

New Horizons for Spatial Data Quality Research

7th International Symposium
on Spatial Data Quality (ISSDQ 2011)

Raising awareness of Spatial Data Quality

By:

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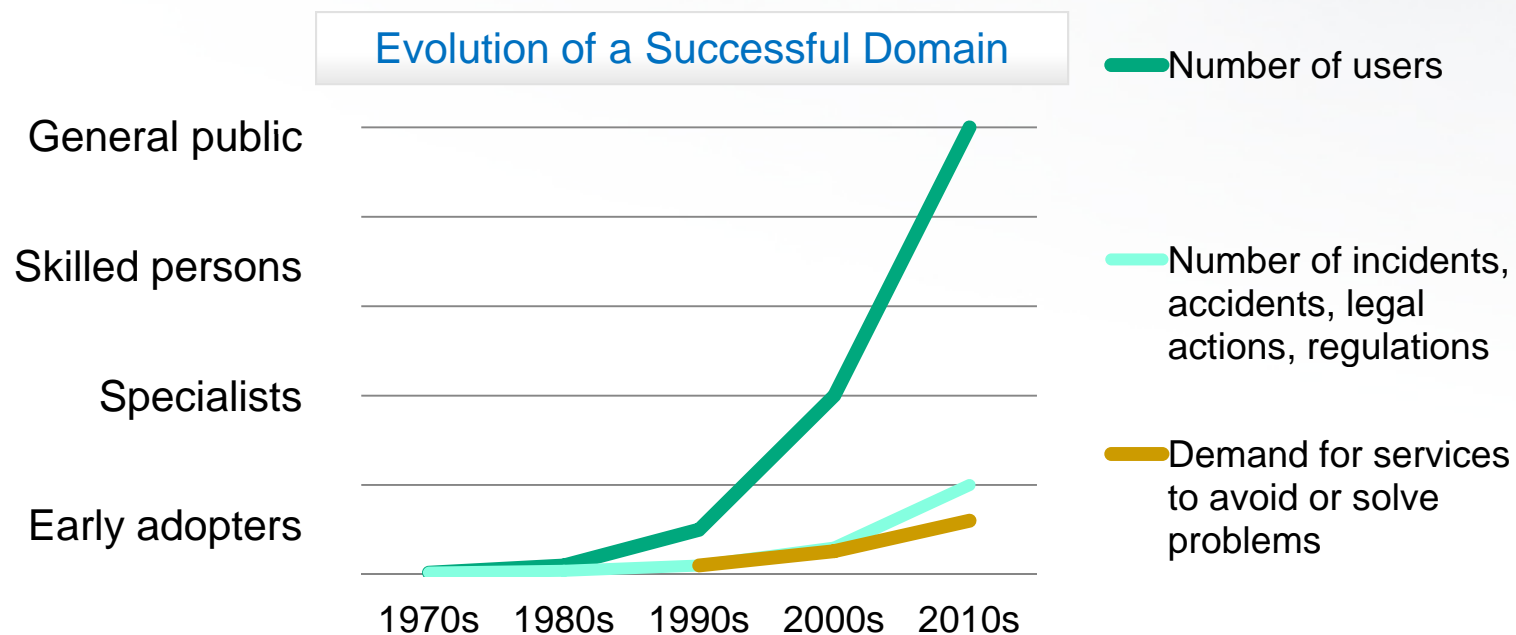


Coimbra, Portugal
12-14 October 2011

Introduction



- Research about spatial data quality has taken place for over 30 years.
- Using and producing spatial data has now reached the level of mass market



Introduction



- Society organizes itself when a mass of citizens is facing increasing risks of misusing given products or services.

Accreditation

Data Quality Assurance

Data Quality Inspection

Accuracy Guarantee

WHEN ?
HOW ?
WHO ?
WHY ?

CIG Professional Certification

ication

OGC Compliance Certification

ISO 9001 Certification



Spatial Data Quality

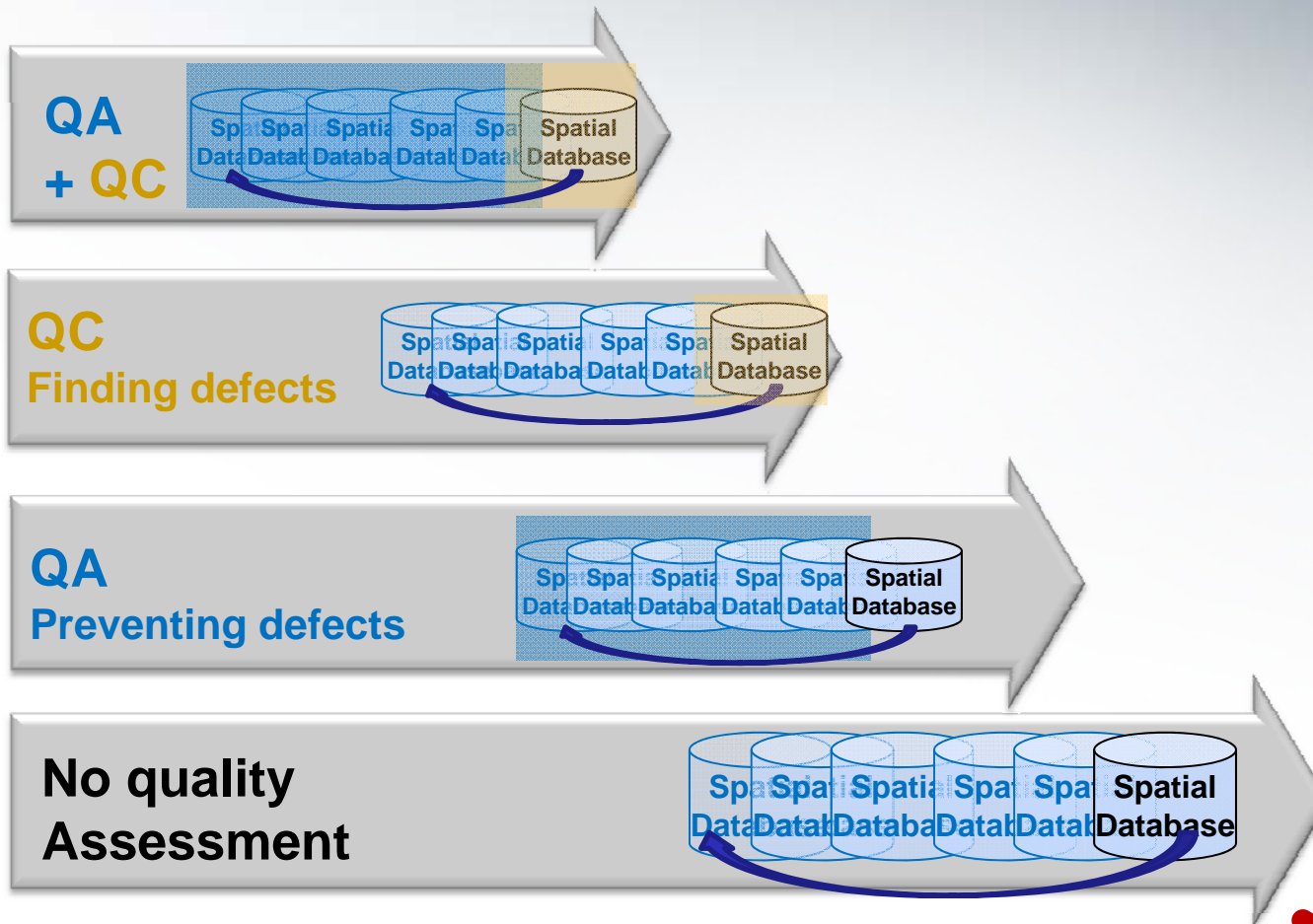
- Uncertainty can be reduced
 - Better observation technologies
 - Better measurement methods
 - Standards
 - Training ...
- There always remains residual uncertainty
- Residual uncertainty = risk absorbed by
 - Data producers
 - Users
- Jurisdictions' laws, Court decisions, regulations, certifications, guarantees, accreditations help to reduce the risk and they define who take or share the residual risk

Data quality issues begin in the hands of professionals but they end up in the hands of Society

When And How To Verify Quality During Spatial Dataset Production?



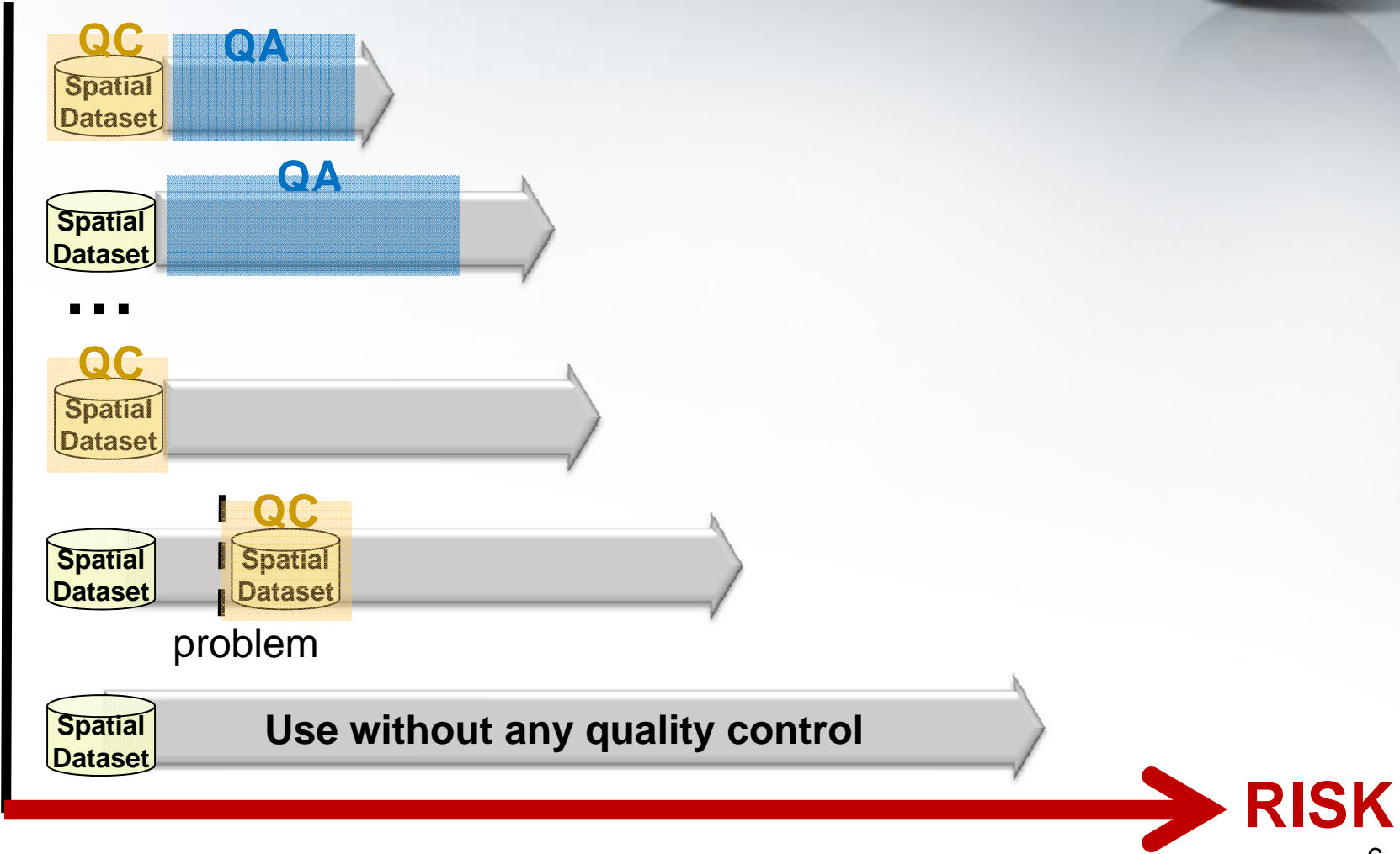
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When and How to Verify Quality For a Specific Usage?

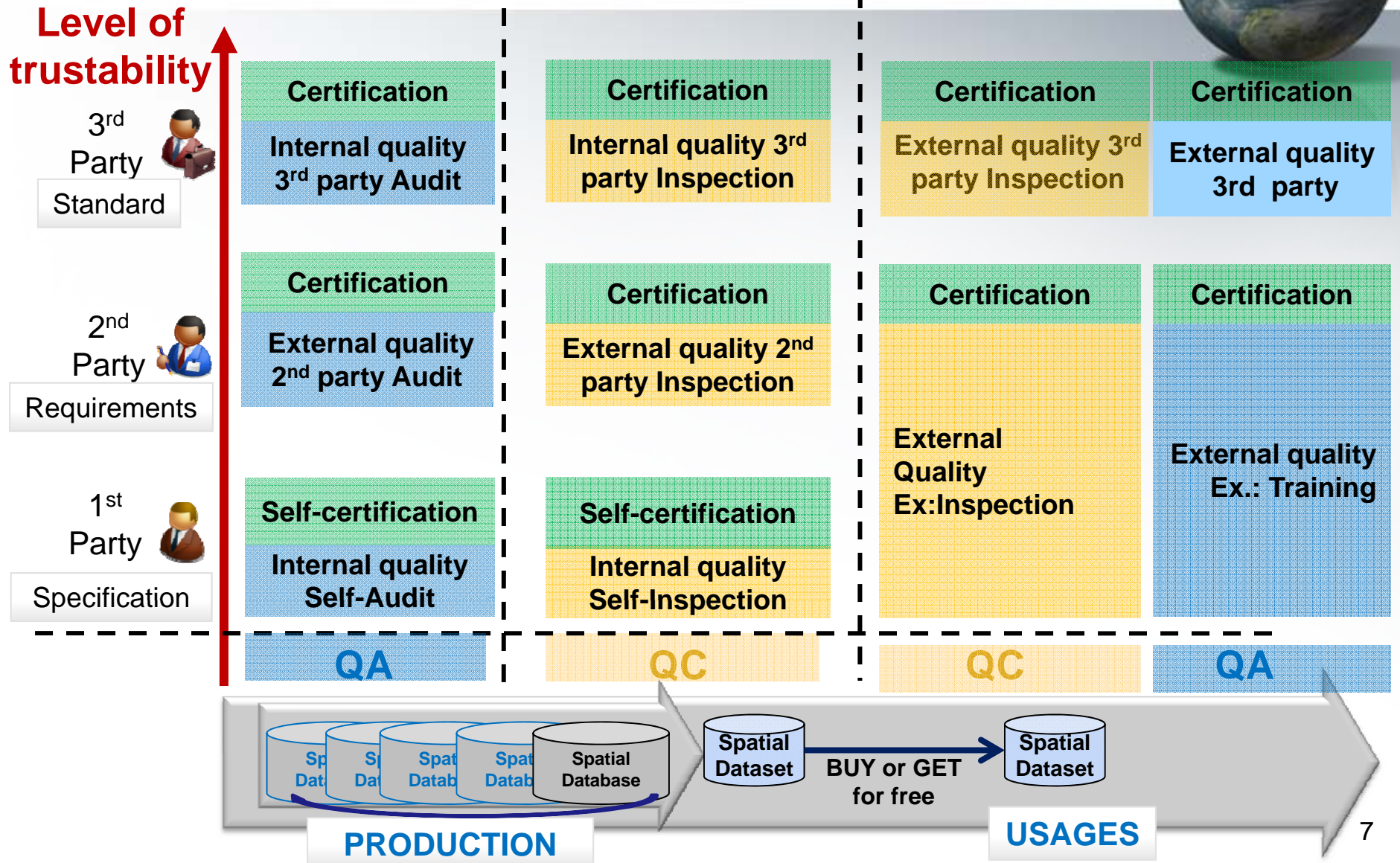


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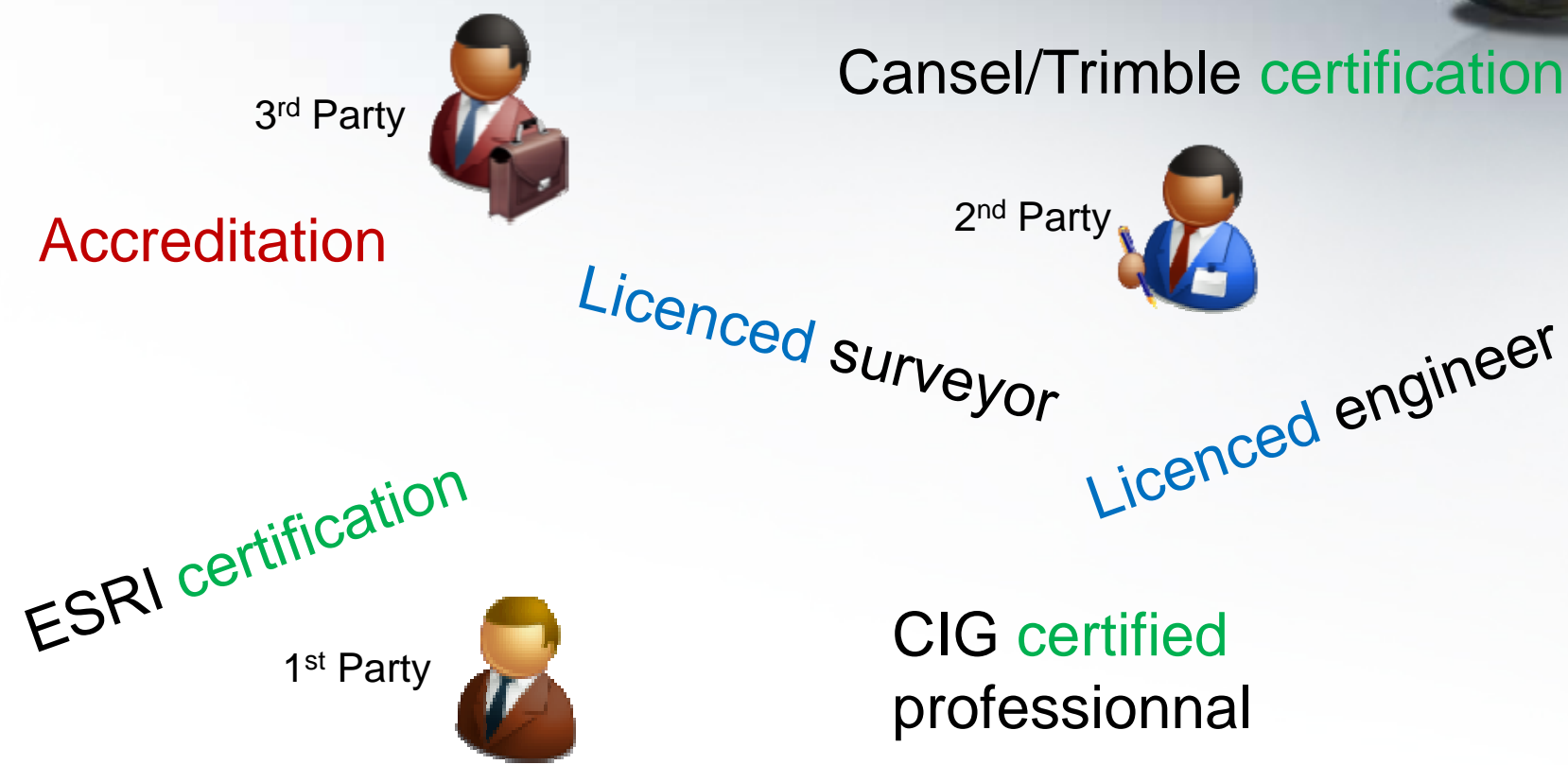


Who verify the quality?





Who verify the quality?

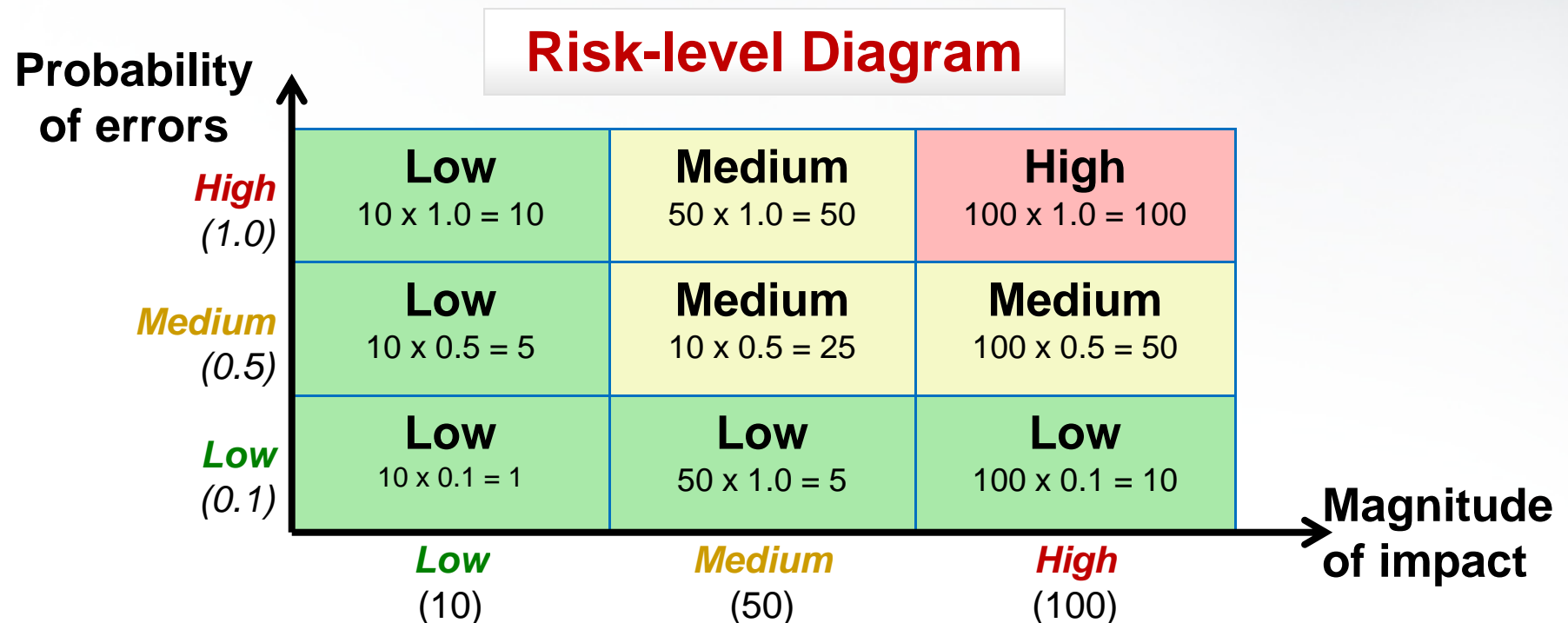


Higher competency  Lower Risk



Why verifying quality?

- To reduce risks which result from:
 - probability of errors reduced by QC, QA, Certification, Audit, Competencies...
 - magnitude of impacts for a given usage.



Guarantee



- Commercial guarantees exist for mass products, for marketing reasons. Does it apply to geospatial data as well?



Empowered Healthcare Intelligence

HealthLink Dimensions takes extensive steps to keep its Physician and Group Practice Databases current. It is estimated that physician contact information accuracy degenerates approximately 30% each year due to changes of address and telephone number, data entry errors, duplication, area code splits, zip code splits, and many other reasons. While no database is 100% accurate; we strive to provide 99% address deliverability¹ as well as a 90% **True Accuracy**² rate for our healthcare provider information. Because of our confidence in our database products and our desire to support our customers' needs, HealthLink Dimensions offers the following guarantee.

Data Quality Guarantee

Address Deliverability

HealthLink Dimensions offers a 99% Address Deliverability Guarantee on all Healthcare Provider Database orders. For database products used within sixty (60) days of product delivery, we will issue to our customers a free update or credit for all undeliverable records contained in their file. This guarantee applies to "best address" only. For information on receiving a free update or credit, please see the **Data Quality Guarantee Remedy** section.

True Accuracy

HealthLink Dimensions offers a 90% **True Accuracy** Guarantee on all Healthcare Provider Database orders. For database products used within sixty (60) days of product delivery, we will issue to our customers a free update or credit for all inaccurate records contained in their file. This guarantee applies to "best address" and "best phone number" only. There are some medical specialties that require providers to practice in multiple locations, which makes it difficult to identify a "best address" or "best phone number" for these individuals. Due to the transient nature of these practitioners, the





Conclusion

- As geospatial data are entering the consumer world, a new era of rights and obligations has begun.
- Many users *de facto* perceive spatial data as reliable for their usages.
- The increasing of number of incidents and accidents involving spatial data is driving Society to protect these users against the risks of data misuses.
- In this new era, we must expand our R&D horizons and there are still many questions to answer.



Acknowledgement

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 - 10 governmental and industrial partners



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