

Interpreting Certification as a Signal of Interoperability

Organisational Implications in a Qualitative Case Study

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With technology becoming an increasingly integrated part of our society, there is also a growing expectation that technical products from different manufacturers will work together seamlessly. An example of this is surveillance cameras and video management systems (VMS) from different companies. For products to be able to work together, technical standards are used to describe how the products should communicate. One of the most important and widely adopted standards in the network video industry is ONVIF (Open Network Video Interface Forum). Products that successfully implement ONVIF's requirements are allowed to be certified, which communicates to the market that the products are compliant with the standard and that they can be expected to work together with other certified products.

Previous research has mainly focused on the technical and financial aspects of standards, but how certification influences how companies organise their work, distribute responsibilities and make decisions has been underexplored in relation. This master's thesis examines how a large technology company in the network video industry is affected organisationally as a result of relying on ONVIF and its certification. The study is conducted as a qualitative and explorative single-case study, with the primary data source being semi-structured interviews with employees at the case company, e.g. managers, implementation engineers, quality assurance and customer-facing roles. Even the current and previous chairman for the ONVIF organisation were interviewed in order to gather wider ecosystem perspectives.

The results show that certification has many aspects and is interpreted in different ways by different roles. ONVIF's certification does not automatically guarantee that products in practice work together

fully seamlessly. Even with two equally-certified products, problems seemingly still occur with compatibility. This is possible because the standard leaves flexibility for different technical interpretations and implementations. The study therefore identifies a difference between what certification actually verifies and what many customers and employees think it guarantees. The study also shows that engineers often view certification as a minimum and as a technical framework on which to further build upon, whereas sales- and businesspersonnel view it as a guarantee for interoperability and also as a marketing asset. Certification thereby becomes a common reference point used by everyone, but with differing meaning depending on role and responsibility.

An important conclusion is that certification works as an organisational tool, not just as a way to technically validate products. The shared certification goal helps the case company to coordinate work, to prioritise resources and to distribute responsibility between departments. However, risks can arise if too much trust is placed in the expectation that products work together, when that is not always the case.

The study's contribution is new knowledge about how technical standards affect organisations from a deeper and more detailed perspective. The analysis shows that certification concerns much more than just the technical aspects, but also how people interpret information, collaborate and make decisions together. For companies, this means that standards such as ONVIF should be seen as both technical and organisational tools, where it is necessary to have a well-planned balance between trust in certification and continuous, critical examination of how products work together in practice.