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Importance of Trusted Networks for Developing countries

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What is Trust?

Trust of a party **A** to a party **B** for a given task **S** is the measurable belief of **A** in that **B** accomplishes **S** dependably for a specified period **P** within a particular trust context **T** (in relation to the task **S**)

Trust is **relative** to a specific task (a service). Different trust relationships appear in different business contexts

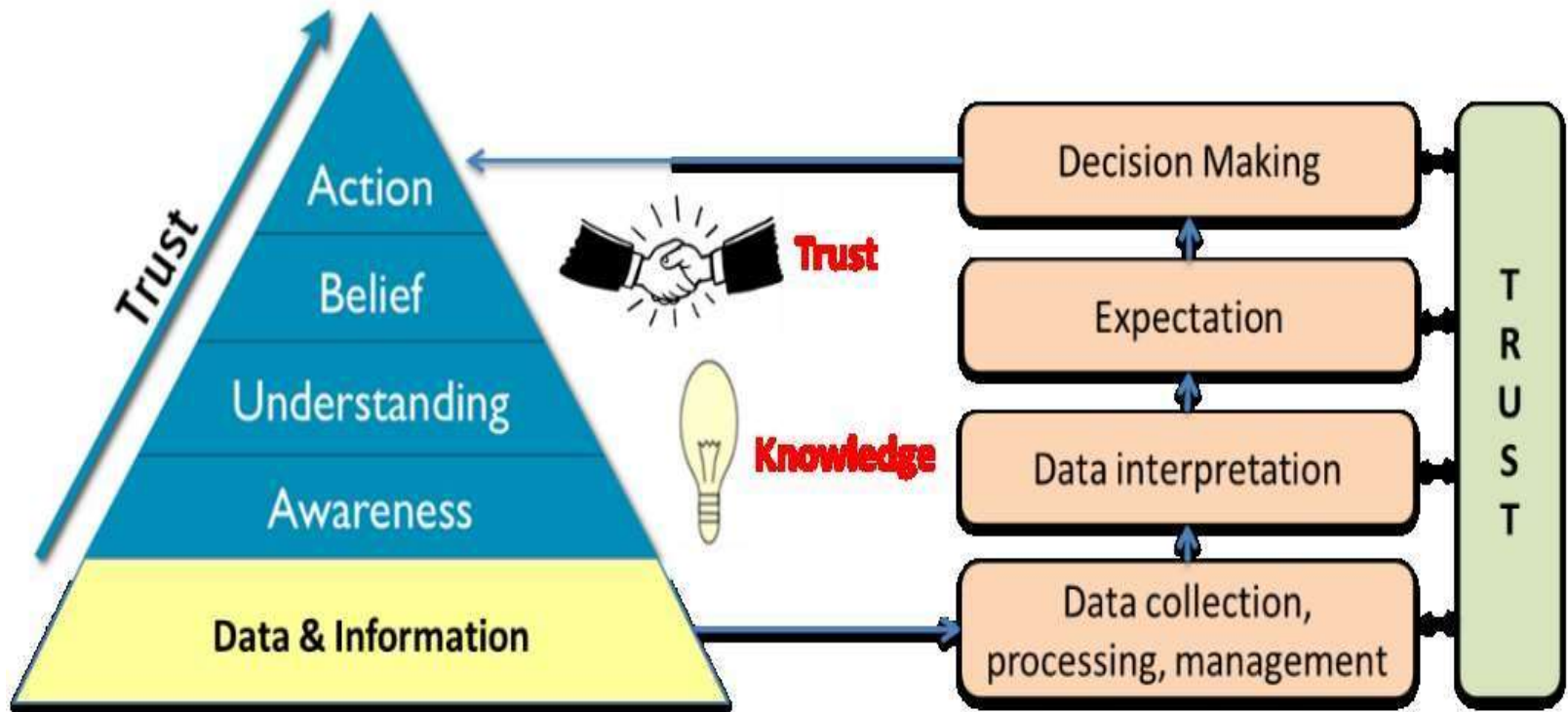
The measurement may be **absolute** (e.g. probability) or **relative** (e.g. Level of Trust)

This period may be in the **past** (history), the **duration of the service** (from now and until end of service), **future** (a scheduled or forecasted critical time slot), or always

Dependability is deliberately understood broadly to include

availability, reliability, safety, confidentiality, integrity and serviceability

Knowledge and trust



Trust Standardization in SG13

- **ITU-T CG-Trust under Q16/13**
- **Three Recommendations on Trust**
 - **Y.3051 (Y.trusted-env)**: The basic principles of trusted environment in ICT infrastructure
 - **Y.3052 (Y.trust-provision)**: Overview of trust provisioning in ICT infrastructures and services
 - **Y.3053 (Y.trustnet-fw)**: Framework of trustworthy networking with trust-centric network domains
- **Other on going draft recommendations**
 - **Y.trustworthy-media, Y.trust-index, etc.**



Trust standardization is in infancy.. Africa should play

What's Next

- ❑ Requirements, capabilities and service scenarios for trust provisioning
- ❑ Architectural framework for trustworthy telecommunication networks
- ❑ Technical solutions for trust provisioning
- ❑ Trust provisioning in Big Data analytics
- ❑ Inter Cloud Trust Management
- ❑ Etc

Trust issues for Developing Countries.

- ❑ Trust Standardization is evolving rapidly but Developing countries' input is largely missing
- ❑ Networks are considering to deploy Trust standardsmost of those are not in Developing countries
- ❑ New networks seem to must have Trust standardization as a critical component in them
- ❑ Trust standardization is opening up new business opportunities which Developing countries will miss if they do not participate
- ❑ Eventually Trust will cost money. Will Developing Countries still afford or will be forced to pay

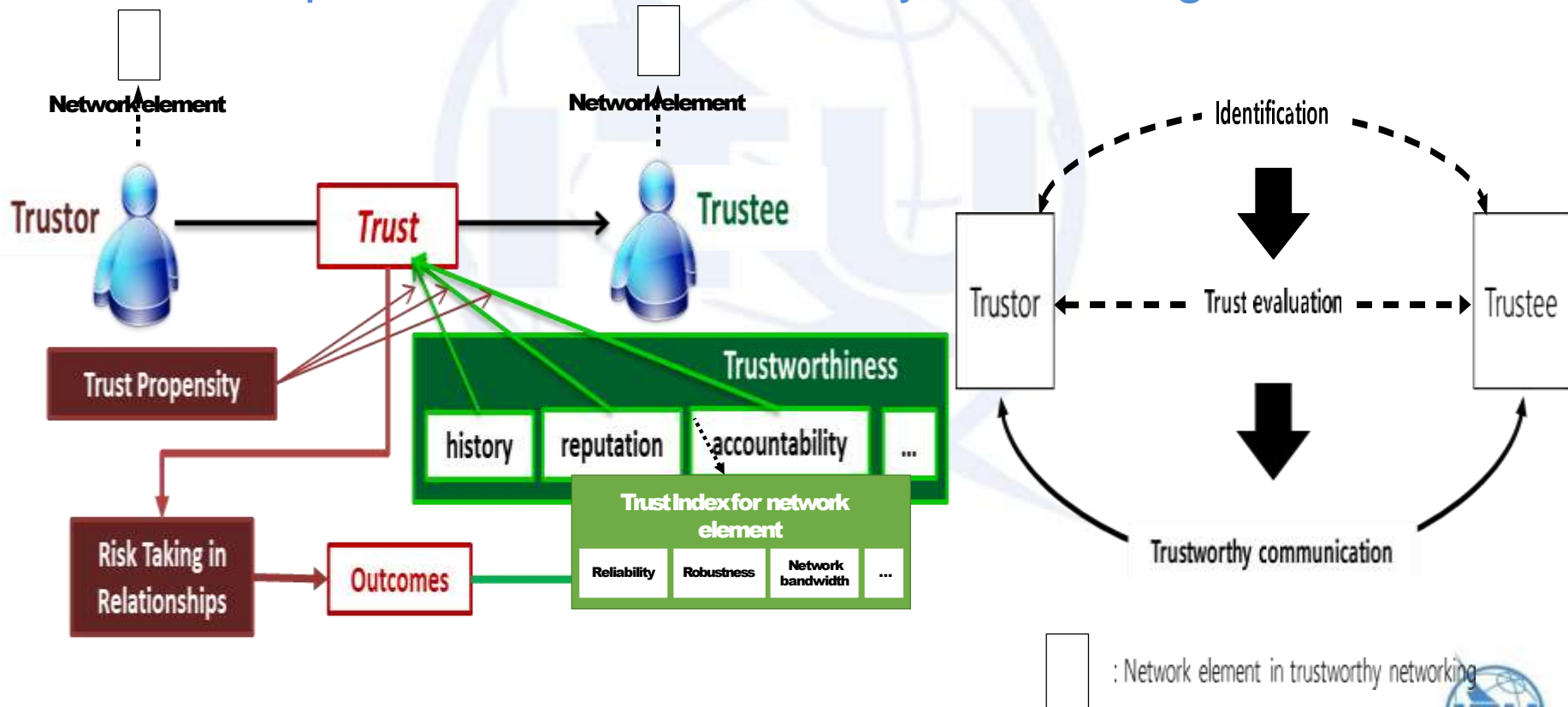


Trust issues for Developing Countries.

- ❑ Trust Standardization could become a network differentiator (Trust Index) (who wants to do business with someone not Trusted)
- ❑ A lot of transactions are going online and these rely on Trustworthiness of networks will Developing countries' networks survive without upgrading?
- ❑ Business opportunities are now largely online can business from developing countries' compete?

Trustworthy networking (Y.3053)

- A conceptual model of trustworthy networking



Challenges for Trust in SCPI

- Highly interconnected SCPI
 - A new kind of **complex system**
- Assuring continuous trustworthiness
 - Trust is **situation-specific** and trust **changes over time**
- Data transparency
 - **Promote transparency** about what data is collected and how it will be processed and handled
- Trust, security and privacy become tightly coupled
 - **A unified approach** towards trust, security and privacy co- analysis, design, implementation and verification
- The integration of the physical, cyber, and social worlds
 - **Social-cyber-physical trust** relationships

Technical Issues

- Identification of entities
- Trustworthy management
- Trust computation and trust evaluation/validation
- Dissemination of trust information
- Trust establishment and provisioning
- Trustworthy system lifecycle management
- Technological Convergence (Networking, Computing, Big Data, AI, Trust)

Trust nexts for Developing countries

- Must and need to understand that Trust has come and it is not going back
- Must participate in the evolution of Trust standardization
- Must start implementing the already approved Recommendations in their networks...even if basically

END

THANK YOU FOR YOUR ATTENTION



