Data Storytelling

Dear Social Service Practitioners,

Communicating to show impact

The current decade is filled with discussions about outcomes, evaluating social impact and translating research into improved service delivery. These are pertinent topics, and perhaps more so in a volatile, uncertain, complex and ambiguous environment that tends to defy consistent relationships. Embarking on research, evaluation and review is therefore necessary but not sufficient to generate knowledge and application of learning. What is needed are measures and strategies that can help us to communicate our work in a way that is impactful.

In a previous letter*, I had touched on the importance of asking good questions at the start of a project in order to have more clarity about the kind of information that is needed and the kind of data that should be collected. In this letter, I will touch on how to make full use of the data that has been collected and how to present them in a manner that creates impact.

Rigorous Analysis

Brent Dykes, Forbes Contributor, mentioned in an article[1] that "data may hold tremendous amounts of potential value, but not an ounce of value can be created unless insights are uncovered and translated into actions or business outcomes". It is useless to simply collect data without analysing them and drawing insights from them. What is of greater value is to translate these data into useful information and knowledge.

Most leaders will work with data and information and oftentimes the data are in raw observations and measurements. So how do we translate them into information? We do this by analysing relationships and connections between and among the data. Good questions can help us to organise the data to find answers. For example, a park authority may have data about every single tree in the city, including when it was planted and how it was pruned. A good question to ask would be if pruning trees in one year would reduce the number of hazardous tree conditions in the following year. Data then becomes alive when they are analysed for answers.

By analysing the data we can answer the "Who/What/Where/How many/When/Why is" type of questions. Quite often, when we talk about data driven decision-making, it is information and not data that feeds into the actual decision-making. Information is a message with an (implied) audience and a purpose. This is the reason why we often ask who needs the information we provide.

> " *data may hold tremendous amounts of potential value, but not an ounce of value can be created unless insights are uncovered and translated into actions or business outcomes* "
>
> *Brent Dykes, Forbes Contributor*

When does information become knowledge? Information becomes knowledge when information is understood and judgements, opinions, predictions and decisions are formed based on that understanding (BBC)[2]. Knowledge answers the "How" question. Decisions are often made based on information and knowledge and not data alone.

* No. 15 / 2015 - Good Questions and Show of Evidence: https://tinyurl.com/nyu22ar

Data Storytelling

Once the data is converted into information and knowledge that is useful, we can then consider how to communicate that effectively. This is where we can learn from great data storytellers by studying what they do differently. Data storytelling is a way of communicating insights gathered from data. Most of the time, we will find that storytellers communicate this way.

They answer the most important question: So what?

Typically, data storytelling involves three elements: data, visuals and the narrative (Dykes, 2016). Brent Dykes[3] elaborates to say that a narrative coupled with data explains to the audience what is happening in the data and its significance. Visuals coupled with data enlightens the audience to patterns and trends that would otherwise go unnoticed without charts and diagrams. Coupling narrative and visuals can then engage the audience. The three elements work together to encourage and facilitate change.
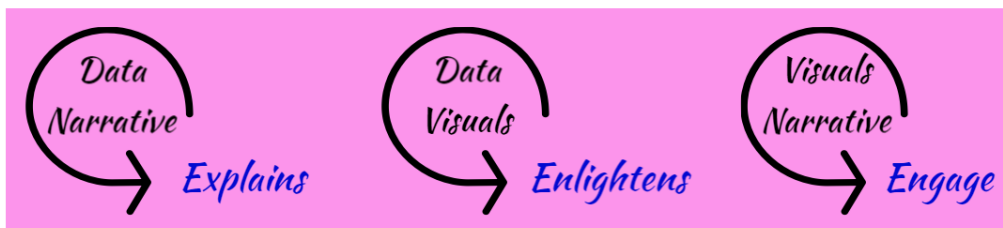
Good storytellers bear in mind that not every audience can engage easily with numbers, statistics, technical concepts and accounting data. As such, the message behind the numbers needs to be clear.

The "so-what" question

So how do we do that? We can start by asking good questions. For example, why should someone care about our findings? What will they do differently after learning of our findings? An example of going straight to the "so what" question is to focus on one key message such as deaths from abuse or violence resulting in lost/ stolen years and how this information affects the way practitioners deliver their services. In communicating this, the exact number of years in this context is less important as it is anticipated and based on an actuarial assumption. What the audience should go away with is the powerful feeling of sadness and loss that can move people into action.

Good storytellers often inspire us to ask more questions. They help people investigate a topic further rather than to simply tell a conclusion. When presenting complex data or a potentially controversial topic, it may be better to package the story into an accessible format that lets the audience take a guided journey to discover the information and knowledge that arise from the data rather than to lecture the audience with claims or arguments. Having the audience to reflect and consider is more likely to move people to act than a passive receiving of data or reading a conclusion.

Data visualization

Data visualization refers to representing data in a visual context, like a chart or a map. However, as Scott Berinato puts it, "automatically converting spreadsheet cells into a chart only visualizes pieces of a spreadsheet; it doesn't capture an idea". It is crucial for storytellers to consider how the chart or graph presented captures and supports the message that one is trying to put across. Data visualisation then helps the audience to extract meaning from the data more easily. It helps to make data interesting and relevant by showing trends, ranking, comparisons, relationships and surprising or counterintuitive information.

Start with a good story

So to use data to communicate social impact, we can adopt a process of finding data, analysing them and creating visuals to tell the story. It is hard work. Start by focusing on a story that is interesting to the audience. Then begin to discover what the data show and what they reveal, sometimes as untold stories or fresh angles to stories that have already been told. This engaging way of communicating impact would hopefully move the audience to reflect, to act and to add to learning and improvements.

Ms Ang Bee Lian
Director of Social Welfare

————

References:

1 Dykes, B. (May, 2016). Data Storytelling: The Essential Data Science Skill Everyone Needs. Retrieved from: https://www.forbes.com/sites/brentdykes/2016/03/31/data-storytelling-the-essential-data-science-skill-everyone-needs/#214234c52ad4

2 BBC. (n.d.). Data, Knowledge and Information. Retrieved from: http://www.bbc.co.uk/education/guides/zkfbkqt/revision/4

3 Berinato, S. (June, 2016). Visualizations That Really Work. Retrieved from: https://hbr.org/2016/06/visualizations-that-really-work