Inception Report

Assessing and Improving the Data Visualisation and communication capacity of the Department of Census and Statistics (DCS), Sri Lanka.

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Consultant – Data Visualisation officer assigned to the project by
UNFPA

Date of Submission: 18/12/2019

I. Brief

This document is intended to establish the direction, current progress and the scope of work of the Consultant - Data Visualisation Officer (DVO) assigned to the aforementioned project.

The content of this document is primarily based upon, and is contained within the boundaries of the consultant - Data Visualisation Offer's TOR.

As the Consultant - Data Visualisation Officer is expected to work closely with Consultant - Communications Analyst (CA), it must be noted that on occasion the report may make references to the overall communications capacity of DCS.

This inception report does not aim to review or assess DCS's current data visualisation capacities, it merely delineates on the fact-finding strategies I wish to employ in carrying out these assessments.

II. Table of Contents

1. A very brief introduction to DCS, the Census and the consultant's work.

The Department of Census and Statistics (DCS) is the National Statistics Office in Sri Lanka Responsible for the collection and dissemination of statistical data among variegated national and international users. It provides the statistics required for policymaking aimed at the development of the country in addition to providing statistical consultancy services to the agencies that require such assistance. DCS is currently preparing for the implementation of the 15th Housing and Population Census to be conducted in 2021.

Whist being a resourceful gather and provider of statistical knowledge, DCS acknowledges areas for improvement in their data dissemination policy, public exposure and communication (particularly regarding the census), their development as a brand and their ability to make statistical data more accessible to the general public.

The United Nations Population Fund (UNFPA), with the aim of providing capacity building assistance to the DCS in the aforementioned key areas has recruited two consultants, Mrs. Kosala Kumara (Consultant – Communications Analyst) and Myself, Vajira Sooriyaarachchi (Consultant – Data Visualisation Officer).

The Communications Analyst is tasked with developing an overall communications and dissemination strategy for the DCS, while working closely with her in developing this strategy**, I focus particularly on improving the Data Visualisation capacity of DCS, to effectively make the complex statistics produced by DCS more accessible, navigable and intuitive to various users. I am also expected to generate a collection of visualisation products, as well as presentations to inform/ communicate about the 2021 Census. (Refer to attached TOR).**

2. Progress as of 16th December 2019

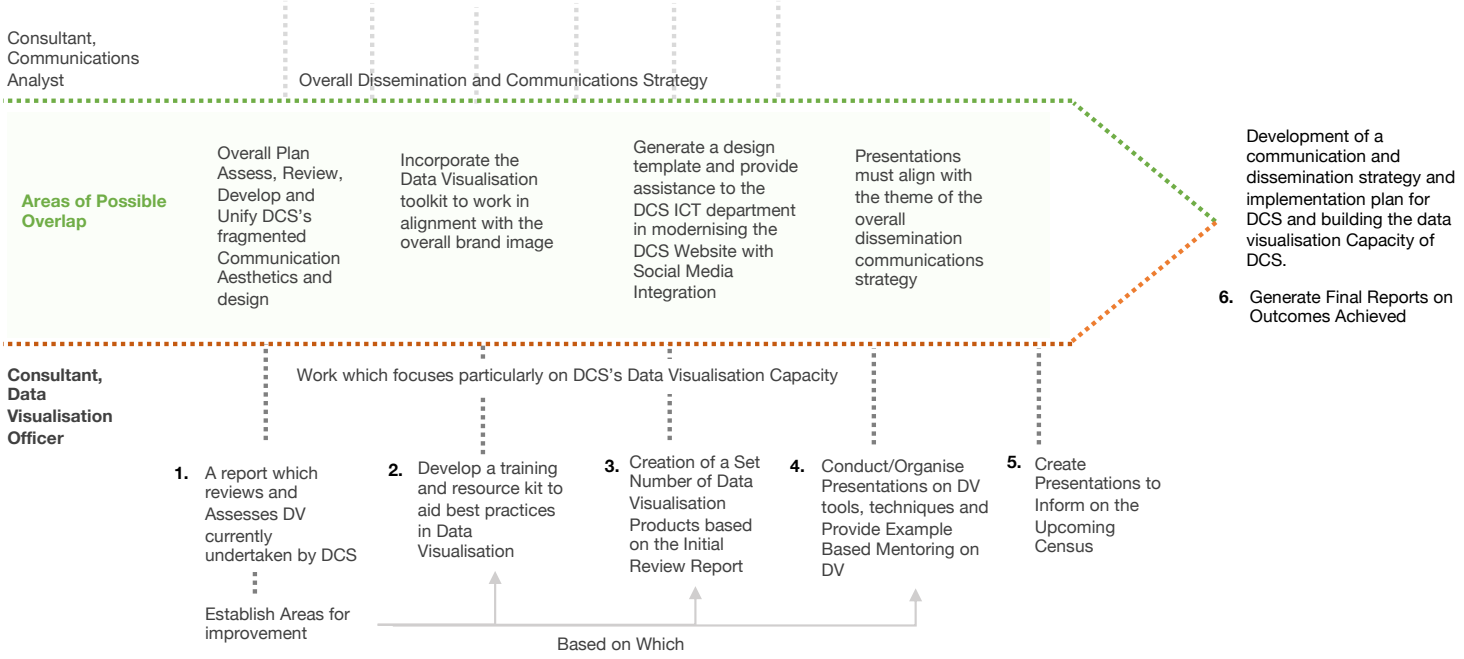
My first formal introduction to the stakeholders at the DCS was made on the 12th of December 2019, notably present from DCS were Director General Dr. (Mrs.) Indu Bandara, Director Research and Special Studies Mrs. Vasana Jayakody and Senior Statistician Mrs. Lakmali. Representing the UNFPA were CCA Mrs.Kosala Kumara, Ms. Poorani Radhakrishnan and myself.

This formal introduction was followed by a meeting on the 13th of December 2019, where Mrs Jayakody and Mrs. Lakmali provided more in-depth insight into the operations of DCS to myself and Mrs. Kumara.

In the run up to these meetings and subsequently, I had the opportunity to study both digital and print visualisation products currently generated by DCS, the meetings served in part as a way of studying the personnel and the processes responsible for the generation of these products.

Given my thus far very limited interactions with DCS, I'm confronted with a notable lacuna of information regarding technologies, work processes, distribution of tasks and inter-department interactions which inform and affect the quality of the visualisation products I have observed, through the span of the project, I wish to bridge this gap using a combination of primary and secondary research strategies.

3. A brief outline of expected deliverables and goals.



4. Overall Data Visualisation Capacity Building Strategy

The intervention to assess and develop DCS's overall Data Visualisation capacity consists of three stages:

I. The primary stage, which is diagnostic in nature, applies a series of primary and secondary research strategies to identify the gaps in DCS's Data Visualisation capacity.

II. The secondary stage attempts to bridge these gaps through a number of capacity building techniques and the introduction of new data visualisation resources/toolkits/training programmes.

III. The third stage re-evaluates the impacts of the decisions made in the previous stages of the intervention and sets about to propose recommendations for the future. The aim of this stage is to compare and contrast before and after snapshots of the intervention through a systematic analysis of the visualisation products generated post-training.

(See Page 5, Illustration 1 for a detailed breakdown)

According to the TOR, the DVO is expected to produce several data visualisation products, using maps, infographics, statistical representations, tables, charts etc. The generation of these products will be used as a hands-on training opportunity where the current DCS staff will be involved in the design and development process.

Along with the overall communications strategy and the design language developed by CCA, the data visualisation products generated will also adhere to a unifying design language that will capture the brand identity of DCS.

1

Diagnostic

Review of current data visualisation products

Review of publications, posters presentations, and the DCS website

Assessment of organisational hierarchies and decision making process that determine the nature of data visualisation products

Attempts to discover who makes decisions regarding the information presented and why.

Primary data gathered through Questionnaires/ Group Discussions and interviews

Assessment of Data Visualisation capacities

Human resource, Training and Aptitude

Primary data gathered through Questionnaires/ Group Discussions and interviews

Soft and Hard Infrastructure

Enumeration of available data visualisation software, languages, libraries and hardware

Workflow observation

An over the shoulder observation of how visualisation products are generated

2

Capacity Building

Infrastructural Capacities/ Workflow improvements

Revising and **developing soft and hard infrastructure** to be up to date with the demands of current trends in data visualisation

Creating a **multi tiered visualisation product creation and dissemination strategy** which makes a clearer distinction between the needs of internal users of data visualisation products to those of variegated external users

Creating A **Resource Kit** including visual libraries, pallets, themes and visualisation stencils to streamline data visualisation workflows

Empowering creative, evidence based decision making and communication through data visualisation

Focus on **Data Visualisation on the Web** with improvements to the website as well as **interactive** visualisation products and **social media** integration

Training and HR Optimisation

Creating DCS specific **training and orientation documentation** with regards to visual design and data visualisation

Presentations on Data Visualisation techniques, principles and creative design from internal and external resource personnel

Example based mentoring sessions where several data visualisation products will be manufactured by the DVO in association with the DCS Staff

If required upon further analysis, recruit permeant or temporary external talent/creative input

3

Review

Analysis Training Outcomes

Recipients of Training will be requested to **use the new Resource Kit and training to produce an individual visualisation piece**, the quality of which will serve as a performance indicator of the overall success of the intervention

Recipients of Training who generate impressive outcomes will be encouraged to act as future **training resources** to new/existing member of staff

The final review will present a **pre/post intervention snapshot** of in house DCS data visualisation products

Analysing overall data visualisation outcomes

Website Visits, Performance in Social Media and Public engagement online will be a key point indicator in assessing the performance of the new DCS data visualisation and data dissemination Strategy

New in house DCS data visualisation products will be compared to those of their international counterparts to assess the extent to which DCS's data visualisation aesthetics and design language have been modernised

Illustration 1

5. Communicating The 2021 Census / A Data Visualisation Hackathon

In accordance with my TOR, and in consultation with Mrs.Kosala Kumara and the DCS team, I will develop visual presentations (digital and print) to communicate and inform external stakeholders of the upcoming census. Development of these presentations will fall within the boundaries of the overall communications strategy, rather than being a strictly data visualisation focused deliverable. I aim to review the dissemination and communication strategy utilised in the last census and propose/develop a new set of communications materials which pays particular attention to the communicative power and expansive reach of social media. I expect to work with Mrs. Kumara very closely on this deliverable as it must adhere to, and reflect the new brand identify we expect to develop for the DCS within the next few months.

In the initial meetings, I proposed a Data Visualisation Hackathon which will bring together a pool of young designers, web developers, statisticians, visual artists. This not only serves to scout young talent, but also serves as a publicity opportunity for the new brand identity and the public message of DCS.

While the idea generated favourable responses from both Mrs. Kumara and DCS representatives, the specific constraints and the nature of its execution as of yet is a matter under review, I have, nonetheless allocated space for the event within the approximate timeline and in liaison with Mrs. Kumara, expect to develop the idea further.

6. Approximate Timeline

(See Page 8)

7. Scope of the Consultant's work

a. While the consultant will deliver some Data Visualisation training/presentations where required, on occasion it may be necessary to hire the services of an external resource person.

b. In association with CA, the DVO will introduce a number of web-based data visualisation productions for the DCS website as well as a plan and a high definition design template to revise the DCS website, the consultant will not be responsible for the backend-development of the site.

c. Where required, the reports will address the backend development of DCS's databases for easier and more convenient data visualisation techniques, although the consultant will not be responsible for the altering or redevelopment of said databases.

d. The DVO will work closely with the CA to specify a social media strategy for DCS, however, the consultant will not be responsible for the maintenance of any social media accounts.

e. Where the scope of the DVO and CA overlaps, mutually understood workflows and sharing of responsibilities will be arrived at through formal/informal discussion and will be communicated/reflected in the initial review and final reports.

8. Concluding Notes

This inception report briefly captured the progress made so far, the strategy moving forward and laid down an approximate timeline in adherence to which the deliverables will be produced. A more detailed picture of the Data Visualisation products that I aim to produce will be captured in the initial review report.

The Overall Data Visualisation Capacity Building Strategy captured in illustration 3, covers briefly the way in which I aim to plan the intervention in the months to come, in summary:

1. The diagnostic stage undertakes a full review of the current data visualisation products generated by the DCS staff, and further analyses levels of training and core competencies, the quality of soft and hard ICT infrastructure, workflows and the creative/editorial limitations under which data visualisation products are generated.

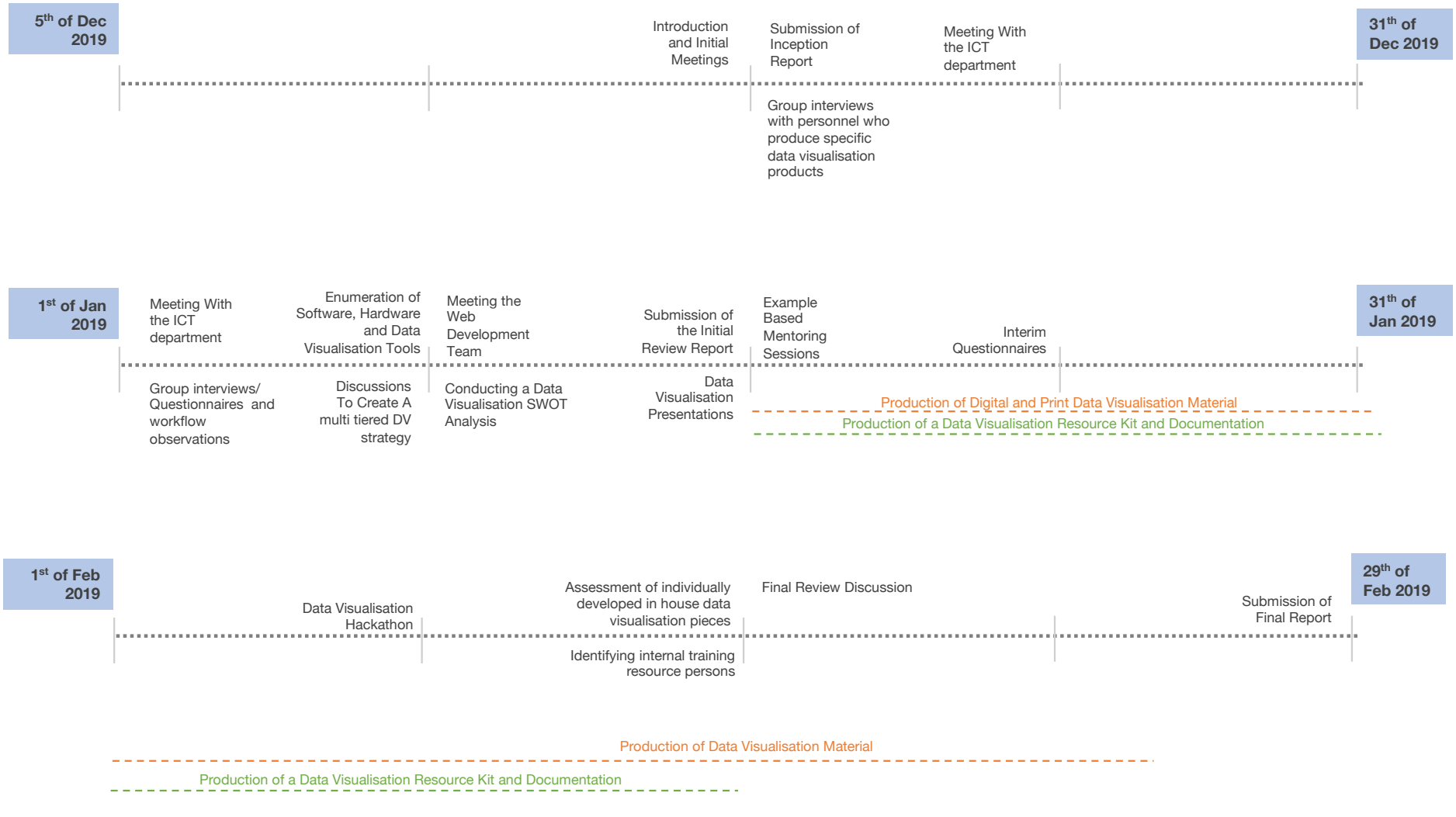
2. The Capacity Building stage, through a combination of improvements to ICT infrastructure, the development of a Resource Kit and training material, as well as a series of presentations, training sessions and workshops aimed at the current staff attempts to remedy the deficiencies observed in the diagnostic stage.

3. The third stage compares and contrasts a before and after picture in developments in data visualisation products generated by DCS staff. It also compares these products to a select number of benchmark products generated by DCS's international counterparts.

Once the initial scheduling, introductions and an intervention timeline has been discussed with the DCS and UNFPA, Mrs.Kumara and I will produce initial review reports which will further elucidate on the key areas discussed in this report.

Until further discussions and communication pathways are established between the consultants and the various teams/departments within DCS, please note that the timeline provided here is only a rough indication of what the consultant considers to be an ideal pace to the project. The timeline will need to be refined further in liaison with the CA, different departments within DCS and UNFPA.

While I aim to capture the full extent of CDS's data visualisation requirements before the submission of the initial report, ff DCS requires/communicates the need for different/additional assistance with regards to data visualisation later within the span of the project timeline, a time and feasibility assessment will be carried out by the CA and myself.


5th of Dec 2019
Introduction and Initial Meetings
Submission of Inception Report
Meeting With the ICT department
31th of Dec 2019
Group interviews with personnel who produce specific data visualisation products
1st of Jan 2019
Meeting With the ICT department
Enumeration of Software, Hardware and Data Visualisation Tools
Meeting the Web Development Team
Submission of the Initial Review Report
Example Based Mentoring Sessions
Interim Questionnaires
31th of Jan 2019
Group interviews/ Questionnaires and workflow observations
Discussions To Create A multi tiered DV strategy
Conducting a Data Visualisation SWOT Analysis
Data Visualisation Presentations
Production of Digital and Print Data Visualisation Material
Production of a Data Visualisation Resource Kit and Documentation
1st of Feb 2019
Data Visualisation Hackathon
Assessment of individually developed in house data visualisation pieces
Final Review Discussion
Submission of Final Report
29th of Feb 2019
Identifying internal training resource persons
Production of Data Visualisation Material
Production of a Data Visualisation Resource Kit and Documentation