


Delivering Actionable Information


Keith T. Weber, GISP
 ISU GIS Director
 GIS Training and Research Center

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THE NEED FOR ACTIONABLE INFORMATION

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End-users, Customers, Stakeholders, Clients and Decision-Makers

AKA- Our **Consumer**

- GIS is a fantastic decision-support tool
- We support our Consumer
- Yet, our consumer is often

Drowning in Data...Thirsting for Information

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Semantics

- Consumer
- Data and information
 - Is it the same thing?

The Data to Wisdom Pathway



Data Information Knowledge Wisdom

To Put it Another Way



It is vital to remember that information - in the sense of raw data - is not knowledge, that knowledge is not wisdom, and that wisdom is not foresight. But information is the first essential step to all of these.

— Arthur C. Clarke —

AZ QUOTES

It's about Communication

- How do we **communicate** with geospatial data?
 - First, we need data
 - Ideally from reliable and/or *authoritative sources*
 - Visualization using standardized or accepted symbology
 - Regardless of how you feel about it cartographically
 - Consider generalization or reclassification
 - Principles of cartography
 - High, medium, or low instead of 0-10000
 - Using meaningful values and words

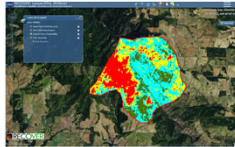
What does this mean?

It's about Communication (cont'd)

- Use meaningful units
 - Acres instead of the number of pixels
 - Miles instead of meters
 - "Sagebrush-steppe" instead of code 4622

An Example

- Q: How much of the 2015 Widget fire was considered a high severity burn?
 - A: 1,968 pixels
 - A: 1,771,200 m² (1,968 30x30 m (900 m²) pixels)
 - A: 437.673052 acres (be cognizant of significant digits)
 - A: 437 acres



Is all Information Actionable?

- What's the difference?
 - Some information may be trivial or tangential
 - You understand it, but it provides little/nothing toward helping to make a decision
 - **Actionable information** is pertinent and applicable
 - It is information that helps make a decision
 - Information that can be acted upon

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How are Decision Made?

- While we (GIS'ers) are not the decision maker
- Our actionable information should support wise, well-informed decisions

OODA

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Observe, Orient, Decide, and Act



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How Are Decisions Made?

- Does actionable information really drive a well-informed decision process?
- Unfortunately not
 - Politics
 - Power
 - Profit
- BUT, we will still do our part to help (and hope) for a better world

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Actionable Information Checklist

- **Step 1:** Identify and understand the consumer.
- **Step 2:** Understand the question!
- **Step 3:** Leverage your strengths
- **Step 4:** Get to know the data
- **Step 5:** Make a great map!
- **Step 6:** Automate
- **Step 7:** Engage in a Team of Teams approach

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Understand the Consumer

- In some cases, the consumer may be John Q. Public
- In other cases, the consumer is a more specific end-user
- In still other cases, the consumer is *all the above*
- **To make this easy for our learning process, we will identify a specific end-user/consumer**

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Our Project Scenario

- The Widget Wildfire
 - Problem: Identify post-fire risks
 - Consumer: Land managers/emergency managers at the local, state, and federal levels

Let's craft a meaningful question

Top

Another Step in the Checklist

- When you have finished spatial analysis and are ready to deliver results...
- Ask yourself:
 - How can I explain this, so the results can immediately support sound decisions?
 - How can I best **communicate** my results?
 - How can I help turn these data into *actionable information*?

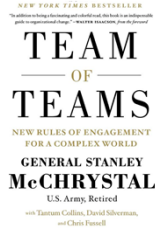
A recent study has found that the top skills in highest demand for GIS candidates are:



<https://www.directionsmag.com/article/2143>

Applied Actionable Information

- Engage in a team of teams approach
 - This is actually quite critical



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Hands-on exercise

TRANSFORMING DATA INTO INFORMATION

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Professional Hints and Tips

- Calendars
 - Accept or decline invitations
 - This is professional etiquette and acts as an RSVP for meeting organizers (i.e., they do not need to follow up)
- Be on time for all meetings
 - Better yet, be a few minutes early

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Questions/Discussion?



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