



World Meteorological Organization
Working together in weather, climate and water

BARRIERS TO DATA AVAILABILITY

SESSION 6.4.3

5th WORLD WATER FORUM

Bruce Stewart
President of CHy



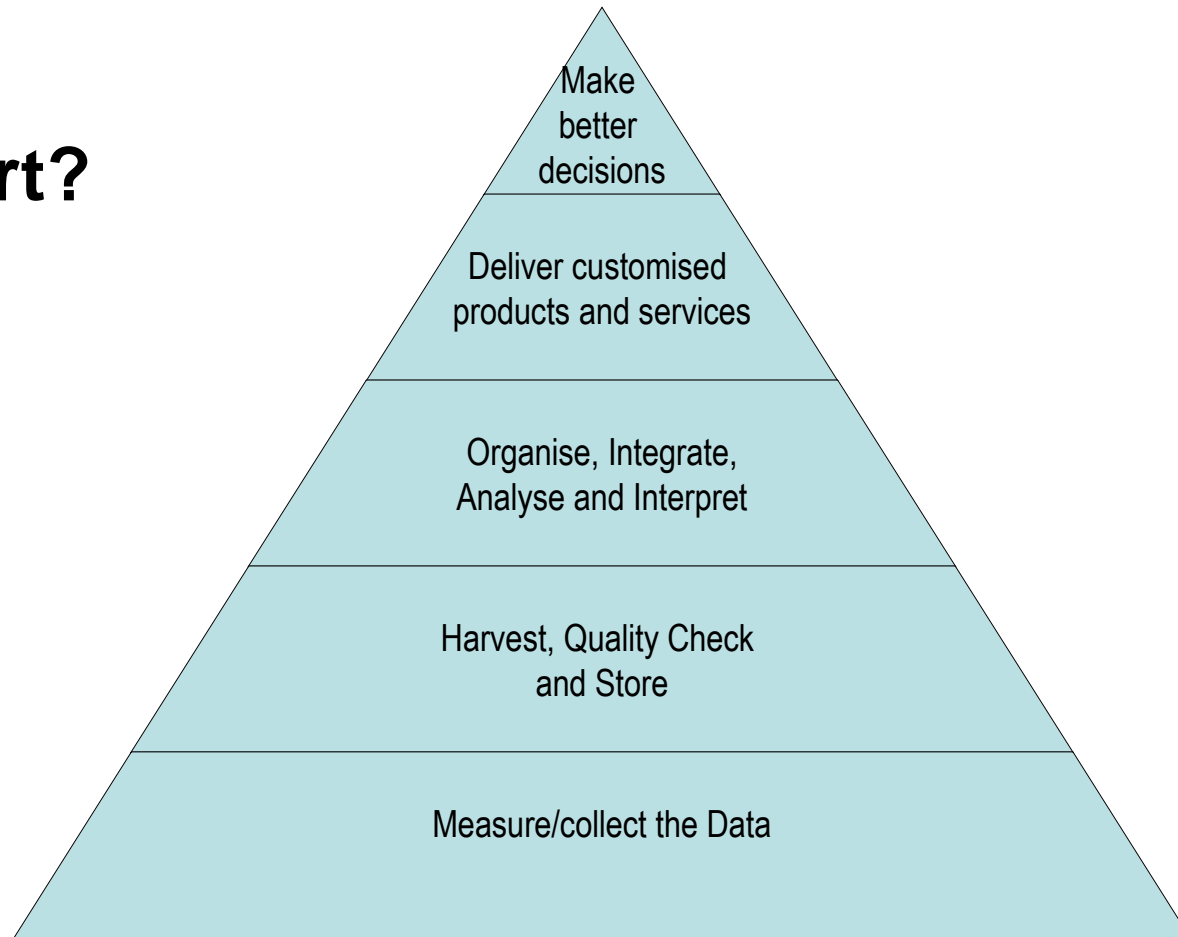
OUTLINE

- **Major points from yesterday**
 - **Objective for Session 6.4.3**
 - **Process and contributors for Session 6.4.3**
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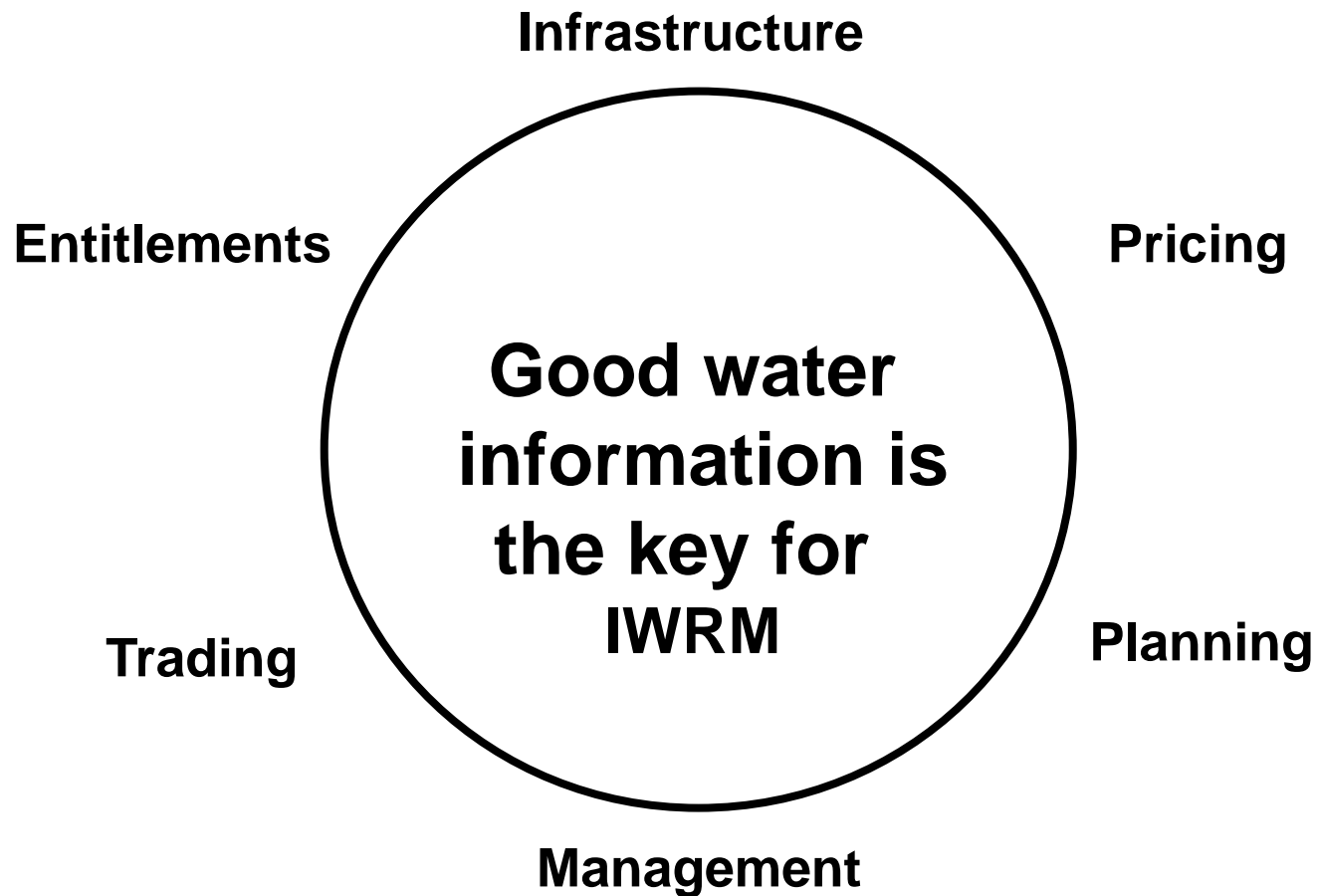
NEEDS/PURPOSE DRIVEN DATA COLLECTION

Invert?



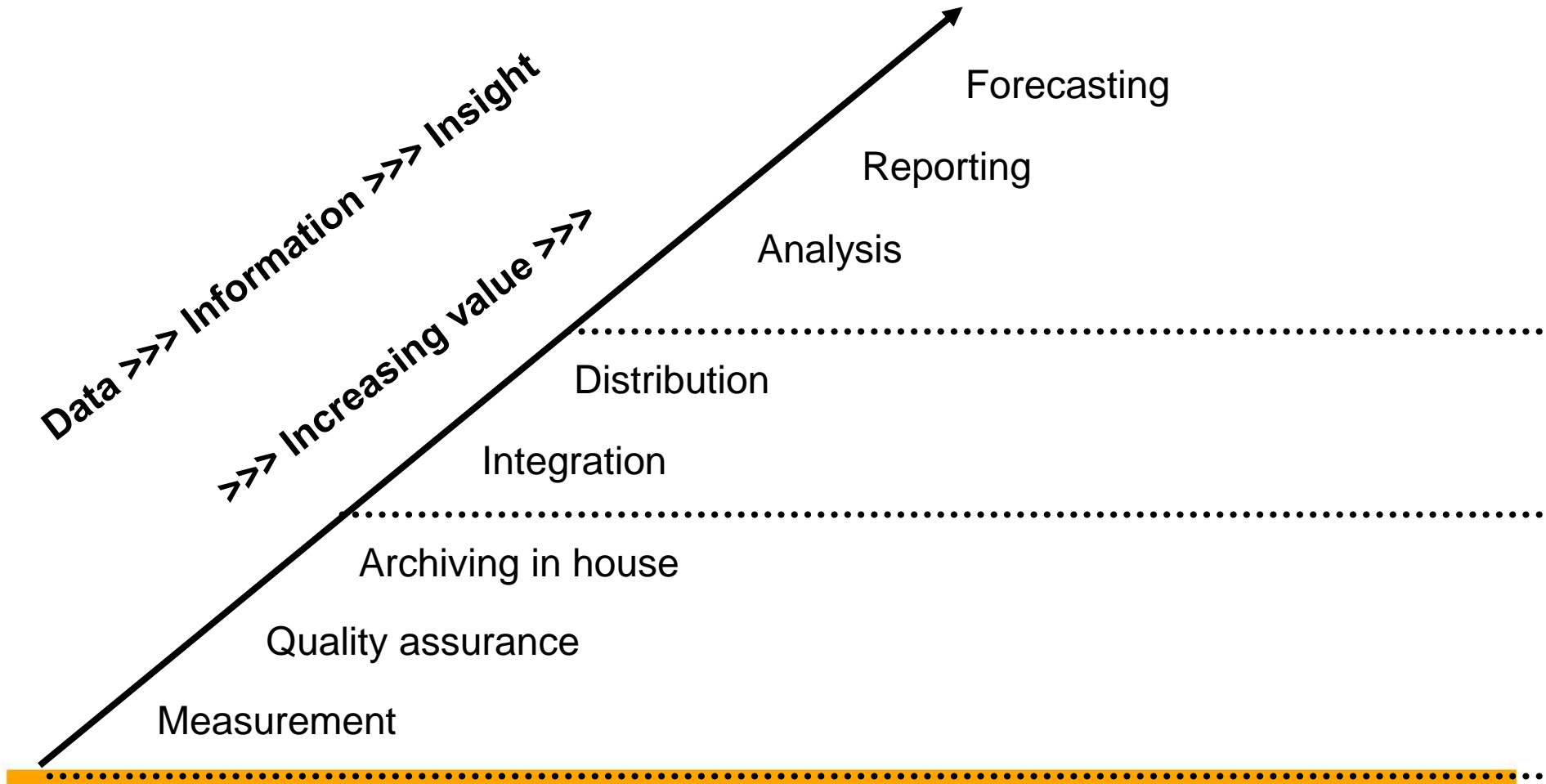


BASIC PREMISE





THE WATER INFORMATION VALUE LADDER





DATA/INFORMATION

- Data/information types required are rapidly expanding
 - Would list but I would miss something!
 - The characteristics of data make assimilation difficult:
 - Session 6.4.2 identified some solutions towards data assimilation/integration – Geofabric etc.
 - need consistent definitions, methodologies and standards
 - Data characteristics that make this difficult include:
 - Temporal variations
 - Spatial variations
 - Definitions/Terminology
 - Quality assurance/Standards
 - Meta-data
-



THE OBJECTIVE FOR SESSION 6.4.3

Barriers to Data Availability/Accessibility

- Technical
- Economic
- Legal
- Socio-political
- Ethical

The sessions will explore the reasons for the lack of availability/accessibility of water related data and debate possible solutions to addressing this issue.



PROCESS AND CONTRIBUTIONS

Presentations followed by a panel discussion.

- Mr Vladimir Smakhtin (International Water Management Institute, Sri Lanka) – General accessibility
 - Mr Bruce Stewart (World Meteorological Organization) – Technical issues
 - Mr Avinash Tyagi (WMO) on behalf of International Water Law Research Institute, UK – Legal
 - Mr Abu Saleh Khan (Bangladesh) – Socio-political
 - Dr Magheb Hussein (Iraq) - Rebuilding
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Mr Vladimir Smakhtin
(International Water Management Institute, Sri Lanka)



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TECHNICAL BARRIERS TO DATA AVAILABILITY

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TECHNICAL BARRIERS TO DATA EXCHANGE

The data are not available because:

- They haven't been measured in the first place (resources);
- They have been measured, but they are:
 - not in a format that enables exchange (e.g. unprocessed records);
 - considered not to be reliable enough to exchange;
 - perceived not to be important to others.
- They have been measured and are suitable for exchange, but the technology:
 - does not exist to enable the transfer;
 - is available, but not reliable;
 - is available, but the capacity to implement it is not.



OTHER RELATED BARRIERS

- Provider's concerns over how the data/information will be used;
 - Communications between providers and users;
 - Consistent terminology and definitions;
 - Different providers provide data/information of different types and of different standards;
 - The temporal nature of data - has both reporting interval (hours, days, etc.) and reporting time (telemetry);
-



OTHER RELATED BARRIERS (ctd)

- Increasing data types and sources – means greater volumes of data to be accessible – access capabilities?;
- Availability of meta-data



REMOVING THE TECHNICAL BARRIERS

The Technical Barriers can be addressed by:

- Improved communications between providers and users
- Improvements in networks (resources);
- Data rescue projects;
- Adoption of a Quality Management Framework;
- Adoption of agreed data transfer standards;
- Interoperability of systems;
- Capacity building, including training;
- Availability of equipment (HYCOS Projects) and supporting systems (HISs).

No technical barriers, only institutional ones!?



CONCLUSIONS AND RECOMMENDATIONS

- Data transfer is essential for improved water resources management
 - Data availability/accessibility is fundamental to the transparent management of the resource
 - There are Technical Barriers to Data transfer, but they can be overcome
 - Get the data/information out there and being used by the users
 - Increase dependency on the availability of the data as value added products and services
 - Set, supply and adopt agreed standards and protocols for data quality and data transfer – Quality Management Framework
 - New data types may provide a solution, but may also introduce new barriers (e.g. standards, data volumes)
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FINISHING COMMENT

If data should be collected with its purpose/use in mind....

The use of the data will define the characteristics required for its collection (spatial, temporal resolution, frequency of recording, reporting timeframes, quality, etc.)....

However, data collected for one purpose may not be sufficiently accurate, timely or of a spatial resolution required for other purposes....

Therefore designing a network to meet all potential purposes/uses remains a significant challenge.



Thank You

