



**EMPIRICAL EVIDENCE CONCERNING SMEs' CORPORATE WEBSITE:
EXPLAINING FACTORS, STRATEGIES AND REPORTING**

Amalia García-Borbolla Fernández
Universidad de Cádiz
amalia.borbolla@uca.es
Manuel Larrán Jorge
Universidad de Cádiz
manuel.larran@uca.es
Rafael López García
Universidad de Cádiz
rafael.lopez@uca.es

Objetives

To find Factors that affect the propensity of SMEs to have their own corporate web.

To Analyse contents of SME's corporate Web sites:

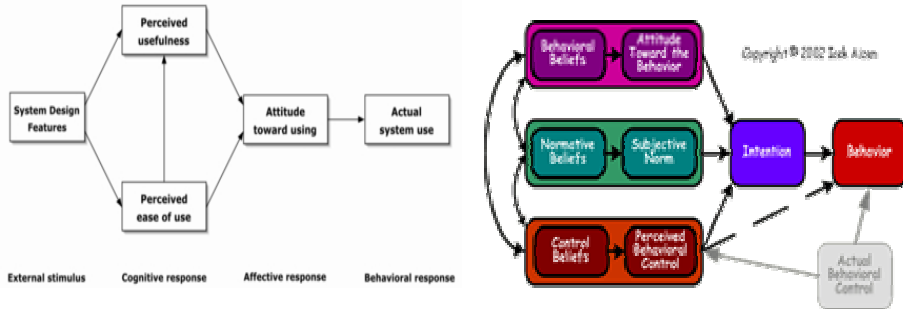
Type of information published on SME's corporate Web sites

Strategies and goals that businesses habitually employ with their corporate Web sites

The Theory of Reasoned Action (TRA) (Fishbein y Ajzen; 1975)

Technology Acceptance Model (TAM) (Davis; 1989)

Theory of Planned Behavior (TPB) (Ajzen; 1991)



SAMPLE OF SMALL AND MEDIUM ENTERPRISES 816 businesses

| Distribution by size (No. of employees) | | | Sectors | | |
|---|-----|--------|--------------|-----|--------|
| Up to 10 employees | 226 | 27,70% | Industrial | 345 | 42,30% |
| 11 to 50 employees | 381 | 46,70% | Construction | 217 | 26,60% |
| 50 To 250 employees | 209 | 25,60% | Services | 254 | 31,10% |

METHODOLOGY

Descriptive analysis
Univariate analysis
Multivariate Logistic Analysis

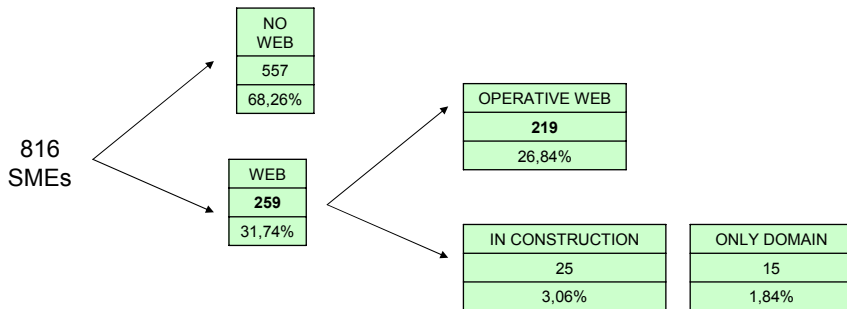
| Integrated Model of Information Systems Adoption in Small Businesses (Thong, 1999). | ADAPTED MODEL | | | VARIABLE USED | MEASURE |
|---|--|----------|--|---------------|---------|
| CEO CHARACTERISTICS | CEO CHARACTERISTICS | | | | |
| CEO's Knowledge | CEO's Knowledge | FORMDIR | 1.- Primary Education. 2.- Secondary Education 3.- University Degree | | |
| CEO's IS Innovativeness | Manager's capability to adapt to the innovations | ADAPTACA | 1 to 4 | | |
| ORGANIZATIONAL CHARACTERISTICS | ORGANIZATIONAL CHARACTERISTICS | | | | |
| Business Size | Size | SIZE | Number of employees Total Assets Turnover | | |
| Employees' IS Knowledge | - | - | - | | |
| Information Intensity | SECTOR | SECTOR | 1. Industrial 2. Service 3. Construction | | |

| ENVIRONMENTAL CHARACTERISTICS | ENVIRONMENTAL CHARACTERISTICS | | | |
|-------------------------------|---|---|---|--|
| Competition | number of competitors | NCOMP | 0 Few competitors 1 Many competitors | |
| IS CHARACTERISTICS | IS CHARACTERISTICS | | | |
| Relative Advantage of IS | Product Quality | CERTISO | 0 if it does not have Quality Certification 1 in the opposite case | |
| | Internationalization | INTERNAC | 0 if the business has not been internationalized 1 in the opposite case | |
| | The importance given to the commercial distribution process | IMPBARID IMPCADIS IMPINMK IMPPRPUB IMPCAPUB | 1 to 5 Effort to achieve an identifiable brand Influence of distribution channels Innovation in marketing methods and techniques Promotion and publicity above the sector average Effort to improve the quality of the business' publicity | |
| Compatibility of IS | Relationships with clients and suppliers via the Internet | RELINTER | 0 Not having relationships with clients and suppliers via Internet 1 in the opposite case | |
| Complexity of IS | The business' technological tradition | INVHARDW | Investments in Hardware in the last two years | |

HYPOTHESIS

- H1: Possessing a corporate Website is independent of the Manager's education and training
- H2: Possessing a corporate Website is independent of the Manager's capacity to adapt to change and/or innovation
- H3: Possessing a corporate Website is independent of the company's size
- H4: Possessing a corporate Website is independent of the sector to which the business belongs
- H.5: Possessing a corporate Website is independent of environmental pressure
- H6: Possessing a corporate Website is independent of the importance given to the quality of processes and products
- H7: Possessing a corporate Website is independent of the company's international orientation.
- H8: Possessing a corporate Website is independent of the importance given to the commercial distribution process
- H9: Possessing a corporate Website is independent of the relationships that the business has with its clients and suppliers via the Internet
- H10: Possessing a corporate Website is independent of the business' technological tradition

Descriptive Analysis



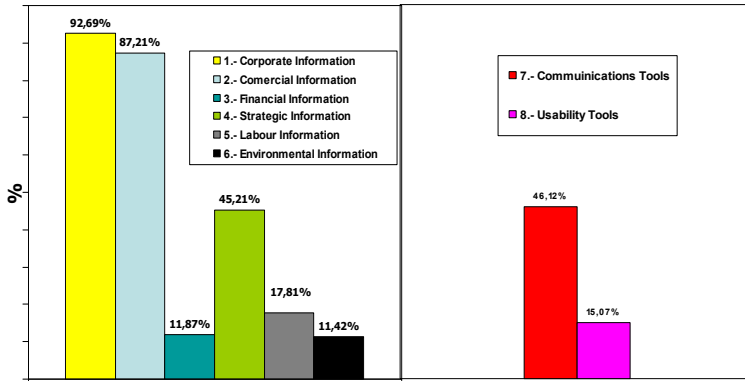
DISTRIBUTION BY SECTOR

| | WEB | SMEs | % |
|--------------|------------|------------|--------|
| Industrial | 120 | 343 | 39,65% |
| Construction | 29 | 217 | 17,97% |
| Service | 70 | 256 | 32,81% |
| | 219 | 816 | |

DISTRIBUTION BY SIZE (number of employees)

| | SMEs | WEB | % |
|-----------------------------|------------|------------|--------|
| Up to 10 workers | 343 | 79 | 30,98% |
| 11 to 50 workers | 217 | 108 | 32,05% |
| More than 50 workers | 256 | 72 | 32,14% |
| | 816 | 259 | |

Descriptive Analysis



Descriptive Analysis

| | | |
|--|-----|--------|
| 1.- Corporate Information | 203 | 92,69% |
| 1.1.- History | 42 | 19,18% |
| 1.2.- Location | 199 | 90,87% |
| 1.3.- General e-mail | 159 | 72,60% |
| 1.4.- Organisational Graphics | 18 | 8,22% |
| 2.- Commercial Information | 191 | 87,21% |
| 2.1.- Information on products | 191 | 87,21% |
| 2.1.- Restricted area for clients | 18 | 8,22% |
| 2.3.- Commercial e-mail | 54 | 24,66% |
| 2.4.- Inclusion of photographs of the products | 168 | 76,71% |
| 2.5.- Inclusion of animation | 26 | 11,87% |
| 2.6.- Inclusion of product prices | 14 | 6,39% |
| 3.- Financial Information | 26 | 11,87% |
| 3.1.- Annual accounts | 1 | 0,46% |
| 3.2.- Financial Figures | 11 | 5,02% |
| 3.3.- Series of financial data | 3 | 1,37% |
| 3.6.- Administration's e-mail | 22 | 10,05% |
| 4.- Strategic Information | 99 | 45,21% |
| 4.1.- Information on goals and objectives | 17 | 7,76% |
| 4.2.- Information on competitive advantages | 90 | 41,10% |
| 4.3.- Information about the sector | 4 | 1,83% |
| 5.- Labour Information | 39 | 17,81% |
| 5.1.- No. of employees | 11 | 5,02% |
| 5.2.- Human Resources Policy | 7 | 3,20% |
| 5.3.- Offers of employment | 19 | 8,68% |
| 5.4.- Restricted area for employees | 15 | 6,85% |
| 6.- Environmental Information | 25 | 11,42% |
| 6.1.- Environment / ambit | 26 | 11,87% |

| | | |
|--------------------------|-----|--------|
| 7.- Communication | 101 | 46,12% |
| 7.1.- Opinions / | 82 | 37,44% |
| 7.2.- Newsletter / | 4 | 1,83% |
| 7.3.- News section | 47 | 21,46% |
| 8.- Usability | 33 | 15,07% |
| 8.1.- Map of Web | 16 | 7,31% |
| 8.2.- Frequently | 4 | 1,83% |
| 8.3.- Internal Search | 15 | 6,85% |
| 8.4.- Helpful Links. | 5 | 2,28% |

Strategy of the web

| | | | |
|--------------------|----------|--------|--|
| Ornamental | 23 webs | 10,50% | Only Corporate Information They think that "have to be" But not have a specific target audience |
| Informative | 101 webs | 46,12% | Orientation towards a specific user group principally customers Only offer information that exists elsewhere. |
| Relational | 95 webs | 43,38% | It will provide feedback via e-mail, bulletings, etc. and information that not concern the business but which is of use to its users. his strategy recognises the Internet as a different medium |

| UNIVARIATE ANALYSIS | | | | | | | | | | |
|----------------------------|--------|---------|----------|------------|------------|----------------|-------|--------------|---------|---|
| | CHI*2 | p-value | V Cramer | Sig. aprox | Sig. aprox | U-Mann-Whitney | Sig. | z-calculated | p-value | |
| FORMDIR | 33,89 | 0,000 | 0,208 | 0,000 | 0,000 | 50973,5 | 0,000 | 4,82775 | 0,000 | ✓ |
| ADAPTACA | 3,279 | 0,351 | 0,065 | 0,351 | 0,138 | 60326 | 0,136 | 0,000 | 1,000 | ✓ |
| NUMPL00 | - | - | - | - | - | 21850,5 | 0,000 | - | - | ✓ |
| LNTOTACT | - | - | - | - | - | 34857,5 | 0,000 | - | - | ✓ |
| LNCNEG | - | - | - | - | - | 35573,5 | 0,000 | - | - | ✓ |
| SECTOR | 31,598 | 0,000 | 0,198 | 0,000 | - | - | - | - | - | ✓ |
| NCOMP | 0,195 | 0,362 | 0,016 | 0,659 | 0,662 | - | - | -0,646 | 0,518 | ✓ |
| INVHARDW | 48,343 | 0,000 | 0,262 | 0,000 | 0,000 | 42583 | 0,000 | 4,508 | 0,000 | ✓ |
| CERTISO | 72,178 | 0,000 | 0,311 | 0,000 | 0,000 | - | - | 8,496 | 0,000 | ✓ |
| INTERNAC | 22,778 | 0,000 | 0,177 | 0,000 | 0,000 | - | - | 4,882 | 0,000 | ✓ |
| IMPMARID | 13,987 | 0,007 | 0,137 | 0,007 | 0,001 | 52358,5 | 0,001 | -3,383 | 0,000 | ✓ |
| IMPCADIS | 21,279 | 0,000 | 0,173 | 0,000 | 0,002 | 48945 | 0,003 | 4,982 | 0,000 | ✓ |
| IMPINMK | 33,017 | 0,000 | 0,214 | 0,000 | 0,000 | 46162 | 0,000 | -3,458 | 0,000 | ✓ |
| IMPRPUB | 29,497 | 0,000 | 0,200 | 0,000 | 0,000 | 47368 | 0,000 | -3,136 | 0,001 | ✓ |
| IMPCAPUB | 23,296 | 0,000 | 0,179 | 0,000 | 0,000 | 47361,5 | 0,000 | 3,966 | 0,000 | ✓ |
| RELINTER | 60,213 | 0,000 | 0,284 | 0,000 | 0,000 | - | - | 7,686 | 0,000 | ✓ |

BINARY LOGIT MODEL

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|-----------------------|-------------|-----------------------|-------------|----------|
| C | -5.631.876 | 1.254.420 | -4.489.625 | 0.0000 |
| FORMDIR1 | -0.679812 | 0.321310 | -2.115.753 | 0.0344 ✓ |
| FORMDIR2 | -0.317315 | 0.290884 | -1.090.865 | 0.2753 |
| ADAPTACA | 0.028381 | 0.184629 | 0.153719 | 0.8778 |
| LNCNEG | 0.123333 | 0.056216 | 2.193.913 | 0.0282 ✓ |
| SECTOR2 | 0.630248 | 0.277110 | 2.274.363 | 0.0229 ✓ |
| SECTOR3 | -0.339246 | 0.326372 | -1.039.446 | 0.2986 |
| NCOMP | 0.287550 | 0.293763 | 0.978852 | 0.3277 |
| CERTISO | 0.920702 | 0.247799 | 3.715.525 | 0.0002 ✓ |
| INTERNAC | 0.225151 | 0.301797 | 0.746034 | 0.4556 |
| DC_MEDIA | 0.512704 | 0.140179 | 3.657.496 | 0.0003 ✓ |
| RELINTER | 1.024.025 | 0.264095 | 3.877.485 | 0.0001 ✓ |
| INVHARDW | 0.274656 | 0.143116 | 1.919.108 | 0.0550 ✓ |
| Mean dependent var | 0.389381 | S.D. dependent var | 0.488150 | |
| S.E. of regression | 0.433664 | Akaike info criterion | 1.139.781 | |
| Sum squared resid | 8.256.042 | Schwarz criterion | 1.258.095 | |
| Log likelihood | -2.445.905 | Hannan-Quinn criter. | 1.186.404 | |
| Restr. log likelihood | -3.021.485 | Avg. log likelihood | -0.541129 | |
| LR statistic (12 df) | 1.151.161 | McFadden R-squared | 0.190496 | |
| Probability(LR stat) | 0.000000 | | | |

CONCLUSIONS

Few SMEs with operative web pages (26,84%)

A high level of Disclosed Corporate Information (92,69%), with information about its products (87,21 %) but without including prices (6,39%)

Factors influencing the Adoption of the Corporate Web Page among SMEs

No correlation: The level of competition and Managers´ capability to accommodate to the innovations
 Only Univariate correlation: Internationalisation. Possible Reason: Correlation with CEO's Knowledge
 Significant Relationship between WEB and Size, Sector, CEO's Knowledge, the importance given to the quality and to the commercial distribution process, maintaining relationships with clients and suppliers via the Internet and the business' technological tradition

FUTURE RESEARCH OBJECTIVES

To make Geographical (Comparison) and temporal (Evolution) Studies

To Analyse which factors are associated with the Quantity of disclosed information quantity in their Web pages.