a significant long-term impact on early mother tongue literacy development in Africa and firmly establish a “model” for the thoughtful use of technology to do so, in areas that would not normally be regarded as conducive to this form of delivery.*\(^{149}\)

**Cost Analysis**

ASb provided three tables – one for translation costs, one for a two-day story development workshop, and one on printing costs. Expenses are direct costs only. The exchange rate used is R12 to the USD.\(^{150}\)

\(^{145}\) [https://www.comicrelief.com/](https://www.comicrelief.com/)

\(^{146}\) Personal communication from Tessa Welch to Kirsty von Gogh, 10 August 2018


\(^{150}\) Personal communication from Tessa Welch to Neil Butcher and Kirsty von Gogh, 17 December 2018
ASb is attempting to reduce the costs of the translation process by equipping translators to translate and quality assure online. However, often the experts in a particular language are not sufficiently digitally skilled to manage this. The costs below assume that the African Storybook office uploads the translations. Total costs are predicated on 20 titles.

**Table 12: Translation of existing ASb titles**

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Unit</th>
<th>Total ZAR</th>
<th>USD total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of translation process for 20 titles</td>
<td></td>
<td>R 5,000</td>
<td>$416.67</td>
</tr>
<tr>
<td>Translation costs per storybook (average)</td>
<td></td>
<td>R 385</td>
<td>$641.67</td>
</tr>
<tr>
<td>QA per storybook</td>
<td></td>
<td>R 50</td>
<td>$641.67</td>
</tr>
<tr>
<td>Uploading and checking – 2 hours per book</td>
<td></td>
<td>R 825</td>
<td>$375.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$ 2,516.67</strong></td>
</tr>
<tr>
<td><strong>Per translation</strong></td>
<td></td>
<td></td>
<td><strong>$ 125.83</strong></td>
</tr>
</tbody>
</table>

**Table 13: Two-day story development workshop to generate six titles in a local language and English (facilitator travel to neighbouring country usually required)**

<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Cost per item</th>
<th>Total cost in ZAR</th>
<th>Total cost in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saide workshop facilitator (2 days planning and admin + 2 day workshop)</td>
<td>R 5,000</td>
<td>R 20,000</td>
<td>$ 1,666.67</td>
</tr>
<tr>
<td>2 days publishing time per storybook title x 6 titles (with all versions – including editing, managing illustrators and translators, uploading illustrations and text, publishing and ASb approving post-production checking)</td>
<td>R 5,000</td>
<td>R 20,000</td>
<td>$ 5,000.00</td>
</tr>
<tr>
<td>Average cost of illustrations per storybook = R 13,000 x 6 titles</td>
<td>R 13,000</td>
<td>R 81,600</td>
<td>$ 6,800.00</td>
</tr>
<tr>
<td>QA coordinator, Ethiopia (1 day admin plus 2 days’ workshop)</td>
<td>GBP 180</td>
<td>GBP 540 (note costs are in GBP)</td>
<td>$ 675.00</td>
</tr>
<tr>
<td>Workshop costs</td>
<td>R 4,070</td>
<td>R 8,140</td>
<td>$678.33</td>
</tr>
<tr>
<td>Two days’ travel</td>
<td>R 5,000</td>
<td>R 10,000</td>
<td>$833.33</td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td></td>
<td>$1,233.33</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td><strong>$ 16,896.67</strong></td>
</tr>
<tr>
<td><strong>Per title including travel</strong></td>
<td></td>
<td></td>
<td><strong>$ 1,407.22</strong></td>
</tr>
<tr>
<td><strong>Per title excluding travel</strong></td>
<td></td>
<td></td>
<td><strong>$ 1,235.00</strong></td>
</tr>
</tbody>
</table>

The information on print costs in the table below is derived from books printed in 2017/2018.
<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Total order</th>
<th>ZAR (average per book)</th>
<th>USD (average per book)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Print on demand (5 copies)</td>
<td>R 513.46</td>
<td>R 102.69</td>
<td>$ 8.56</td>
</tr>
<tr>
<td>Print and delivery, 80 titles per school for 25 schools (14,240 books), plus management of book order</td>
<td>R 336,557.63</td>
<td>$ 23.63</td>
<td>$ 1.97</td>
</tr>
<tr>
<td>Print of 137 titles for 1,020 schools (562,928 books) plus management of book order</td>
<td>R 1,531,016.05</td>
<td>R 2.72</td>
<td>$ 0.23</td>
</tr>
</tbody>
</table>
Appendix 5: StoryWeaver from Pratham Books

Non-profit publisher
India
https://storyweaver.org.in/ and http://prathambooks.org/

Introduction

Pratham Books was set up in 2004 as a not-for-profit children’s book publisher to fill a gap in the production of high-quality, affordable books in local Indian languages. Its mission is to ensure that every child has a book. Pratham Books aims to keep prices below Rs.35 (approximately 50 US cents) per book.

About 50 percent of Indian children are not reading at the correct level, in part because of the lack of quality reading material in mother-tongue languages. India has 22 official languages and hundreds of other local languages, but most books published are in English and Hindi due to higher demand for these languages. Hindi is the largest language published in India. This has resulted in a paucity of mother-tongue reading resources for children across the country.

Pratham Books has created an alternate publishing model to resolve these inequities. In 2009, it adopted open licensing to reach more of the 350 million children in India. Pratham Books has published titles in 18 Indian languages, including early readers, fiction, non-fiction, and storybooks on science, history, mathematics, and nature.

Outreach at Pratham Books: ‘a book in every child’s hand’

‘A book in every child’s hand’ is the Pratham motto, and Odisha State is an example of how Pratham tries to make it happen. According to Himanshu Giri, chief operating officer of Pratham Books, ‘Lack of books in mother tongue is the main reason for alienation of tribal children from school education. These books are aimed at making learning fun for the children by making the process enjoyable, contextual and skill-oriented.’ With 62 registered tribes, the tribal population makes up 75 percent of the state’s population. Many languages have no curriculum; Pratham Books was the first publisher to create books in some of these languages. Pratham Books wants to make reading fun and easy for the children who are being educated in a language that is not their mother tongue and struggling with school education. A group of local language writers and poets wrote stories that were read to children in the tribal communities. Ten stories were selected and produced in tribal and Odia languages, and written in Odia script.151

Since 2010, Pratham Books has made 1,100 titles available on Scribd,152 an open publishing platform and membership book service used in 194 countries. Pratham Books titles are available in English, Hindi, Telugu, Odia, Assamese and Bengali and have been read 487,000 times.153 Since StoryWeaver was launched in 2015, Pratham Books releases its content on this platform only, and no longer adds titles to Scribd. It has also recorded 153 audio stories in nine languages – Hindi, Tamil, Marathi, Kannada, Gujarathi, Telugu, Urdu, Punjabi and English – and these are freely available on SoundCloud.154

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152 See https://www.scribd.com/publisher/128645/Pratham-Books
153 Personal communication to Lisbeth Levey and Kirsty von Gogh from Suzanne Singh, 10 October 2018
154 These recorded stories are available at https://soundcloud.com/prathambooks/
In 2016, with partner support, Pratham Books piloted a project where users could give a missed call, and they would then receive a call back to listen to a story in English or Hindi. 40,000 calls were placed during the period of four days and 5,000 children in Delhi listened to stories. There were 40 stories available in the two languages. Through this, 250,000 stories were delivered in 1.5 million minutes to 300,000 children.

Pratham Books received a grant from the Vodafone Foundation to continue this project in five states for ten days in October 2017. Additionally, listeners received a link via SMS to the story on StoryWeaver.

In addition, Pratham Books has created a compact classroom library, known as the Library-in-a-Classroom, for resource-scarce schools. It contains over 100 books displayed in a modular unit that can be locked up for safekeeping. With the support of donors and partners, the classroom library model enables Pratham Books to get more books to children in remote locations across India. In 2016/2017 Pratham Books set up 1,280 classroom libraries with 154,000 books across 18 Indian states.

Figure 25: Library-in-a-Classroom (credit: Pratham Books)

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155 A missed call is a phone call that is deliberately terminated by the caller before being answered.
What does StoryWeaver do?

StoryWeaver is an online platform set up by Pratham Books to put in place new ways to ensure that every child can read books in his or her own language. The platform was created through a 2013 grant from Google for $3.85 million.\(^{158}\)

Launched in 2015, StoryWeaver is an open and interactive digital repository that contains stories in over 100 languages from around the world. Its aim is to provide openly licensed stories for children in their mother tongue. The digital platform started with a repository of 800 stories in 24 languages.\(^ {159}\) It allows writers to upload stories, illustrators to upload artwork, and readers to access these stories.

In 2017, Pratham Books was awarded the Library of Congress Literacy Awards International Prize of $50,000 for promotion of literacy through the creation and distribution of multilingual books on the StoryWeaver platform.

*Figure 26: In October 2018, StoryWeaver had 9,489 stories in 122 languages.*

StoryWeaver content is created in various ways. First, an inhouse team at Pratham Books identifies gaps in available subject matter or languages and commissions books to fill these gaps. These are published by Pratham Books and uploaded to StoryWeaver. Second, users can write content with existing illustrations or supply their own, then mount these stories on the platform. Third, StoryWeaver hosts workshops for content creators who receive training and a stipend for their work. These methods enable StoryWeaver to create content in more local languages, revive languages that have no written texts, and include more diverse groups of content creators.

The platform provides ‘Community Guidelines’\(^ {160}\) for content creators. About 40 percent of the stories created by StoryWeaver community members have not been vetted by the editorial team and carry no quality assurances. The remaining stories are quality controlled by the StoryWeaver team; some of these content creators may be requested to produce more stories at a later stage. The Pratham Books team’s goal is to have over 80 percent of the content on the platform reviewed by March 2019.\(^ {161}\)

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\(^{158}\) Google. (No date). Pratham Books: StoryWeaver. Available at https://www.google.org/our-work/education/storyweaver/


\(^{160}\) See https://storyweaver.org.in/community_guidelines

\(^{161}\) Personal communication to Kirsty von Gogh from Suzanne Singh, Chairperson of Pratham Books, 8 October 2018
Pratham Books also partners with publishers who agree to use open licences to supply content for the StoryWeaver repository. In this way, publishers can upload backlist titles under an open licence to promote publishing of their front list titles, and readers can be directed to the publisher’s site from StoryWeaver. Organizations that have supplied content to the repository to date include Book Dash\(^{162}\), The Asia Foundation\(^{163}\), and ASb\(^{164}\) as well as publishers such as Sub-Saharan Publishers\(^{165}\), based in Ghana, and Ms Moochie\(^{166}\), a publisher based in India. Pratham Books is also engaging with several additional Indian publishers to upload their content onto the StoryWeaver platform.

All publishers have a profile page where they can include their logo, a brief description of their organization, and a website link. Logos also appear on all their books. StoryWeaver attaches a 'Recommended' tag to all stories supplied by publishers, as Pratham Books has worked with the publishers to upload the books and has assured the quality of these titles. The 'Recommended' tag makes publishers' stories more accessible, since many users are likely to look for 'Recommended' stories. Publishers can see how their stories are being used. On their profile page, they can see the number of reads and derivatives for each story. On the story detail page, which is accessible to all users, they can see the number of reads and likes, as well as viewing the derivative versions.

*Figure 27: Book Dash’s page on StoryWeaver*

Stories are available at four levels: Level one stories contain fewer than 250 words and words are repeated. Level two stories present simple concepts and contain up to 600 words. Level three stories use longer sentences and contain up to 1,500 words. Level four stories are longer and more nuanced than level one to three stories.

\(^{162}\) [http://bookdash.org/](http://bookdash.org/)
\(^{163}\) [https://asiafoundation.org/](https://asiafoundation.org/)
\(^{164}\) [http://www.africanstorybook.org/](http://www.africanstorybook.org/)
\(^{165}\) [http://subsaharanpublishers.com/](http://subsaharanpublishers.com/)
\(^{166}\) [http://iloveread.in/Static/MsMoochie.php](http://iloveread.in/Static/MsMoochie.php)
Each story is available for download as a low-resolution PDF file, an A4 print-ready PDF file, or as an EPUB file. While the complete StoryWeaver library is available online, it has also launched an offline library. Readers can now select up to twelve stories at a time to store offline on a mobile device or a computer.

Figure 28: Information is supplied for each title, including the author, publisher, illustrator, translator (where applicable), level, a blurb, other versions available, how many times the story has been read and how many reading lists have included the title.

Marching to Freedom

Written by Subhadra Sen Gupta
Illustrated by Tapas Guha

Published by Pratham Books

Mahatma Gandhi and his followers have decided to march to Dandi to protest against the unfair salt tax imposed by the British. 9-year-old Dhani who lives at the Sabarmati Ashram wants to go too. This tale captures the spirit behind the momentous event that inspired millions of Indians to join the struggle for Independence.

This story is a part of 3 Reading Lists

This book has been published on StoryWeaver by Pratham Books.
Users of the StoryWeaver platform include literacy organizations, the Indian government, textbook publishers, digital classroom providers, parents, teachers, entrepreneurs who print and sell the books or create apps using the books, and organizations that adapt the books for Braille or animation, such as BookBox.167

In 2017, StoryWeaver added a feature called Lists, a facility to create curated reading lists for teachers to help them find relevant content more efficiently. The lists’ team spoke to organizations that use StoryWeaver about how they were currently using the platform, how they searched for stories, and whether they found this an easy or difficult task. Thus, each list is based on needs articulated by teachers who use the platform.

While Pratham Books’s print catalogue has books in 20 languages, StoryWeaver, has storybooks available in over 100 languages. Roughly 40 percent of these languages have been added in response to user requests, indicating a need for mother-tongue reading materials in early literacy. As many of these titles are translations or adaptations from the original titles, the role of translation is crucial.168 Translation partners are added to the platform based on their language strengths and reviews by native speakers of a language. Stories adapted by these partners from recommended stories also carry the recommended tag. StoryWeaver’s engagement with translation groups includes international non-profits, such as The Rosetta Foundation,169 Translators Without Borders,170 and organizations

167 See https://www.bookbox.com/ and the BookBox organizational profile, Appendix Two.
168 See StoryWeaver’s Translation Tools and Tips: https://storyweaver.org.in/translation_tools_and_tips
169 https://www.therosettafoundation.org/
170 https://translatorswithoutborders.org/
such as the Uganda Christian University,\textsuperscript{171} which has translated 51 stories into eight Ugandan languages,\textsuperscript{172} and has its own quality-control mechanisms.

StoryWeaver also has an active YouTube channel\textsuperscript{173} with tutorials for story creation and translation, as well as instructions on how to use the offline library and information on feature upgrades. The channel showcases StoryWeaver activities and stories that are read along with subtitles.

\textit{Figure 31: StoryWeaver’s YouTube channel}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{storyweaver_youtube.png}
\end{figure}

\textbf{Intellectual property rights}

StoryWeaver, which was built on an open-licensing philosophy, allows unrestricted access to all of Pratham Books’ content, using Creative Commons licences, as well as all other stories and illustrations on the website. The CC BY licence that StoryWeaver uses is very permissive. Anyone can distribute, remix, tweak, and build upon the original work, even commercially, with attribution. This policy is discussed with authors and illustrators before they are commissioned to do any work, and it is explained on the site for everybody who submits content to the repository. All translation and formatting tools are free.

\begin{itemize}
\item \textsuperscript{171} 
\url{http://ucu.ac.ug/}
\item \textsuperscript{172} At 19 October, 2018 on \url{https://storyweaver.org.in/stories?publisher=Uganda%20Christian%20University&query=&sort=Relevance}
\item \textsuperscript{173} See \url{https://www.youtube.com/channel/UCH9_ahI5Vu8P9tElauPWahg/feed}
\end{itemize}
Business model: costs and revenue

Pratham Books receives most of its funding for content creation and running the StoryWeaver platform through donations from Indian and international foundations, non-profit and corporate organizations, and individuals. Donors include CISCO, Dell, Google India Pvt. Ltd, Oracle, Pratham Education Foundation, Tata Trusts, and Vodafone Foundation.¹⁷⁴

Pratham Books, which uses a social publishing model, employs Creative Commons open licensing to achieve flexibility and a community of users to increase the scale and reach of its efforts. Pratham Books also licenses content to multiple organizations and individuals by releasing books under a Creative Commons licence, instead of using all-rights reserved copyright and a traditional publishing model. This strategy eliminates time-consuming negotiations with every organization wishing to use its content. Equally significant, rather than negatively impacting sales, the open licensing model has boosted sales of openly licensed titles that are available online. In 2013, sales of print books that were openly available on Scribd outsold books that were not available on the platform by a ratio of three to one.

Suzanne Singh, Chairperson of Pratham Books, believes that print sales continue to do well, even though the online version of every story is free. She notes that she:

"looked at a selection of our top rated books on StoryWeaver - some are new titles and some are old ones and it looks like print is continuing to thrive in spite of the open free version. A case in point is the first title - Fat King, Thin Dog which is one of our older and more popular titles and in spite of the high readership of the free version, it continues to sell in large numbers. Equally the last 4 titles in the list which are about a year old, have consistent sales even with the free version which would have been released in parallel with the print version." ¹⁷⁵

The table Singh provided is below.

Table 15: Print sales versus online readership in StoryWeaver

<table>
<thead>
<tr>
<th>Title Name</th>
<th>Copies Sold in 2017</th>
<th>Readership on StoryWeaver</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Older Titles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fat King Thin Dog</td>
<td>12,011</td>
<td>20,414</td>
</tr>
<tr>
<td>Bheema the Sleepyhead</td>
<td>8,893</td>
<td>3,387</td>
</tr>
<tr>
<td>Season 3 Spring Everything</td>
<td>3,866</td>
<td>8,582</td>
</tr>
<tr>
<td>Looks New</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Boy and the Drum</td>
<td>2,758</td>
<td>13,824</td>
</tr>
<tr>
<td><strong>New Titles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Butterfly Smile</td>
<td>3,663</td>
<td>3,686</td>
</tr>
<tr>
<td>Ammachi’s Amazing Machines</td>
<td>4,501</td>
<td>6,169</td>
</tr>
<tr>
<td>How Old is Muttajji?</td>
<td>4,985</td>
<td>5,501</td>
</tr>
<tr>
<td>Jadav and the Tree Place</td>
<td>2,723</td>
<td>5,735</td>
</tr>
</tbody>
</table>

¹⁷⁴ http://www.prathambooks.org/our-supporters
¹⁷⁵ Personal communication to Lisbeth Levey from Suzanne Singh, 3 August 2018
Pratham Books sells its printed storybooks and story cards online, via its e-store and across India, to schools, government, and individuals.

The Pratham Books organization consists of an editorial team, a design and production team, a sales team, a marketing team, and a social media team. Its Board of Trustees oversees the running or the organization and keep its activities in line with the overall goal of putting ‘a book in every child’s hand’.

Cost Analysis

The table below presents costs involved in creating titles for Pratham Books. Costs are in Indian Rupees and converted to US$. The overhead cost is factored into the editorial cost of Rs.3,000 (US$47) per title.

Table 16: Costs involved in creating print titles in Indian Rupees and US Dollars

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost in Rupees</th>
<th>Cost in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing fee</td>
<td>Rs.5,000 per title</td>
<td>$79 per title</td>
</tr>
<tr>
<td>Editorial fee</td>
<td>Rs.3,000 per title</td>
<td>$47 per title</td>
</tr>
<tr>
<td>Translation</td>
<td>Rs.4 per word</td>
<td>5c per word</td>
</tr>
<tr>
<td>Translation review</td>
<td>Rs.1 per word with minimum payment of Rs.250</td>
<td>2c per word with minimum payment of $4</td>
</tr>
<tr>
<td>Proofreading</td>
<td>Rs.250 to Rs.400 per book, depending on level</td>
<td>$4 to $6.30 per title, depending on level</td>
</tr>
<tr>
<td>Design and layout</td>
<td>Rs.1,000 per page</td>
<td>$15.75 per page</td>
</tr>
<tr>
<td>Typesetting</td>
<td>Rs.125 per page</td>
<td>$2 per page</td>
</tr>
<tr>
<td>Pre-press review</td>
<td>Rs.25 per page</td>
<td>40c per page</td>
</tr>
<tr>
<td>Full colour illustration</td>
<td>Rs.1,000 per illustration on average</td>
<td>$15,75 per illustration on average</td>
</tr>
<tr>
<td>EPUB creation/conversion</td>
<td>This is an automated process and incurs no extra cost.</td>
<td></td>
</tr>
<tr>
<td>Printing</td>
<td>Printing ranges from Rs.17.50 to Rs.39 for higher print runs and Rs.120 to Rs.430 for print on demand</td>
<td>Printing ranges from 25c to 50c for higher print runs and $1.90 to $6.80 for print on demand</td>
</tr>
</tbody>
</table>

The print cost of storybooks is two to three times the cost of the product when premium printing quality is used, so this keeps the costs of books high. The cost of warehousing books for two years costs more than the books are worth. Depending on sales, a print run of 500 books can last 18 months, so Pratham Books has found that print on demand can be better, although this is not always cost effective. Printing directly from StoryWeaver is a tough task because print-on-demand does not work at the ideal price point of 50c to US$1.

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176 [http://store.prathambooks.org/](http://store.prathambooks.org/)
177 The exchange rate is calculated by the average rate for January 2018 of Rs.63.65 to US$1.
The table below presents costs involved in creating titles for StoryWeaver, and uploading content from publishers. The cost of the writing fee is calculated on the cost of a writers’ workshop of Rs.100,000 (US$1570) yielding ten to eleven manuscripts. Costs are in Indian Rupees and converted to US$.

Table 17: Costs involved in creating digital in Indian Rupees and US Dollars

<table>
<thead>
<tr>
<th>Cost driver</th>
<th>Cost in Rupees</th>
<th>Cost in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing fee</td>
<td>Rs.10,000 per title</td>
<td>$157 per title</td>
</tr>
<tr>
<td>Editorial fee</td>
<td>Rs.1,900 per page</td>
<td>$30 per page</td>
</tr>
<tr>
<td>Translation</td>
<td>Rs.4 per word</td>
<td>6c per word</td>
</tr>
<tr>
<td>Translation review</td>
<td>Rs.2 per word</td>
<td>3c per word</td>
</tr>
<tr>
<td>Proofreading</td>
<td>Rs.200 per title</td>
<td>$3.15 title</td>
</tr>
<tr>
<td>Illustration</td>
<td>Rs.32,500 per title</td>
<td>$510 per title</td>
</tr>
<tr>
<td>Typesetting</td>
<td>Rs.300 per book</td>
<td>$5 per book</td>
</tr>
<tr>
<td>Redesigning and uploading to StoryWeaver</td>
<td>Rs.5,000</td>
<td>$80 per title</td>
</tr>
</tbody>
</table>

For uploading content from publishers onto the platform, costs include redesigning books into digital templates, editorial costs to tag images, uploading content onto the StoryWeaver platform, and proofreading the English version. Excluded are the costs of converting text to Unicode and creating high-resolution images.

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178 The exchange rate is calculated by the average rate for January 2018 of Rs.63.65 to US$.178
Appendix 6: Sub-Saharan Publishers
Commercial publisher
Ghana
http://subsaharanpublishers.com/

Introduction

In Ghana, as in other African countries, textbook publishing constitutes about 70 percent of a publisher’s book list. Many publishers depend on revenue from educational publishing, including for early grade literacy, to keep their business afloat. Publication of children’s picture books does not produce revenue for the most part, unless commissioned by a donor, such as USAID, the Barbara Bush Foundation for Family Literacy, and DFID. These donors contract directly with publishers, both commercial and NGOs. The Ghanaian government does not order many children’s storybooks. In general, orders are few and far between and cannot be predicted in advance.

What does Sub-Saharan Publishers do?


The environment has always been an important theme to Sub-Saharan Publishers. At the time of its establishment, it produced many children’s books on the environment. Its first nine titles were illustrated children’s books, two of which were sponsored by the Ghana Environmental Protection Agency. The environment continues to be an important theme, as is gender, both for children’s picture books and those for scholars. Ofori-Mensah explains the reason for the publisher’s emphasis on the environment as follows:

I love nature; I grew up in a rural community where life is dependent on nature; the forest, the rivers were protected by traditional rules. In my adult life I have seen these rules thrown to the dogs; the quest for quick riches has turned our rivers into muddy ponds and farm lands are being destroyed. The traditional environmental protection rules are no longer respected; government is having a hard time getting its environmental laws enforced.

Sub-Saharan Publishers regularly exhibits at international book fairs, such as Bologna, Frankfurt, and Cape Town (now the South African book fair). Participation in these international fairs is crucial because they are venues for buying and selling rights. At the first fair in Cape Town, for example, Rainbird Publishers in Johannesburg bought the rights to six picture books written and illustrated by Meshack Asare, the noted Ghanaian artist. In addition, rights to Sosu’s Call were widely sold because Sub-Saharan Publishers exhibited the title at so many fairs.

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179 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 4 December 2017
180 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 4 December 2017
The book’s many awards and subject matter helped too, of course, and are discussed in detail below. Sub-Saharan Publishers also plays a central role in African publishing trade developments through Ofori-Mensah’s role as a council member of the African Books Collective,\textsuperscript{181} a former executive committee member of the International Board for Books for the Young (IBBY),\textsuperscript{182} and a former executive board member of the African Publishers Network (APNET).\textsuperscript{183}

The role of children’s books at Sub-Saharan Publishers

Table 18: Social issues are central and universal

<table>
<thead>
<tr>
<th>Title</th>
<th>Social Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sosu’s Call</td>
<td>Inclusion of the physically challenged</td>
</tr>
<tr>
<td>Mimi Mystery</td>
<td>Empowerment of the girl child</td>
</tr>
<tr>
<td>The Cross Drums</td>
<td>Friendship and peace</td>
</tr>
<tr>
<td>The Canoe Story</td>
<td>Environmental protection</td>
</tr>
<tr>
<td>The Herd Boy</td>
<td>Empowerment, self-belief, and leadership</td>
</tr>
<tr>
<td>Gizo-Gizo</td>
<td>Environmental protection</td>
</tr>
</tbody>
</table>

Children’s books constitute about 60 percent of the Sub-Saharan Publishers’ portfolio. A grant from the Danish International Development Agency (Danida) to Sub-Saharan Publishers, through its Danish Private Sector Development Programme, provided training in the fundamentals of publishing children’s books. Sub-Saharan Publishers was teamed up with the well-known Danish publisher of children’s books, Vagn Plenge, who concentrates on ‘publishing warm books from warm countries, in particular, picture books.’ Plenge strongly believes in the importance of reading stories from the global South rather than reading stories written by Europeans about the developing world.\textsuperscript{184}

Award-winning children’s books published by Sub-Saharan Publishers include: Kwajo and the Brassman’s Secret about Ashanti gold weights, which won the 1982 Noma Award for Publishing in Africa and the 2015 NSK Neustadt Prize for Children’s Literature, which is given by the University of Oklahoma in the United States; Cat in Search of a Friend, which won the 1985 Austrian National Book Prize;\textsuperscript{185} Sosu’s Call, which won several prizes (see next page); The Magic Goat, which won the 1999 Toyota Prize; Mimi Mystery, which was on the 2014 IBBY Honor List; and, most recently, Gizo Gizo, which won the Children’s Africana Best Book Award for 2017.

\textsuperscript{181} ABC, which was established in 1989 is a consortium of the major African publishers. It was founded to facilitate the ability of these publishers to market, sell, and ship their titles internationally. Go to http://www.africanbookscollective.com.

\textsuperscript{182} http://www.ibby.org/ (The 2019 IBBY Africa regional meeting will be held in Accra.)

\textsuperscript{183} APNET was established in 1992 to help African publishers, but is no longer active. During the period of its activity, APNET also facilitated capacity-building training and meetings. Go to https://en.wikipedia.org/wiki/African_Publishers_Network.


\textsuperscript{185} The book was originally published in German as Die Katze sucht sich einen Freund by the Austrian children’s publisher, Verlag Jungbrunnen in 1984 and republished in English by Sub-Saharan publishers in 2000.
In addition, two titles for teenagers were recipients of CODE’s Burt Award for African Literature in 2010 – *The Deliverer* by Kwabena F. Ankomah-Kwakye and *The Mystery of the Haunted House* by Ruby Yayra Goka. A *Nightmare* by Agnes Gyening Asiedu, about child marriage, won the 2017 Burt Award. This award recognizes excellence in young adult fiction from Tanzania, Ethiopia, Ghana, and Kenya. Separate competitions are held for writers in each country, with the purpose of encouraging authors to write relevant, high-quality novels in English (the medium of instruction of high schools) for young people, aged between twelve and eighteen years. Winning authors share CAD$21,000 in annual prizes in each country. Publishers are willing to publish the winning titles because CODE guarantees the purchase of 60 percent of the initial print run of 5,000 copies, which is distributed to schools and libraries, on condition that the publishers pay for and actively market the remaining 40 percent.

*Figure 33: Sosu’s Call in Spanish on YouTube*[186]

*Sosu’s Call* was Sub-Saharan Publishers’ first award-winning storybook; it won UNESCO’s first prize for *Children’s and Young People’s Literature in the Service of Tolerance* in 1999. It is listed as one of the top twelve titles of *Africa’s 100 Best Books of the 20th Century* (published in 2002).[187] and has been named an *Honor Book for Young Children* by the African Studies Association’s Children’s Africana Book Committee, as a contribution to accurate and balanced material on Africa for children. *Sosu’s Call*, which was written by Meshack Asare, an award-winning artist,[188] is the story of a young disabled boy who is ostracized by the entire village because everyone fears that he will bring them bad luck because of his disability, but who nevertheless saves his village from floods by crawling on all fours to beat the village drum to raise an alarm for rescue.

The original print run was 5,000 copies. In 1998, the DFID Book Scheme for Basic Schools bought 20,000 copies. Sub-Saharan Publishers subsequently did a print run of 10,000 copies and no more have been printed since then. Sadly, plans to put the book in the hands of each primary school pupil stalled because of lack of funding.

The book has been translated into Castilian, Catalan, Portuguese, German, Danish, Italian, French, Czech, Kiswahili, Mongolian, Chinese with complex characters in Taiwan, and Simplified Chinese in the People’s Republic of China. The rights were sold for $1,000 per language plus $200-$250 for scans of the illustrations.

*Sosu’s Call* is also available digitally through WorldReader. In addition, someone recorded and mounted the Spanish version on YouTube; the resulting video has been viewed more than 3,700 times.[189]

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186 https://m.youtube.com/watch?v=fj6vQXp9IUo
187 This prestigious award was first suggested by the scholar, Ali Mazrui, at the 1998 Zimbabwe International Book Fair. After receiving 500 nominations, the prize committee, chaired by the writer and scholar, Njabule Ndebele, published the list in 2002. Archbishop Desmond Tutu served as Committee Patron. The fill list can be found at http://www.fables.co.za/hundred_best.html.
188 Asare has won numerous awards, including the 2015 NSK Neustadt Prize for Children’s Literature, the first African to do so. In 1982 he won The Noma Award for Publishing in Africa, and in 1999 the Toyota/Children’s Literature Foundation Best Picture Story Book Illustrator’s award and the UNESCO First Prize for Children and Young People’s Literature in the Service of Tolerance.
189 Ofori-Mensah did not know about the YouTube version, but was pleased to learn of it. (Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 5 November 2017)
Gizo-Gizo: A Tale from the Zongo Lagoon won the 2017 Children’s Africana Book Award (CABA), which is a part of the US African Studies Association and Africa Access. Africa Access was founded in 1989 to help schools, public libraries, and parents improve the quality of their K-12 collections on Africa; CABA is one of its initiatives. The book was written and illustrated by Emily Williamson, a volunteer, and the children and teachers of Hassaniyya Quranic School in Cape Coast, Ghana. Gizo-Gizo originated in a community-based project called the Zongo Water Project, the mission of which is to use water to improve the quality of life for the Zongo people, who migrated to Ghana from Hausa-speaking communities in the Northern Sahel, primarily in Nigeria. The Zongo community in Ghana is made up of people from the Northern part of the country, as well as the Sahel. They all have a mother tongue, but Hausa is the common community language, even though it is not Ghanaian.

Business model: philosophy, languages, production costs, and revenue

For its children’s books and young adult fiction, Sub-Saharan Publishers tries to meet the needs of children and young people to have books that they can enjoy reading. In addition to the donor purchases described above, Ghanaian parents and relatives who can afford to buy children’s stories make purchases. In addition, foreigners sometimes purchase these books to take home to their children. Ofori-Mensah believes that these stories are ‘cultural ambassadors’ for Ghana. Print copies are sold locally and occasionally in neighbouring countries. As an example, Faceless, a novel published in 2003, became a literature textbook for the West African Examinations Council (WAEC). Sub-Saharan Publishers distributed the books in Liberia, Sierra Leone, the Gambia, and Ghana, but because the Nigerian market is so large, rights to the book were sold to a Nigerian publisher.

Sub-Saharan Publishers also sells its books on Kindle through WorldReader. Books ordered through Worldreader by individuals on Amazon cost $3.99, but only $1 for qualified organizations that order in bulk through WorldReader. Sub-Saharan Publishers receives maximum of 100 percent and minimum of 60 percent for each book sold. Ofori-Mensah likes the WorldReader connection because titles are typically ordered for all Kindles in a class; therefore, more than one copy is sold at a time.

Sub-Saharan Publishers is very active in buying and selling rights. It sells the rights to its children’s books for several reasons. Although the African Books Collective markets and sells scholarly publications to readers outside of Africa, it does actively promote children’s books. In addition, shipping on the Continent is difficult. It is therefore more efficient and cost-effective for Sub-Saharan Publishers to market and sell rights to its storybooks and young adult fiction, primarily at international book fairs, but also elsewhere. Fees are often based on a book’s unit price for one year, usually between 6.5 and 7.5 percent of the unit price. There is also a non-refundable fee of $1,000, plus a fee of $250 for illustrations.

Sosu’s Call is an example of Sub-Saharan Publishers’ success in selling the rights to its books, which then serve as ambassadors of other cultures and languages. Mimi Mystery about a young Ethiopian girl is another. Rights were sold to translate Mimi Mystery to Kinyarwanda for sale in Rwanda. Thus, this book, which was written in

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190 See http://www.africanbookscollective.com/books/gizo-gizo for more information on the book.
191 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 4 December 2017
English by an Ethiopian (Michael Daniel Ambatchew) and illustrated by a Ghanaian (Edmund Opare), has now reached Rwanda.

In addition, buying rights can result in South–South trading. For example, Sub-Saharan Publishers bought the rights to *Como as Historias se Espalharam Pelo Mondo*, a Brazilian Portuguese-language children’s book by Rogério Andrade Barbosa and illustrated by Graça Lima, which tells a folk tale from West Africa. Barbosa worked as a United Nations volunteer in Guinea-Bissau (a former Portuguese colony in West Africa) and specializes in Afro-Brazilian literature and programmes. As Ofori-Mensah-Mensah explains, 192

‘How Stories Spread across the World’ is another example from afar which has come back to Ghana. It is a typical Ghanaian folk tale taken to the Americas during the transatlantic slave trade. I first saw the book in Guadalajara, flipped through and guessed the tale. I have had it translated into English and published it. The story was originally written in Portuguese and illustrated by a Brazilian... Irrespective of where a book is written or the language, once people know it and get interested in it, it will travel.

Buying rights from some publishers can be stressful, however. As an example, when Sub-Saharan Publishers first wanted to purchase the rights to Niki Daly’s story, Jamela’s Dress, it approached Frances Lincoln Publishers in the UK because this publisher had purchased worldwide rights to the book from Tafelberg, the original South African publisher. However, Tafelberg interceded; Sub-Saharan Publishers paid the rights fees to Tafelberg who sent it to Frances Lincoln, and the former offered to do the print-run for Sub-Saharan Publishers. Since this experience, Sub-Saharan Publishers now deals directly with Tafelberg, which keeps the African rights for Daly’s books for possible interest from African publishers.

According to Ofori-Mensah, most books are in English because: 193

> it is easier to sell them in English than in local languages. The snag is that the educated elite do not allow their children to speak their mother tongue: they speak English with them. Unfortunately, the teaching of local languages in the public schools has gone down drastically and the Ministry of Education is trying to salvage the situation.

In addition to commissioning books by African authors, Ofori-Mensah has worked with Kathy Knowles, a Canadian and Director of the Osu Children’s Library Fund 194 to co-publish stories in English and in Ghanaian languages, aimed at helping to develop the reading skills of the children using the libraries associated with the Osu Library Fund. A child from Northern Ghana told Knowles the *Fati* stories (see below), which Knowles then wrote. Ofori-Mensah was responsible for illustrations, layout, and production. The four books in the *Fati* series have sold very well, with *Fati and the Honey Tree* being the most popular (see Table 18 below). *Fati and the Honey Tree* was also translated into Dagaare and Sisali, two Northern Ghanaian languages. The Dagaare edition of *Fati and the Honey Tree* was selected for inclusion in a USAID/Ghana Education Service project, and 9,600 books were ordered through this contract. 195 UNICEF subsequently bought 935 copies, also in Dagaare, during the 2016-17 school year.

193 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 17 December 2015
195 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 8 January 2016
Table 19: The Fati series print runs

<table>
<thead>
<tr>
<th>Title</th>
<th>Number of Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fati and the Honey Tree</td>
<td>10,000 copies</td>
</tr>
<tr>
<td>Fati and the Old Man</td>
<td>10,000 copies</td>
</tr>
<tr>
<td>Fati and the Green Snake</td>
<td>9,000 copies</td>
</tr>
<tr>
<td>Fati and the Soup Pot</td>
<td>5,000 copies</td>
</tr>
</tbody>
</table>

*Fati and the Honey Tree* and *Sosu’s Call* were also translated into French in 2002, with support from the French Ministry of Foreign Affairs. The project was handled by *La Joie par les Livres*, a French NGO that supports the development of children’s literature and reading in the developing world, particularly former French colonies. Fatoumata Keita, an Ivorian award-winning writer of children’s stories and a professor at the University of Cocody in Abidjan, did the translation. Ofori-Mensah has also paid her to translate *Yennenga, the Dagomba Princess*, into French. Yennenga is the matriarch of tribes in northern Ghana and in Burkina Faso. Ofori-Mensah therefore believes that this storybook will be particularly relevant in Francophone Africa.

Five thousand copies is the minimum print run considered by Sub-Saharan Publishers as cost-effective. It does not print in Ghana and uses printers outside Ghana. The first books were printed in the UK and Belgium, then in Mauritius until the printing press there closed. Afterwards, Sub-Saharan Publishers began to send its print jobs to Eastern Europe, the Far East, India, and Dubai. Although printers in the Far East are cheap and the quality is high, shipments might take too long to arrive to meet deadlines.

The situation vis-à-vis consumables for printing makes offshore printing more cost-effective than printing in-country. Ghanaian printers must import paper and other printing inputs, such as ink, films, and plates, for which there are import duties. Printed books, however, can be imported without any duties because Ghana is a signatory to UNESCO’s *Florence Protocol on the Importation of Educational, Scientific and Cultural Materials*. The government has now removed VAT on paper and printing materials, but only for textbooks. Additionally, the government requires that the educational textbook publishers with which it contracts use Ghanaian printers to bolster the local printing industry. But printing locally does not reduce publisher costs. Ofori-Mensah explained:

> The cost of print in Ghana is definitely much higher than in the Far East or elsewhere; but since the essence is to give jobs to Ghanaian printers, the policy is bound to stay. Even without shipping costs printing in Ghana is more expensive than offshore.

Other production costs include content creation fees (author, illustrator, editor, layout, and translation), warehousing, and delivery to schools for textbooks. Authors typically receive ten percent of net sales up to a print run of 10,000 copies, then 12.5 percent for net sales exceeding 10,000. Illustrators are the most expensive cost component. A well-known illustrator like Meshack Asare can command $1,100 or more for a 32-page picture book. As Ofori-Mensah wrote:

> Meshack is in a special category by himself. Good illustrations for good picture books are quite expensive and hard to come by.

The Ministry of Education now requires publishers to deliver textbooks to each school and requires evidence of delivery before they are paid. (Production and other costs are detailed in the cost analysis section.)

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197 Akoss Ofori-Mensah, personal communication to Lisbeth Levey, 19 January 2016
Sub-Saharan Publishers fixes its prices on a sliding scale. The young-adult novel, *Faceless* (236 pages), for example, sells the book for $2.33 to customers in Ghana, but booksellers, schools, and organizations, receive a 40 percent discount for bulk purchases. Picture books are priced differently. *Gizo Gizo*, which has a hardback format and illustrations, costs $4.41 in Ghana, and $14.00 on the ABC website.

About 30 percent of the books produced by Sub-Saharan Publishers are scholarly books, primarily commissioned and paid for by the University of Ghana and individual scholars, many of them part of the university’s Readers Project.200

**An experiment with open licensing**

Until now, all books published by Sub-Saharan Publishers have been fully copyright protected. Akoss Ofori-Mensah was not familiar with open licensing before 2017, but became interested after attending a workshop organized by Neil Butcher and Associates on the potential of using open licensing to increase the availability of early literacy reading resources in mother-tongue languages.201

*Figure 35: Cover of Fati and the Honey Tree*

Following the workshop, Ofori-Mensah agreed to an action research project on the impact of open licensing on her business. Sub-Saharan Publishers has digitized three stories based on tales from Northern Ghana – *Fati and the Honey Tree*, *Fati and the Green Snake*, and *Fati and the Soup Pot*, which have been mounted on StoryWeaver and will be on ASb. They are in English and three Northern Ghanaian languages – Dagaare, Sisali, and Dagbani, using a CC BY licence. Print will continue to be sold. These books were selected for several reasons, including the fact that the author, Kathy Knowles of the Osu Library Fund, agreed and the illustrator had already been paid for his work. There were no Intellectual Property Rights (IPR) issues to block digitization and open licensing. Sub-Saharan Publishers and the Osu Library Fund each printed copies of the books.

Experience and research have shown that open licensing can bring greater visibility and a wider audience to research literature.202 One goal is to ascertain whether this is also the case for the children’s stories included in this action research. StoryWeaver has made Sub-Saharan Publishers a ‘featured’ publisher on its website with a link to the publisher home page.203 StoryWeaver has shared a blog post about the *Fati* stories and this experiment run by Sub-Saharan Publishers.204 The stories have been widely

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200 Go to [https://www.ug.edu.gh/events/invitation-launch-university-ghana-readers-project](https://www.ug.edu.gh/events/invitation-launch-university-ghana-readers-project) for more information on the project.

201 The workshop, which was held in January 2017, brought together key players in early literacy content production from Ethiopia, Ghana, India, Kenya, Uganda, and South Africa. Both commercial publishers and NGOs were represented at the meeting.

202 The Open Citation Project maintains a bibliography on the effect of open access for research publications. Go to: [http://opcit.eprints.org/oacitation-biblio.html](http://opcit.eprints.org/oacitation-biblio.html).

203 See [https://storyweaver.org.in/publishers/1549-sub-saharan-publishers.](https://storyweaver.org.in/publishers/1549-sub-saharan-publishers.)

204 The blog post is available here: [https://storyweaver.org.in/v0/blog_posts/346-meet-akoss-ofori-mensah-of-sub-saharan-publishers.](https://storyweaver.org.in/v0/blog_posts/346-meet-akoss-ofori-mensah-of-sub-saharan-publishers.)
publicized through social media (including Twitter, Facebook, Instagram, and StoryWeaver news story alerts). The pilot project is exploring whether enhanced discoverability of Sub-Saharan Publishers will drive more visitors to its site. StoryWeaver will also provide usage data: number of times the stories are viewed and downloaded; countries visitors are coming from; languages to which the stories are translated; and emails about the stories from the StoryWeaver community, amongst others. We will also compile similar data from ASb when the stories are mounted on its platform. Tracking this data is essential because our overarching goal is to increase the number of culturally relevant picture books in the hands of children in their mother tongue in a financially sustainable way.

Figure 36: Sub-Saharan Publishers’ page on StoryWeaver

https://storyweaver.org.in/publishers/1549-sub-saharan-publishers
Two additional components of this research involve a cost-benefit analysis. What are the costs involved in translating the stories, scanning images to the required resolution, preparing the EPUB and PDF formats, etc.? Offsetting costs, what are the benefits? Did this effort lead to better discoverability on Google and other search mechanisms, enhanced visibility, and increased sales of any of the *Fati* books and other children’s books produced by Sub-Saharan Publishers?

**Cost analysis**

The table below delineates Sub-Saharan Publishers costs in US$ for a 32-page children’s book.\(^{207}\) Overhead costs of ten percent are included. These cover staff time, warehousing, delivery costs, and other expenses.

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\(^{206}\) [https://www.instagram.com/p/Bq81KCZHsrW/](https://www.instagram.com/p/Bq81KCZHsrW/)

\(^{207}\) Information for the table is derived from a publishing costs questionnaire that Sub-Saharan Publishers completed in April 2016.
Table 20: Costs involved in producing a children’s book published by Sub-Saharan Publishers

<table>
<thead>
<tr>
<th>Cost Driver</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing fee</td>
<td>10 percent of net sales up to 10,000 copies</td>
</tr>
<tr>
<td></td>
<td>12.5 percent of net sales exceeding 10,000 copies</td>
</tr>
<tr>
<td>Illustrator’s fee</td>
<td>$1,113 per full-colour title</td>
</tr>
<tr>
<td>Editorial fee</td>
<td>$22 per page</td>
</tr>
<tr>
<td>Translation fee</td>
<td>$668 per title</td>
</tr>
<tr>
<td>Translation review</td>
<td>$223 per title</td>
</tr>
<tr>
<td>Proofreading</td>
<td>$111 per title</td>
</tr>
<tr>
<td>Design and layout per title</td>
<td>$1,103 per title</td>
</tr>
<tr>
<td>Typesetting</td>
<td>$780 per title</td>
</tr>
<tr>
<td>Pre-press review</td>
<td>$446 per title</td>
</tr>
</tbody>
</table>
Appendix 7: Ubongo
Non-profit social enterprise
Tanzania
https://www.ubongo.org

Introduction

Ubongo is a non-profit social enterprise, based in Tanzania, which produces two education media programmes: Ubongo Kids and Akili and Me. Nisha Ligon, who has a BSc in biology from Yale University in the US and an MSc in science media production from Imperial College in the United Kingdom and now lives in Tanzania, co-founded Ubongo in 2013 with Rajab Semtawa, the lead animator, Cleophace Ng’atigwa, Thomas Ng’atigwa, and Arnold Minde. Ubongo employs 33 people, including administrators, animators, graphic designers, researchers, software developers, sound engineers, and videographers. They also have an internship programme.208

‘Ubongo’ means brain in Kiswahili, and the organization plans to reach children’s brains through ‘edutainment.’ It has created cartoon videos, radio programmes, apps and books and believes in distributing its content through technology that is already widely available to Tanzanian and other African children, primarily television but also mobile phones and other digital devices. Television penetration in Africa is large and projected to grow.209 Both Ubongo Kids and Akili and Me are broadcast for free on public and free to air television stations in nine countries (Tanzania, Kenya, Uganda, Rwanda, Zambia, Malawi, Ghana, Nigeria and South Africa) and on the radio, as well. It is also available via YouTube. SMS quizzes and rewards are sometimes used to stimulate interest. E-books and print are also produced.

Both Ubongo Kids, which began broadcasting on television in 2014, and Akili and Me, which had its first television season in 2015, are available in Kiswahili, Kinyarwanda (primarily for Rwanda), and English. Some Ubongo Kids videos are also translated to French and to Thai210 for Akili and Me.

Ubongo Kids focuses on science, technology, engineering, mathematics, and life skills for children in primary school (seven years old and up), while Akili and Me is aimed at promoting learning readiness for pre-primary children.

Production has gone up, from 13 Ubongo Kids cartoons in 2013 to 16 Ubongo Kids episodes projected for 2019 along with 23 episodes of Akili and Me.

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210 Thai was a small project requested by a Thai bank. Nisha Ligon, Ubongo’s Director, is half Thai and received help from her family to implement the project. Personal communication to Lisbeth Levey, 18 December 2018
### Table 21: Ubongo episode timeline

<table>
<thead>
<tr>
<th>Year</th>
<th>New episodes (Ubongo Kids)</th>
<th>New episodes (Akili and Me)</th>
<th>Episodes (cumulative)</th>
<th>Languages</th>
<th>Lessons (cumulative)</th>
<th>Subjects</th>
<th>Ages covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>13</td>
<td>13</td>
<td>1</td>
<td>13</td>
<td>1</td>
<td>1</td>
<td>7-14</td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
<td>6</td>
<td>32</td>
<td>2</td>
<td>56</td>
<td>2</td>
<td>7-14</td>
</tr>
<tr>
<td>2016</td>
<td>6</td>
<td>20</td>
<td>58</td>
<td>3</td>
<td>162</td>
<td>4</td>
<td>3-14</td>
</tr>
<tr>
<td>2017</td>
<td>10</td>
<td>11</td>
<td>81</td>
<td>3</td>
<td>237</td>
<td>6</td>
<td>3-14</td>
</tr>
<tr>
<td>2018</td>
<td>10</td>
<td>16</td>
<td>107</td>
<td>4</td>
<td>327</td>
<td>8</td>
<td>3-14</td>
</tr>
<tr>
<td>2019 (projected)</td>
<td>16</td>
<td>23</td>
<td>146</td>
<td>9</td>
<td>458</td>
<td>10</td>
<td>3-14</td>
</tr>
</tbody>
</table>

**Ubongo Kids**

*Ubongo Kids* follows the adventures of five Tanzanian children who love learning science, technology, engineering, math (STEM), and life skills, and use their new knowledge to solve problems and mysteries in Kokotoa Village. The show has grown from Tanzania’s first homegrown cartoon, to a Pan-African series on TV in 4 languages and 31 countries.

It is aimed at seven- to 14-year-old children. Subjects include mathematics, science, engineering, technology, character strengths, and life skills:

*The program does not cover a comprehensive curriculum as it serves as a supplement to in-class learning. The creators select topics after discussions with teachers and students. The show focuses on problem topics — those students especially struggle with — and threshold topics — those that are essential to understand for students to move through a curriculum (i.e. the concept of a decimal).*

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211 Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018


Akili and Me

Akili is the star of Akili and Me. She is a curious 4-year-old who lives with her family at the foot of Mt. Kilimanjaro, in Tanzania. She has a secret: every night when she falls asleep, she enters the magical world of Lala Land, where she and her animal friends learn all about language, letters, numbers and art, while developing kindness and coming to grips with their emotions and rapidly changing toddler lives!
Ubongo story development and production

Story development commences with considerable research to identify topics before episodes move into production. Extensive testing is carried out at each stage.\(^\text{216}\)

*For Akili and Me (for pre-primary)* we’ve worked with early childhood education experts to map out a curriculum for language, early numeracy, pre-literacy, social emotional learning and health.

*For Ubongo Kids (for primary students)* it’s less comprehensive. We talk to teachers, students and education stakeholders to identify priority topics for each season. Every episode has an academic learning topic, and a social emotional/ life skills topic. We do teacher round tables before planning out each season, and also do lots of kid and parent focus groups/ user testing. We’ve also occasionally done SMS polls for kids to select new topics for the show.

The steps involved in story development, production, and translation include: topic identification and learning outcomes; focus groups with children; and story development, production, and testing. Children are actively engaged during the story development process, as are teachers and other educators. Adapting content to different languages entails more than translation because context is so important. Using Ubongo’s alphabet cartoons as an example, Ligon explained that images of ‘b’ words in English would be switched to ‘b’ words in other languages.\(^\text{217}\)

Actual expenses for print and e-books have been low because volunteers convert the video content to eBooks, but it requires considerable effort.

Ubongo audience penetration

Ubongo cartoons reach a wide audience. *Ubongo Kids* in Kiswahili has 48,000 subscribers on YouTube; the English *Ubongo Kids* YouTube channel has 4,700 subscribers, far fewer than the KiSwahili version. Many of the videos are streamed by larger numbers of people who may not choose to subscribe, with over 600,000 views per months between the two channels.

*Figure 39: Popular KiSwahili-language Ubongo cartoons*

**Akili and Me** has a different audience profile. Almost 55,000 people subscribe to the English version and 38,000 to the Kiswahili version. Here, too, some videos are viewed online in numbers far in excess to the number of subscribers, getting over 7 million views each month.

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\(^{216}\) Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018

\(^{217}\) Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018
Ubongo also analyses viewer data from Google Analytics and YouTube. Over one million unique viewers monthly watch content online, while 1.4 million minutes of Ubongo shows are watched on YouTube every day.\textsuperscript{218}

Ubongo receives TV viewership numbers for each broadcast from Geopoll,\textsuperscript{219} a mobile survey platform for emerging markets. As of December 2018, viewership numbers were:\textsuperscript{220}

9.1 million households in Africa. Both Akili and Me and Ubongo Kids are pretty equally popular. About 50\% of our audience (surveyed in Kenya, Tanzania and Uganda) watch both shows. Across those countries.

Ubongo also contracts Lean Data\textsuperscript{221} to conduct audience surveys. In a recent survey of Ubongo programming in Kenya, Uganda, and Tanzania, almost all of the approximately 400 responses were positive. A few respondents requested content improvements or language changes, but the overall impression was very favourable; one parent even reported learning to read using Ubongo videos.\textsuperscript{222} Below is a screen captures from the Lean Data report.

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\textsuperscript{218} Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018
\textsuperscript{220} Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018
\textsuperscript{221} Get the right revenue data to the right people, every time. (n.d.). Retrieved 21 December 2018, from https://www.leandatainc.com/
\textsuperscript{222} Provided by Nisha Ligon in a personal communication to Lisbeth Levey, 18 December 2018
In addition, 85 percent of survey respondents did not believe that there was a good alternative available to Ubongo programming. Only seven percent thought that there was and eight percent thought that there might be.

**Ubongo research**

Ubongo has three researchers on its staff who do extensive in-house research with children and parents during the development and design of content.

Professor Dina L.G. Borzekowski of the University of Maryland School of Public Health serves as Senior Research Advisor to Ubongo. Professor Borzekowski’s research focuses on how youth use media and how media affects the health and well-being of children and adolescents. Much of her research has examined the impact of the US television programme, Sesame Street, on the educational development of children in Indonesia, India, and Kenya. She has conducted studies of learning outcomes from *Akili and Me* in Tanzania and Rwanda.

Ubongo leadership believe that story development requires understanding what children know, where the gaps are, how best to promote both learning and fun, and how best to engage parents and caregivers in the process. Ubongo calls it ‘human centred research.’

223 We believe that the best way to develop effective content, products and services is to design WITH the user. Our in-house user-testing team conducts research, focus groups, and prototypes ideas with kids (our core audience), in order to craft content that is relatable and meets their needs.

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**Akili and Me** is an example of how Ubongo uses research to test and evaluate its programming:  

In the design phase of their school readiness programme, Akili and Me, the producers discovered through user feedback that their original design was appealing to adults but confusing and complex for the actual users, the children. The episodes were re-written and the animations adapted and then tested again. Following a more positive response from the children and parents, production began on the full 26-episode season. Throughout the production process the Ubongo team has continuously sought feedback from viewers, communicating with users via phone interviews and focus groups.

Funding from the Human Development Innovation Fund (HDIF) in 2016 gave Ubongo an opportunity to test and evaluate a series of public service announcements (PSAs) on different topics for parents and caregivers:

Three sets of content were broadcast for 1 year and very well received by audiences. Research conducted in partnership with IPSOS Tanzania found that over the period of one year, parents who watched Akili and Me on TV increased by 8 percent in positive parenting behaviors when compared to the general population, and those who both watched on TV and listened on radio increased by 18 percent.

**Figure 42: Changes in caregiver engagement indicators after one year (national survey of 2,000 people)**

Although published research on educational outcomes is limited, more is forthcoming. One project is complete and two more are underway. In 2016, Professor Borzekowski researched the impact of Akili and Me...
Me’s first season and published her research in 2017. She studied the impact of Akili and Me on 568 peri-urban Tanzanian children in the Morogoro area. Describing the research and its results, she wrote:

Researchers investigated the impact of an animated educational series, where participants were randomized to see Akili and Me versus other popular programs. In interviews with children, researchers assessed measures before and after four weeks of exposure. From Morogoro, Tanzania, 568 children (mean age - 4.8 years) participated. Controlling for the child’s sex, age, and baseline skills in the assessed follow up outcome, exposure to Akili and Me significantly improved drawing skills, shape knowledge, number recognition, counting, and English skills. Young and vulnerable children can benefit from a locally-produced educational program. Media interventions should be encouraged as they effectively and efficiently alter school readiness.

She attributes a large part of Akili and Me’s success to the cultural relevance of the programmes:

While Akili and Me employs many critical factors necessary for effective educational media, its most distinctive feature likely contributing to the program’s success, especially for this young and vulnerable audience, is the inclusion of culturally relevant elements. To date, practically all media reaching Tanzanian children comes from other regions of the world and include references that might be unfamiliar to this audience... Akili and Me is a locally-produced educational program, that presents the music, characters, and culture of East African children.

Intellectual property rights

Many Ubongo cartoons are freely available on YouTube for streaming, but only a subset of them carry a CC licence. About 20 percent of content is shared under a CC-ND-NC licence, which includes a few full episodes together with selected educational clips, segments, and spin-off content. Ubongo relies on its copyrighted material and trademarked characters to earn income, which can then be used to sustain the organization over the long-term. This is discussed in more detail in the next section. E-books and print books are fully copyrighted and sold.

Business model: costs and revenue

Ubongo receives grants and generates earned revenue. HDIF, supported the development of Akili and Me and production of the first two series. Ubongo recently received an HDIF Round Three grant to support Akili and Me’s third series and additional programming for caregivers, which includes advice and easy-to-follow activities in the form of PSAs, as described above.

Ubongo also receives contracts for ‘co-production’ special programming. In 2017, for example, the European Union funded Ubongo to produce an episode for Ubongo Kids in English and Kiswahili titled ‘Kids for A Cleaner Future!/Watoto kwa Nisha ti Safi!’ It was broadcast on the Tanzania Broadcasting Corporation (TBC) in both languages and reached 1.5 million households and has also gone on to broadcast

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Ubongo has four main earned revenue streams:

Table 22: Earned revenue categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-production</td>
<td>Funds are provided by donors to produce content (episodes, storylines or shorts) using Ubongo characters to target specific messaging or outcomes. These come both in the form of commercial contracts and grants. Co-Production partners have included Malaria No More (for a malaria-focused episode), The Goodall Foundation (for four episode developing character strengths) and the European Union (for clean energy and gender rights).</td>
</tr>
<tr>
<td>Advertising</td>
<td>Advertising revenue is generated through payment by third parties to place their own advertisements or public service announcements on Ubongo content. This is usually handled by the television station or distribution platform (such as YouTube) and Ubongo receives a revenue share. Most Ubongo advertising revenue comes from YouTube. The CPM (cost per thousand impressions) earned for views varies widely by geography and is more than ten times higher in more developed markets like the US than for Tanzania.</td>
</tr>
<tr>
<td>Business-to-business (B2B) sales and licensing</td>
<td>This entails sales or licensing of existing content, characters or brands to other businesses or organizations, including licensing of content to pay-TV and Video on Demand (VOD) operators; sales of content-kits to schools and NGOs; and licensing of character rights. Ubongo recently started character and artwork licensing, with the new Aga Khan Hospital Children's Ward in Tanzania being the first customer; the whole hospital wing is decorated with Ubongo characters.</td>
</tr>
<tr>
<td>Business to consumer (B2C) sales and royalties</td>
<td>B2C sales and royalty revenue is earned from end users paying for products, through direct sales channels or royalties from products sold by third parties. Ubongo markets DVDs, T-shirts, e-books, print books, and more for sale. This not currently a significant revenue generator (once one accounts for the cost of producing and delivering merchandise in Africa), so Ubongo focuses on it as engagement for its ‘superfans.’ Ubongo hopes that, as markets in Africa grow and its international audience increases, this revenue stream can help towards long-term sustainability.</td>
</tr>
</tbody>
</table>

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Mkuki na Nyota, the Tanzanian publishing house, sells Ubongo Kids and Akili and Me titles, for 6,000 Tanzanian shillings ($2.68) and 7,000 Tanzanian shillings ($3.12) respectively. Ubongo receives royalties from Amazon, WorldReader, and Mkuki na Nyota. Each organization does its own marketing and distribution.

**Figure 44: Ubongo mathematics and science books**

Maths and Science have never been more fun! Enjoy the Ubongo Kids series with entertaining stories and fun comprehension activities in both English and Kiswahili.

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231 Go to: http://www.mkukinanyota.com/?s=ubongo&post_type=product
Ubongo has copyright over all its output and has trademarked its characters to protect against intellectual property theft. Ubongo believes that revenue from the income streams delineated in table 21 above will lead to long-term sustainability of the organization and enhance its ability to make high-quality free content available to children.\textsuperscript{232}

_Owning the copyrights to this content allows us to generate revenue through distribution that is free to the end user. Videos that are free to watch on YouTube, and music free to stream on platforms like Spotify generates revenue, which helps support further content production._

**Figure 45: M is the letter of the day**

Some donors, however, now require Creative Commons licensing for educational materials produced through grants and contracts. When Ubongo receives funding for such projects, it will create resources that do not use any of the Ubongo Kids or Akili and Me characters. The alphabet song for the letter ‘m,’ shown on the left is an example. These alphabet songs, which are funded by UK Aid through HDIF, will be released in 2019 with a CC-ND-NC licence. In addition, a set of alphabet stories will carry a CC-BY licence.\textsuperscript{233}

Ubongo is open to using CC-ND-NC licences because:\textsuperscript{234}

*We have commercial distribution agreements with TV stations and streaming platforms, who pay us to show this content. If we were to put it under a CC-BY license, we would lose this revenue stream, which is a source of funding for further content production. The CC-ND-NC license allows us to provide content free on YouTube and to schools/teachers/partners for non-commercial use, but still charge TV stations and streaming platforms if they want to broadcast it commercially.*

**Cost analysis**

Each Ubongo episode costs between $22,000 and $34,000 to produce, from initial research to completed animation with sound design. Costs vary depending on the amount of additional research and evaluation needed for the topic and the number of changes needed for localization in different languages. These episodes are then adapted to different formats for distribution across various platforms, with full episodes broadcast on television and radio, shorter educational video clips published to YouTube, educational songs and stories from the episodes delivered via interactive voice response, and books written from the episode story and illustrated with graphics from the animated video. Ubongo believes that although the cost of episode production is high, its cost structure is the most efficient way of reaching many viewers at a low cost per viewer. Cost analysis by Ubongo shows that each episode is delivered free to families in Africa at a cost of just $0.003 per child; a year’s worth of content across platforms costs just $0.09 per child per year.

\textsuperscript{232} Personal communication from Nisha Ligon to Lisbeth Levey, 21 December 2018

\textsuperscript{233} Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018

\textsuperscript{234} Personal communication from Nisha Ligon to Lisbeth Levey, 18 December 2018
Ubongo reports that, due to its investment in research, strong storytelling, high production values and localization, major broadcast channels are eager to distribute the content. Knowledge of the series spreads through word of mouth, while viewers show a high degree of engagement and return viewing. With this larger investment in content, Ubongo’s strategy is to minimize costs in marketing and distribution by leveraging existing, high-reach platforms to reach millions of African families, and motivate who can continue learning through fun by engaging educational media on whatever technology they can access.235

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235 The information in the cost analysis section comes from a personal communication from Nisha Ligon to Lisbeth Levey, 16 January 2019.