

## **Web publishing of statistics: Statistics South Africa website**

Luxolo Lengs and Koketso Moeng (Statistics South Africa)

### **INTRODUCTION**

In our quest to expand our statistical target audience from core statistics consumers to ordinary citizens and to also make it easier for the public to access our information, it became paramount to revamp our dissemination channels – including our website – from being a static publishing tool to a more dynamic dissemination channel. This paper will share the journey that Stats SA undertook to arrive at the current website and also highlight some of the items on our Roadmap.

Traditionally our focus was to make statistics accessible to core statistics users and consumers. With our new website, we have managed to demystify the technical jargon associated with statistics, thus welcoming a new audience to our environment. This is supported by the growth of the number of users accessing our website and its content. Through our new website, we have moved from disseminating static statistical publications and content to dynamic, user-friendly content by making use of data stories, theme-based product packaging, making use of infographics and other visuals to assist users when accessing the Stats SA website.

### **Traditional websites**

Web and software technologies are disruptive across many industries, including the Statistical field. Most National Statistics Offices (NSOs), however, are not keeping up with technology and embracing the many possibilities that the technologies bring. If one does a quick survey of NSOs websites, many of them are still using aging technology.

At Stats SA, we went through a period of introspection about how we offer products to our end users, and we came to the conclusion that there are better ways to present the statistics that we produce. In 2013 we started working on a new website that would be more responsive to our stakeholders' needs and would also adopt a range of technologies that make life easier for our end users and our internal production processes.



to find specific data on Stats SA’s website.

- **The use of data stories:** Another initiative of the new website would be to communicate statistics through the use of easy-to-read *Data Stories*. Data Stories are “newspaper”-like write ups that give users background information and context to the statistics/indicators that we release. Users were asked to read through and provide feedback on a few written data stories.
- **Internal staff perceptions of external users:** Stats SA staff from various divisions were asked about those external users whom they service, and if they knew of any frustrations that users experienced with Stats SA’s old website.

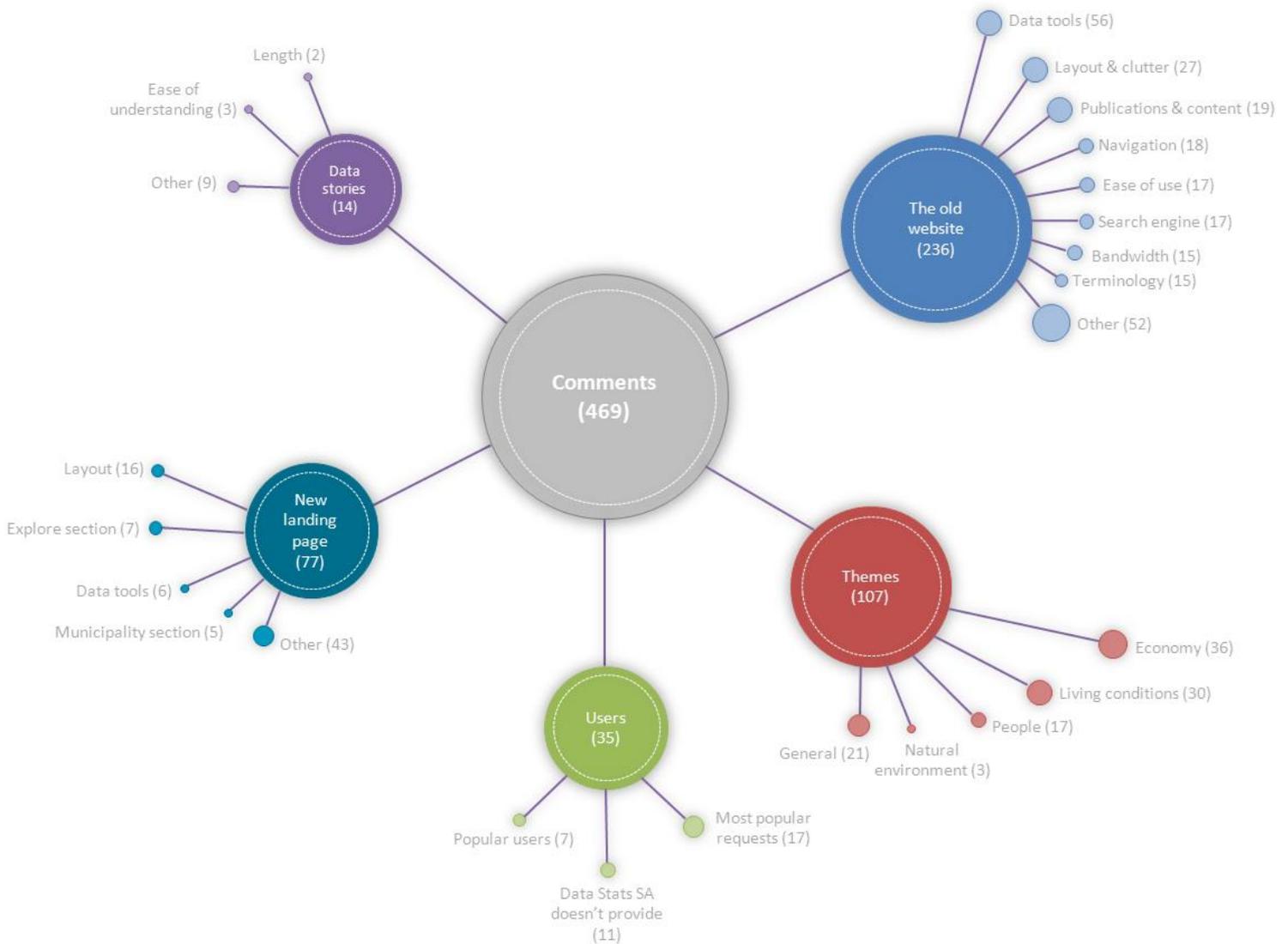


Figure 2: Feedback received during pre-launch consultative process

Figure 2 above shows how the comments that were received during the consultation process were classified. The comments from the classifications were then further analysed and used as input into the design process for the new website.

## Context-driven dissemination

One of the discoveries that we made during the user consultation process was how our stakeholders did not like information that did not have any context. For our users, it's not just a single number but rather how that number fits into a broader narrative around that number or set of numbers.

**"The beginning of a wise decision is knowing the facts."**

*Juho Kusti Paasikivi*  
(Former President of Finland)

Announcing that the Gross Domestic Product (GDP) is 3.7% might sound impressive but when you also know that the unemployment rate is 17% and the inflation rate is 5.8%, then that GDP number might not seem that impressive. We realised that for a majority of our users, they needed the complete narrative in order for them to make sense of all the indicators that we are producing.

The screenshot shows a website theme page for 'Economic Growth' on the Stats SA website. The page features a navigation bar at the top with links for Home, Find Statistics, Publications, Census, Suppliers, and About Us. Below the navigation bar, the page is titled 'Home / Statistics by theme / Economy'. The main content area is divided into several sections:

- Economic Growth:** A text-based section providing context on the South African economy's structure and performance, including a 'Quick Fact' that states a 7.6% all-time high quarterly real GDP growth rate post-apartheid. It also includes a 'Key Statistics' table.
- Key Statistics:** A table listing various economic indicators and their values.
- Statistical Publications:** A list of related publications such as 'Gross Domestic Product', 'Consumer Price Index', and 'Quarterly Employment Statistics'.
- Related Documents:** A list of related documents including 'Quarterly financial statistics: refreshing samples', 'Regional economic growth', and 'Measuring South Africa's Economic Growth'.
- Links:** A section with a link to 'Interactive data'.
- Gross Domestic Product:** A section with two charts: 'Percentage Change' (a line chart showing GDP Y/Y and GDP Q/Q from 2008 to 2014) and 'Gross Domestic Product by Province' (a stacked bar chart showing the percentage contribution of each province to the total GDP).
- Economic growth slows in 2014:** A news-style section with a small image and text stating that South Africa's economy grew by 1.5% in 2014, down from 2.2% in 2013. It also includes social media sharing options and a 'read more' button.

Figure 3: An example of a theme page – theme pages set the context for users to understand the various publications.

Figure 3 shows the layout of a typical theme page. Theme pages are made up of the following elements:

- **Introductory narrative:** The narrative is used to set the context for users. This might include some historical information that would give the users insight into the evolution of the indicators or publications that they are interested in.
- **Quick fact or infographic:** The quick fact or infographic is part of the introductory narrative that assists in setting the context.
- **Graphics panel:** The centre panel is reserved for graphics. Stakeholders can use these to get an overview of how the related indicators are performing relative to other indicators within the same theme.
- **Key Stats:** This panel allows users to get a glimpse of the key indicators within the theme.
- **Statistical Publications:** This panel has all the statistical publications that fall into that theme.
- **Related documents:** The related documents panel contains supplementary content such as metadata documents or technical documents.
- **Links:** The links panel has links to our data portal or links to other (external) websites.
- **Data story:** The bottom panel is reserved for data stories that are related to the theme.

Another important discovery from the user consultation sessions and through analysing the trends from our social media platforms ([Twitter](#) and [Facebook](#)), we realised how popular visual communication was for our stakeholders. Most of the user activity was where we included infographics as part of the messaging.

In hindsight this makes sense as more and more people are consuming bite-size content through social media platforms. Below is an example of an infographic for *Causes of Death*.

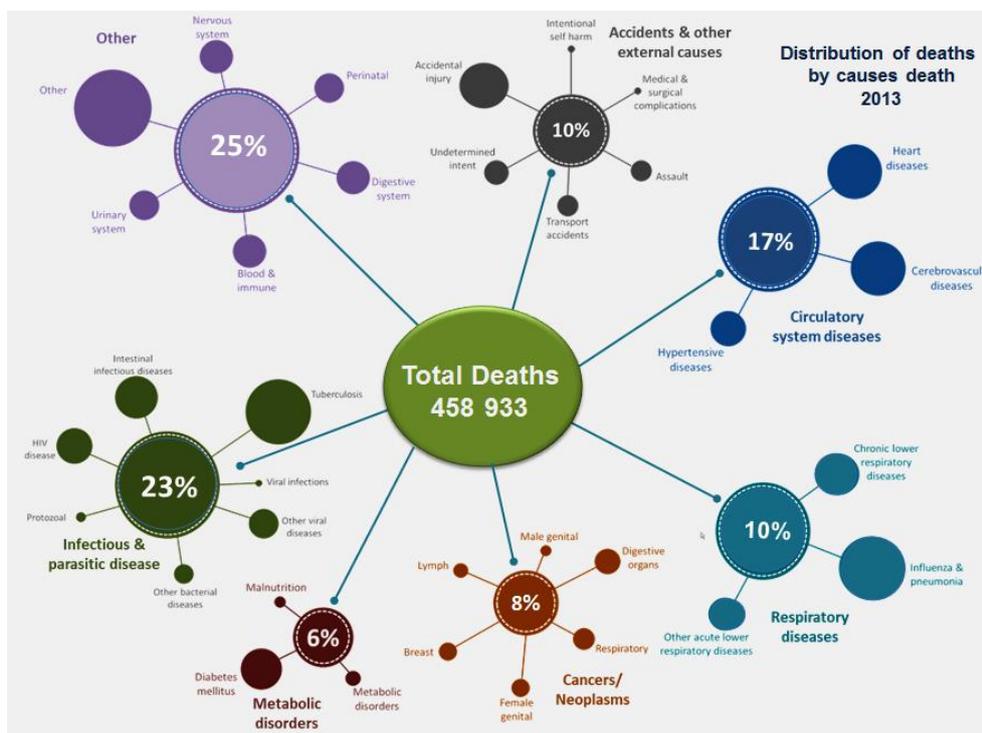


Figure 4: A Causes of Death infographic

Infographics are not exclusively for our social media platforms but they are also included as part of Data Stories and the Theme pages.



Figure 5: A Gross Domestic Product (GDP) infographic.

### Feedback/Response

The new website has been operational for 19 months and we continue to see steady growth in both the number of users and the number of sessions per month, as shown in the graph below.

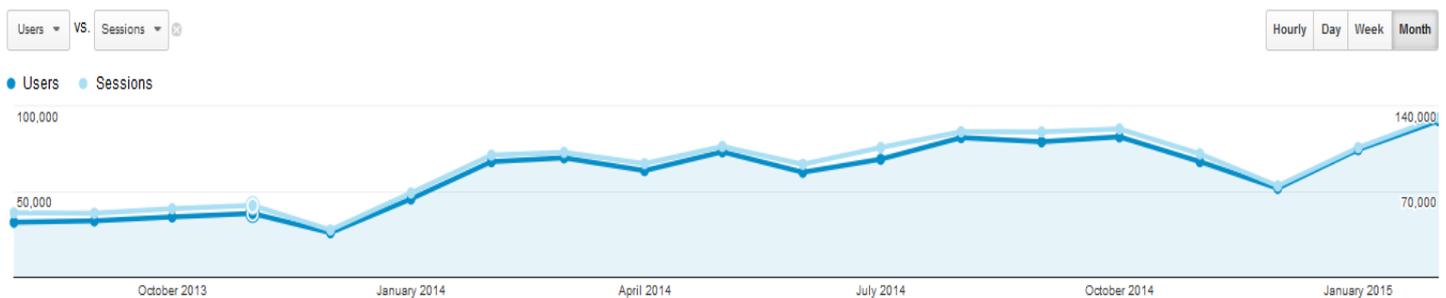


Figure 6: Number of users and sessions per month (August 2013 to February 2015).

One of the objectives that we set out to achieve was to reduce the number of clicks (which translates into time) it takes for our users to reach the content they are looking for. On the old site, users complained that it was cluttered and they couldn't find what they were looking for. They were spending most of the time looking for content instead of consuming it. This was evident when we inspected the number of pages per session and the average session duration –the number of pages was high but the duration was low and the total number of downloads was also low. After the redesign, the pages per session (which we used as a proxy for number of clicks) dropped while the number of downloads and average session duration increased.

We understood this to mean that users could find the content they were looking for and spending more time on relevant pages.



Figure 7: Distribution of visitors by country (August 2013 to February 2015).

## Roadmap – What’s next?

While we are very pleased with the growth in user numbers, number of statistical publication downloads and number of sessions per month, there is still a lot of room for improvements and growth.

The following are a few deliverables on our roadmap for the next 12 months:

- Improve the maps functions for navigation
- Improve the graphics engine
- Add a Data API
- An automated and metadata driven publication system
- News-Wire service (exclusively for journalists)
- Blog functionality
- Performance enhancement
- Discussion forum

**“If we want South Africans to use statistics as one of their democratic tools, we have to make the statistics accessible and understandable.”**

*Trevor Manuel*

*(Former Planning Minister of South Africa)*

## **Conclusion**

While innovation is not a precursor for success, it remains an important component in retaining your client base and more importantly, increasing it. This is evident in the feedback that we receive from our clients and the growth in the user base.

The innovation in this case wasn't only the technology that was used, but a combination of how People (in different fields – IT specialists, Marketing and Communication specialists and our various Stakeholders), Processes, and Products (technology) were unified behind a single goal within an ecosystem that promotes and supports innovation.