



QWEB Specification:

new perspectives from different stakeholders

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1. Introduction

- The existence of e-commerce/e-business is **growing** in the Web.
- A key factor for the e-business success is the **trust** that the customer deposits in the service provider, allowing for further visits and purchases in the future.
- One way to tell the customer that the service supplier uses a set of best practices - **certification**.
- The **QWEB specification**, owned by the International Certification Network (IQNet), defines a set of rules and guidelines for e-commerce and e-business certification.
- Originally from Italy, the QWEB Certification is used particularly in **Europe** (Italy, Portugal, Finland, Slovenia, Switzerland).
- The last available edition (version 2.0) was published in **January 2005**.
- By the end of April 2011 there were **59** QWEB certified websites worldwide.

2. Research Purpose

- **Our aim:**
“Improve the QWEB specification, taking in account the research findings that we were able to identify in the literature review and from the opinion of different stakeholders”
- **Questions to answer:**
 - Are there any **alternatives** in the market for e-business certification? What are their **features**?
 - Does the QWEB specification fulfill the **most important** requirements defined by the **customers**?
 - Does the QWEB certification **add value** to the business?
 - What is the **opinion** of the **certified companies**, the **auditors** and the **QWEB Coaches** (companies that develop websites according the QWEB specification requirements) concerning the current specification? In what ways can it be improved?

3. Methodology

Potential Improvements

- Identify **customer satisfaction** evaluation systems in e-commerce/e-business. Based on the information gather, identify the characteristics of a website that are considered by the costumers as the **most important** ones.
- Identify **certification schemes** and **logos/stamps** of best practices at e-commerce/e-business sites.
- Analyze the **QWEB specification** and compare it with other schemes.

Different Opinions

- Interview with a QWEB Auditor - **Specialist Opinion**.
- Develop a **survey** to be carried out among the QWEB certified companies – **Certified Entities Opinion**.

New QWEB proposal

- Based on **qualitative** and **quantitative analyses** over the data collected, develop a new version of the QWEB specification, incorporating research findings.
- Validate the specification proposal, with a **QWEB Coach company**.

4. Identification of Potential Improvements

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Literature review

- I. Evaluation systems of customer satisfaction in e-commerce/e-business
- II. Stamps/Logos of best practices at e-commerce/e-business sites
- III. QWEB Specification

4. Identification of Potential Improvements

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I. Evaluation systems of customer satisfaction in e-commerce/e-business

Important Conclusions

- The most important and common aspects are related to **usability/website design** and **fulfillment/reliability** of goods and services (Wolfenbarger and Gilly, 2003; Barnes and Vidgen, 2005; Parasuraman *et al.*, 2005).
- **Information quality** is also mentioned several times.
- Besides these, we find security, privacy, site performance, availability, supplier contact and business credibility.
- Regarding business credibility, some authors suggest the use of services from entities that monitor and **certify the credibility of the business**, with the inclusion of corresponding **logos** (Trocchi and Janda, 2003).

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4. Identification of Potential Improvements

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II. Stamps/Logos of best practices at e-commerce/e-business sites

Some examples:



Important Conclusions

- Some studies have identified **small benefits** but others refer an **increase in purchase intent**, particularly when they are related with guarantees, security and trust (Hu *et al.*, 2003).
- Despite the existence of several organizations that certify websites, seems to be greater emphasis given to **safety aspects**, such as Verisign and Webtrust, and **not** in the **entire business** scope, like BBB and QWEB.
- Some systems have a set of requirements a bit complex and demanding.

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4. Identification of Potential Improvements

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III. QWEB Specification

- Defines a set of rules and guidelines for e-commerce and e-business certification.
- It includes front-office and back-office audits
- 59 websites certified (April/2011) in Europe (Italy, Portugal, Finland, Slovenia, Switzerland)
- 21 certification bodies (April/2011)

Requirements are grouped into **seven distinct areas**:

- Identification of the online supplier
- Information to be provided on the certified website
- Transaction management
- Processing of users' personal information (privacy)
- Security
- Social responsibility
- Quality of the e-business process (control, complaints and corrective actions)

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5. Specialist Opinion – Interview

- QWEB auditor interview as another relevant source of information.
- The interview framework used was composed by 3 groups of questions: **QWEB project**, **QWEB Specification** and **QWEB Certification Process**.

Main Conclusions:

- **QWEB Project**
Weak commitment by certification bodies of the different countries. Customers have interest, some times as a first approach to quality management processes on IT organizations (next is ISO9001).
- **QWEB Specification**
Should integrate several aspects like customer support, ISO27000 information security in electronic transactions aspects and usability. They should improve other aspects like handling complaints, internal audits and outsourcing. Alignment with other standards (ISO20000, ISO27000).
- **QWEB Certification Process**
Continues with low demand, perhaps caused by the certification costs. It is need a big marketing campaign to promote the recognition of the brand.

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6. QWEB Certified Companies Opinion - The Survey

- Based on the information gathered in the previous phases, we developed a **questionnaire** that was sent to all QWEB certified organizations.
- A **first version** of the questionnaire was tested in a Portuguese QWEB certified company.
- Based on the feedback gathered we improved the survey to the **final version**.
- The final version of the questionnaire was composed by **45 questions**, grouped in four sections:
 - **QWEB Certification Mark**
 - **Strategic Management**
 - **Customer Support**
 - **Website**
- Online platform: **LimeSurvey**
- **Languages:** English, Portuguese and Italian
- **Response rate:** 21,8%

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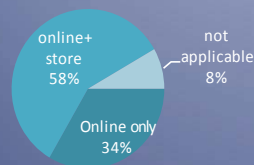
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7. Statistical Analysis of Responses

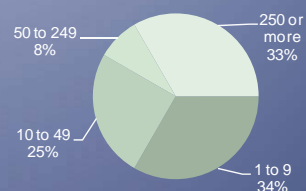
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- **Organizations general characterization**

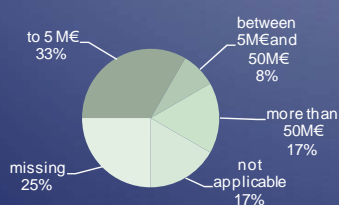
Type of business



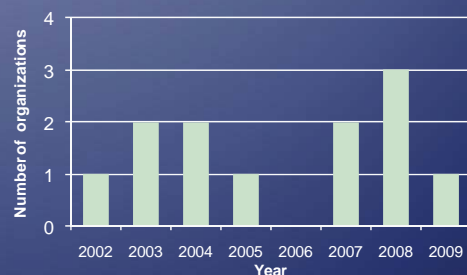
Number of Employees



Sales volume



QWEB Certification year



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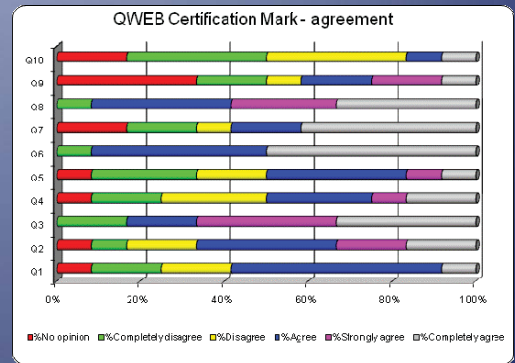
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7. Statistical Analysis of Responses

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Section 1 - QWEB Certification Mark

- Questions with the **highest** average agreement
 - Q3 - *The audit process translates into added value to the organization*
 - Q6 - *The QWEB symbol size is suitable for viewing by consumers*
 - Q8 - *QWEB Certification improves in terms of added value if they were included usability tests to the website*



- Questions with the **lowest** average agreement
 - Q10 - *Following the granting of certification, annual audits are not justified to back-office*

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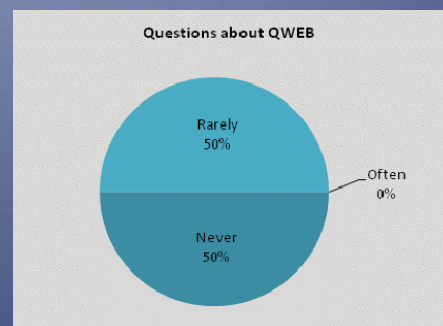
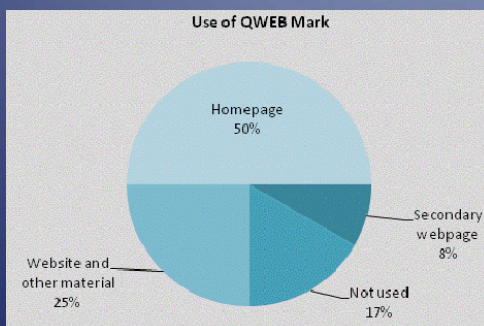
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7. Statistical Analysis of Responses

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Section 1 - QWEB Certification Mark

- Use of QWEB Mark
- Questions by customers about QWEB



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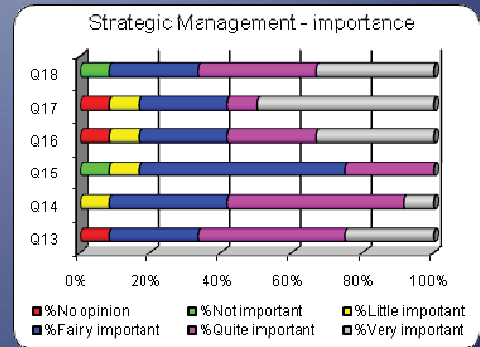
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7. Statistical Analysis of Responses

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Section 2 - Strategic Management

- There is a **significant positive correlation** between the "importance" and "use"
- Questions with the **highest** average importance/use
 - Q13 - *Process of self evaluation to the entire system, with the production of formal report*
 - Q17 - *Resolution of conflicts (customer-supplier) without external entities (only parties)*
- Questions with the **lowest** average importance/use
 - Q15 - *Documented procedure on the risk analysis, including definition of responsibilities, areas and reports*

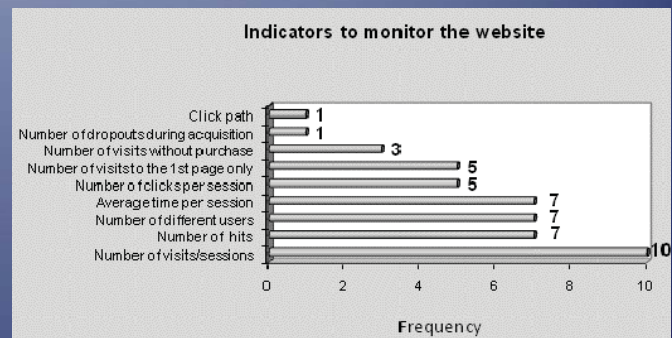
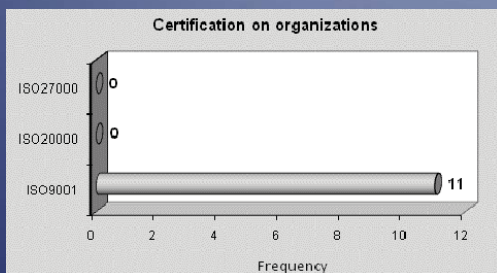


7. Statistical Analysis of Responses

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Section 2 - Strategic Management

- **Certifications**
- **Indicators to monitor the website**

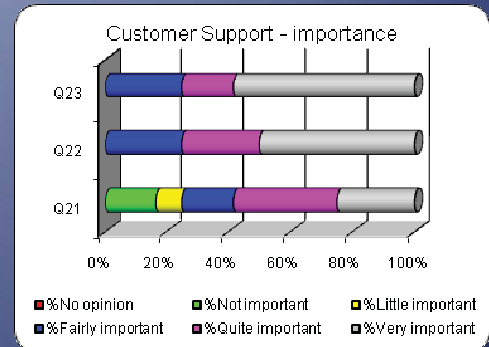


7. Statistical Analysis of Responses

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Section 3 - Customer Support

- There is a **significant positive correlation** between the "importance" and "use"
- Questions with the **highest** average importance/use
 - Q23 - Registration of complaints by using a feature of the website framework for this purpose
 - Q22 - Clear process of management and treatment of complaints perfectly designed, implemented, monitored and improved (in line with ISO9001)



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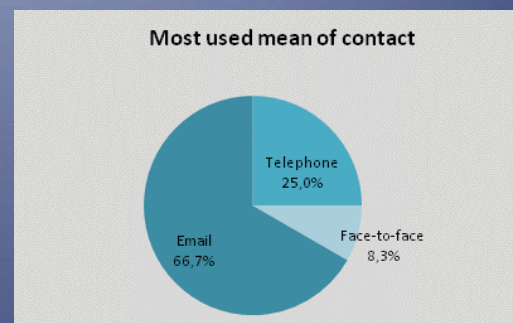
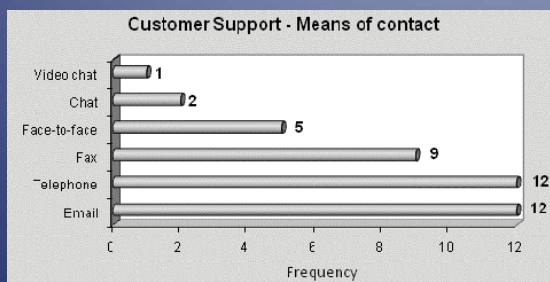
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7. Statistical Analysis of Responses

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Section 3 - Customer Support

- Means of contact
- Most used mean of contact



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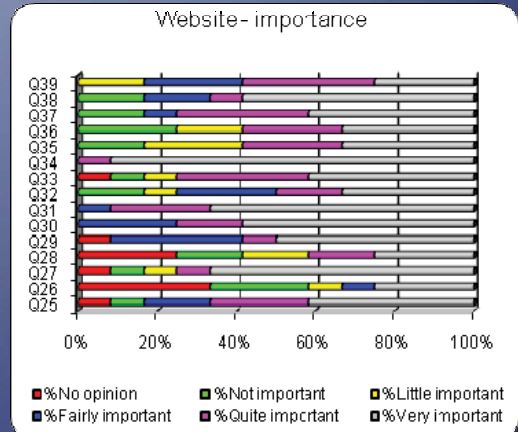
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7. Statistical Analysis of Responses

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Section 4 - Website

- There is a **significant positive correlation** between the "importance" and "use" in 13 questions (/15)
- Questions with the **highest** average importance/use
 - Q30 - *Update content performed according to a precise procedure, including responsibilities, precedence and dates*
 - Q31 - *Valuation of presentation and navigation simplicity in the website development*
 - Q34 - *Introduction of personal data in secure session - SSL*
- Questions with the **lowest** average importance/use
 - Q26 - *Inclusion of hyperlink to the supplier if it is necessary to download/install extra software*



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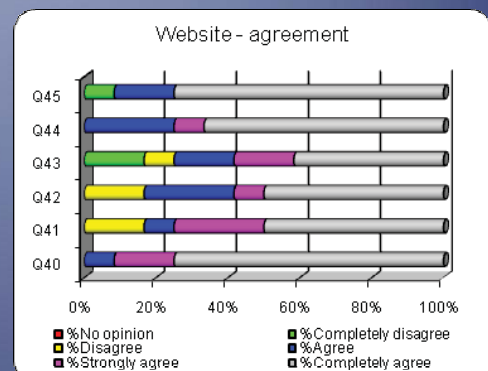
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7. Statistical Analysis of Responses

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Section 4 - Website

- Questions with the **highest** average agreement
 - Q40 - *The organization image is seriously affected by online existence of incorrect or outdated information*
 - Q44 - *For normal use of the website, it should not be necessary to install specific plug-in*
 - Q45 - *Having the website monetary transactions, the system should include minors protection mechanisms*



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8. QWEB Specification Proposal / Improvements

1. **Brand visibility**

A large marketing campaign is need to improve the national and international brand image

2. **Audits**

Balancing the possibility of integrating back-office audits in ISO9001 audits

3. **Security / SSL**

The existence of mandatory security mechanisms with the corresponding resistance tests would be well regarded by both parties

4. **Complaints**

Any complaints about all aspects of the e-business operation should have the correct treatment, defined like in ISO9001

5. **Monitoring indicators**

Set of key metrics, especially related to purchases and withdrawals

8. QWEB Specification Proposal / Improvements

6. **Usability**

Integrate usability tests in appropriate depth in order to integrate the concepts but not to make a system of such complexity that could prevent the implementation

7. **Cost**

The joint audits with other management systems implemented in the organization could allow a rationalization of the costs with amounts reduction

8. **Internal audits**

This analysis should be periodically together with record keeping

9. **Contact with customers**

Beyond traditional ways of contact, the system should assess the use of new kind of contact solutions that enable greater proximity to customers, particularly those using real time video and audio

8. QWEB Specification Proposal / Improvements

10. Search engine

The inclusion should be done in a general area of the website to facilitate its use, preferably at the beginning of the main page

11. Content Management

The existence of a well-defined procedure, including responsibilities, dates and precedence should be implemented for the entire website

12. Plug-ins

It is better not to force users to install additional components, making the process faster and lighter.

13. Minors Protection

As the site has transactions of goods and services with payments, it is advisable to use mechanisms to identify orders executed by minors

9. Conclusions and Future Work

- QWEB is a good certification scheme with a well-developed specification and an appropriate certification process
- A large marketing campaign is need to improve the brand image
- Certification bodies have a key role in the promotion of the product to its customers

Future Work

- Validate the specification proposal, with a **QWEB Coach company**
- Inclusion of usability tests - develop studies in this area
- Contact companies that were QWEB certified in the past and that are no longer - know the reasons for this decision
- Know the opinion of other organizations in e-commerce market

Thank you.

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