

The Importance of Context

Chapter One – Storytelling with
Data



Exploratory vs. Explanatory Analysis

Exploratory analysis is what you do to understand the data and figure out what might be noteworthy or interesting to highlight to others.

When we do exploratory analysis, it's like hunting for **pearls** in **oysters**. We might have to open 100 oysters (or look data in 100 different ways) to find perhaps two pearls.

Explanatory analysis is a specific thing you want to explain, or a specific story you want to tell – probably about those two pearls.

Who, What, and How

To whom are you communicating?

It is important to have a good understanding of **who your audience is** and **how they perceive you**. This can help you to identify common ground that will help you ensure they hear your message.

What do you want your audience to know or do?

It is important to be clear **how you want your audience to act** and take into account how you will communicate to them, and the overall **tone that you want to set** for your communication.

How can data help make your point?

Who is your audience?

The more specific you can be about who your audience is, the better position you will be in for successful communication. Avoid general audiences, such as “internal and external stakeholders” or “anyone who might be interested in”.

Identifying the decision maker is one way of narrowing your audience.

The more you know about your audience, you'll be able to understand how to resonate with them and form a communication that will **meet their needs and yours**.

Jalur Penerimaan Mahasiswa Baru

Audience: DIKTI

Jalur undangan diutamakan untuk menunjukkan **diversity** dari provinsi-provinsi di Indonesia karena SMA saat ini mayoritas sudah menggunakan sistem zonasi. Dampaknya, tidak ada anggapan SMA unggulan lagi.

Audience: Orang Tua Calon Mahasiswa Baru

Untuk orang tua calon mahasiswa baru biasanya diutamakan untuk memberikan informasi yang mereka ingin dapatkan untuk memastikan bahwa anak-anak mereka bisa **diterima** dan **survive** dan **kerja bagus setelah lulus**.

Who are you?

Do you have an established relationship with the audience?

Do they already trust you as an expert?

Do you need to work to establish credibility?

These questions are important when it comes to determine how to structure your communication and when to use data and may impact the order and flow of the overall story you aim to tell.

What action?

What do you need your audience to know or do?

Communicating with data need to take a more confident stance when it comes to making specific observations and recommendations based on their analysis.

If you simply present data, it's easy for your audience to say, "Oh, that's interesting" and move on to the next thing. But if you ask for action, your audience has to make a decision whether to comply or not. This elicits a more productive reaction from your audience, which can lead to a more productive conversation.

What mechanism?

How will you communicate to your audience?

Do not use your slides as your teleprompter! Keep your slides sparse, and only put things on them that help reinforce what you will say. Your slides can remind you of the next topic but shouldn't act as your speaking notes.

LIVE PRESENTATION WRITTEN DOC or EMAIL

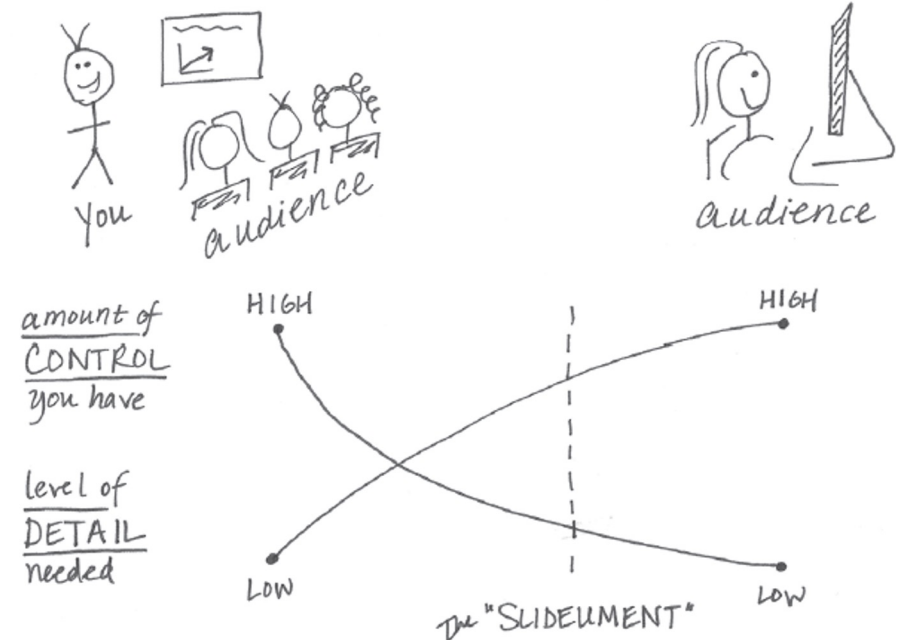


FIGURE 1.1 Communication mechanism continuum

Jalur Penerimaan Mahasiswa Baru: *Detailed Planning*

Audience: DIKTI

Jalur undangan diutamakan untuk menunjukkan **diversity** dari provinsi-provinsi di Indonesia karena SMA saat ini mayoritas sudah menggunakan sistem zonasi. Dampaknya, tidak ada anggapan SMA unggulan lagi.

Informasi apa sajakah yang DIKTI perlu tahu untuk evaluasi?

- *Apakah cukup nama provinsi?*
- *Apakah perlu sampai jumlah mahasiswa per provinsinya?*
- *Apakah perlu sampai nama-nama SMA di tiap kota per provinsinya?*
- *Apakah perlu sampai nilai yang diperoleh tiap nama?*

Jalur Penerimaan Mahasiswa Baru: *Detailed Planning*

Audience: Orang Tua Calon Mahasiswa Baru

Untuk orang tua calon mahasiswa baru biasanya diutamakan untuk memberikan informasi yang mereka ingin dapatkan untuk memastikan bahwa anak-anak mereka bisa **diterima, survive, dan kerja bagus setelah lulus**.

Untuk memastikan apakah anak-anak bisa **diterima**, misalnya ortu camaba membutuhkan informasi **tingkat ketetapan** masuk prodi dan UKT per prodi.

Untuk memastikan apakah anak-anak bisa **survive**, misalnya ortu camaba membutuhkan informasi tentang **lama study per prodi**.

Untuk memastikan apakah anak-anak bisa **kerja bagus setelah lulus**, misalnya ortu camaba membutuhkan informasi tentang besaran **gaji pertama alumni** dan **waktu tunggu mendapatkan kerja setelah lulus**.

What tone?

What tone do you want your communication to set?

The tone you desire for your communication will have implications on the design choices.

Jenis-jenis tone:

- memberikan informasi secara umum
- ingin meyakinkan audience (asesor akreditasi)
- landasan reasoning akan sesuatu hal (besaran UKT)

How

What data is available that will help make my point?

Data becomes supporting evidence of the story you will build and tell.

What kind of visualization will be relevant?

Example of Who, What, How

Who: Bidang SDMO

What: reasoning mengapa Prodi Sistem Informasi membutuhkan dosen baru sebanyak 3 dosen.

How:

- menunjukkan jumlah intake mahasiswa baru S1
- menunjukkan workload dari setiap dosen di Prodi SI dari waktu ke waktu (EWMP) (mengajar, meneliti, mengabdikan di prodi SI atau prodi lain dalam Univ, prodi luar Univ)
- membagi visualisasi menjadi 2 bagian: (1) saat EWMP masih memenuhi standard, (2) saat EWMP sudah terlalu berat untuk per dosennya.

Example of Who, What, How

Who: Bidang SDMO

What: reasoning mengapa Prodi Sistem Informasi membutuhkan dosen baru sebanyak 3 dosen yang memiliki kualifikasi S3.

How:

- menunjukkan jumlah intake mahasiswa baru S1 dan S2
- menunjukkan jumlah dosen eligible untuk membimbing Tugas Akhir S1 dan Tesis S2 (kepangkatan dan ijazah terakhir > baku mutu)
- membagi visualisasi menjadi 2 bagian: (1) saat rasio masih memenuhi standard, (2) saat rasio sudah terlalu berat untuk per dosennya.

Example of Who, What, How

Who: Bidang SDMO

What: reasoning mengapa Prodi Sistem Informasi membutuhkan dosen baru sebanyak 3 dosen yang memiliki kualifikasi S3 dan bidang keahlian Manajemen Bisnis.

How:

- menunjukkan jumlah **peminat** mahasiswa baru S2 di Prodi baru
- menunjukkan jumlah dosen eligible untuk mengajar di Prodi baru sesuai Bidang Keahlian
- menunjukkan jumlah dosen eligible untuk mengajar di Prodi baru sesuai Laboratorium yang berkesesuaian

Storyboarding

The storyboard establishes a structure for your communication. It is a visual outline of the content you plan to create.

When it comes to storyboarding, the biggest piece of advice I have is this: don't start with presentation software.

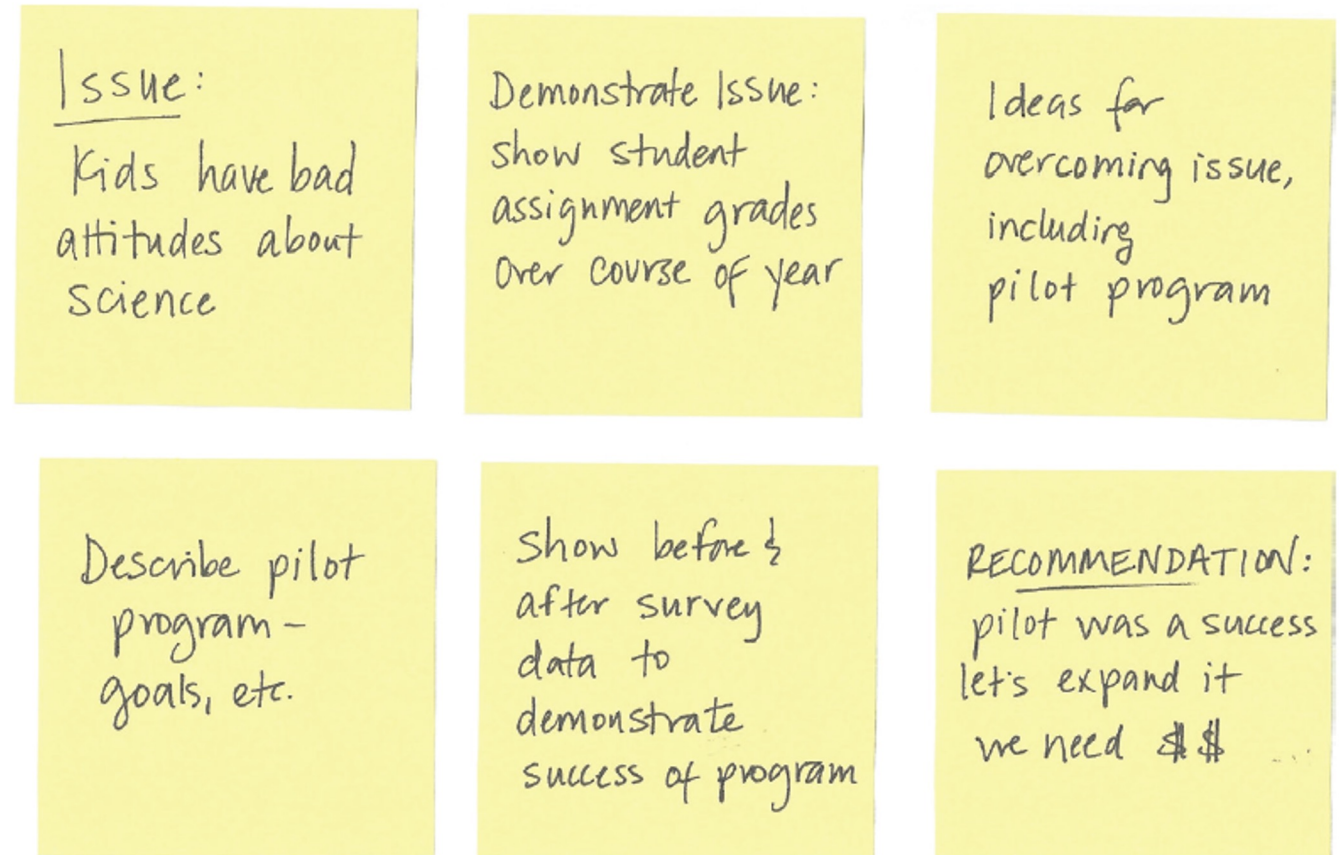


FIGURE 1.2 Example storyboard

In closing

When it comes to explanatory analysis, being able to concisely articulate exactly who you want to communicate to and what you want to convey before you start to build content reduces iterations and helps ensure that the communication you build meets the intended purpose.



Exercise!

Case Study

Asesor Akreditasi sedang melakukan Visitasi Borang Akreditasi ke Prodi S1 Sistem Informasi. Dalam borang ditunjukkan bahwa terdapat 4 dosen yang memiliki beban berlebih (misal EWMP di atas 12) dan ada 2 dosen yang memiliki beban kurang dari standar.

Asesor menanyakan kepada Tim Penyusun Akreditasi mengapa hal ini bisa terjadi?

Answer 1

Intake mahasiswa S1 baru-baru saja ditingkatkan (2 tahun terakhir).

Bagaimana cara menampilkannya?

- Memberikan data penambahan dan pengurangan mahasiswa tiap tahunnya (mhs pindah, DO, keluar, MD)
- Memberikan data penambahan dan pengurangan dosen tiap tahunnya (lanjut sekolah, pensiun, pensiun dini, rekrutmen dosen baru)
- Ratio dosen:mahasiswa

Answer 2

Memberikan visualisasi bahwa

- starting point (masuk ke prodi) setiap dosen bisa berbeda
- load setiap dosen juga berbeda tiap dosennya
- nilai rata-rata EWMP prodi tersebut masih di angka standar IKU



Answer 3

the **BIG IDEA** worksheet

storytelling  data®

Identify a project you are working on where you need to communicate in a data-driven way. Reflect upon and fill out the following.

PROJECT Back-to-school opportunity

WHO IS YOUR AUDIENCE?

- (1) List the primary groups or individuals to whom you'll be communicating.

the executive team

- (2) If you had to narrow that to a single person, who would that be?

the head of retail

- (3) What does your audience care about?

- *Having a highly profitable back-to-school shopping season*
- *Making customers happy because happier customers spend more*
- *Beating the competition*

- (4) What action does your audience need to take?

Agree that training is the right way to deal with inconsistent service levels and approve the resources it will take to make that happen (cost, time, people) ←

WHAT IS AT STAKE?

What are the *benefits* if your audience acts in the way that you want them to?

- *better service levels = happier customers*
- *happier customers spend more, come back more often, tell friends about their positive experience*

What are the *risks* if they do not?

- *no action could lead to negative word of mouth*
- *people shopping with competitors*
- *reputational risk*
- *lost revenue*

FORM YOUR BIG IDEA

It should:

- (1) articulate your point of view,
- (2) convey what's at stake, and
- (3) be a complete (and single!) sentence.

Let's invest in sales associate training to improve the in-store shopping experience and make the upcoming back-to-school season the best revenue generating one yet!