Conformity assessment and standards

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TODAY’S TOPICS

● The elements of Conformity Assessment Systems

● Use of standards and conformity assessment to evaluate promised services as 'fit for purpose’ and ‘meets expectations’

● Principles and Value of Open Standards
Problem: Gaining Trust in Promised Services

- What do you & your organization look for in online products and services to believe they are trust-worthy and are a solid solution?

- How can a commercial reputation for quality be expressed?

- Is this a hard problem to solve?
**SOME POSSIBLE SOLUTIONS**

- Use recognized standards to develop and deliver services

- Undergo conformity assessment and obtain a licensed Mark of conformity as evidence of conforming to specified standards

- Negotiate contracts (unilateral, bi-lateral, multi-lateral)

- Purchase services that display the desired Mark of conformity
Some Concepts

- **Standards** are a consensus on how an activity *should be done* or a product made. They should be developed using open, transparent, voluntary processes.

- **A Mark of Conformity** represents a *commitment* by the licensee to achieve specified quality as defined in a standard.

- **Conformity Assessment** is used to evaluate how an activity *is actually being done* (and may result in issuance of a licensed Mark).
A Scenario

SHOEME.COM AND PERSONAL DATA PROTECTION RISKS
THE SCENARIO

• Overall scenario – online retail based on personal information and preferences
• Problem – each participant is at risk if the other is a bad apple or careless
• Solution – What do you do in real life?
  • get information about track record
  • determine if good practices are used
• How is this possible in the online world?
SCENARIO – SHOEME.COM

S. Shopper

Gives personal information for custom store recommendations

ShoeMe.com
SCENARIO – SHOEME.COM

S. Shopper

Gives personal information for federated authentication services

myLogonFriend.com

Use secure authentication protocol for federated single sign-on

ShoeMe.com

Gives personal information for custom store recommendations
SCENARIO – SHOE_ME.COM

Do ShoeMe and myLogonFriend protect information well?
Are they using good industry practices?
Is my information safe?

Does ShoeMe protect information well?
Do they comply with regulations?

Does myLogonFriend protect information well?
Do they comply with regulations?
SCENARIO – SHOEME.COM

Use Conformity Assessment to assess whether the organizations meet the requirements as stated in standards!

S. Shopper

myLogonFriend.com

ShoeMe.com
CONFORMITY ASSESSMENT
Definition: Conformity Assessment

- Conformity assessment: demonstration that specified requirements relating to a product, process, system, person or body are fulfilled

(ISO/IEC 17000:2004)
THE VALUE OF CONFORMITY ASSESSMENT

- Undergoing the conformity assessment process has a number of benefits:
  - It provides consumers and other stakeholders with added confidence.
  - It can give your company a competitive edge.
  - It helps regulators ensure that health, safety, environmental conditions, security and other requirements are met.
ISO/IEC 17000 ‘FUNCTIONAL APPROACH’

- ISO/IEC 17000
  *Conformity assessment – Vocabulary and general principles*
- Part of a family of standards on Conformity Assessment
- ‘Functional Approach’ is proposed
  - *Selection* – choose the standard; decide on sampling & techniques
  - *Determination* – testing, inspection, auditing, examination
  - *Review & Attestation* – decide on conformity to the specified requirements; issue statement of conformity; issue a Mark
  - *Surveillance* – monitoring out in the marketplace
WHAT IS A MARK OF CONFORMITY?
MARK OF CONFORMITY

● A Mark of conformity is an indication that an organization has demonstrated conformity to standards which set expectations of quality.

● A Mark of conformity may be licensed to qualified organizations.

● The license contains terms and conditions to have the right to use the mark – e.g. the licensee must remain in conformity
WHY TRUST A MARK ISSUER?

• A Mark issuer conforms to standards (of course). The issuer uses a formal conformity assessment system to ensure the quality of the licensee’s products and services.

• Mark issuers should be Accredited: evaluated by peers to confirm quality of the conformity assessment scheme and Mark license.

• Accreditation increases the value of issued Marks.
CONFORMITY ASSESSMENT SYSTEM
WHAT IS A SYSTEM OF CONFORMITY ASSESSMENT?

- Conformity assessment system: rules, procedures and management for carrying out conformity assessment

(ISO/IEC 17000:2004)
CONFORMITY ASSESSMENT SYSTEM
WHO PERFORMS ASSESSMENTS?

- 1st Party Assessment = Internal Independent Assessor
- 2nd Party Assessment = A Supplier requirement
- 3rd Party Assessment = External Independent Assessor

Significance
- There is high value in each type of conformity assessment; 3rd party assessment (certification) is not always required
Examples of

CONFORMITY ASSESSMENT SCHEMES
The Kantara Identity Assurance Assessment Framework

- Assess fulfilment of requirements of NIST SP 800-63 v2 or equivalent standards (Credential Management, Identity Proofing, Credential Authentication)
- Kantara Initiative manages the scheme: the assessment rules, approval processes and assessment criteria
- Kantara Initiative licenses marks of conformity
- Currently developing a scheme to assess conformity to NIST SP 800-63 v3
INFORMATION SECURITY MANAGEMENT SYSTEMS

- ISO/IEC 27001: *Information technology — Security techniques — Information security management systems — Requirements*
- Requirements for information security management systems
- There are 14 currently-accredited certification bodies in the USA
OPEN STANDARDS
[Standards] provide requirements, specifications, guidelines or characteristics that can be used consistently to ensure that […] processes and services are **fit for their purpose.**

— www.iso.org
Open Standards

- Cooperation
- Adherence to Principles
- Collective Empowerment
- Availability
- Voluntary Adoption
10 Benefits of Open Standards

- Address Market Needs
- Reduce Costs
- Drive Interoperability and Scalability
- Encourage Market Competition
- Leverage Expert Knowledge
A Scenario

SHOEME.COM AND PERSONAL DATA PROTECTION RISKS
CONCLUSION – SHOEME.COM

S. Shopper

myLogonFriend.com

ShoeMe.com
CONCLUSION – SHOEME.COM
CONCLUSION – SHOE ME.COM
CONFORMITY ASSESSMENT SYSTEM
The Kantara Initiative is the global consortium improving trustworthy use of identity and personal data through innovation, standardization and good practice

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