The outside in : questioning the use of electronic information services in organizations
Nouwens, J.C.A.R.

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: http://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.
Variables and relationships per case

Variables 106

Task characteristics

- Discipline (auditors, tax, legal, management consultancy)
- Hierarchy: Management level (partner, manager, senior, junior)
- Client contact (agree/disagree 1-5)
- Deliberation with clients (agree/disagree 1-5)

Individual characteristics

- gender (male/female)
- years of employment (ratio)
- age (ratio)

Environmental uncertainty

- Importance of 11 environmental segments (ordinal 1-4)
- Amount of important (score 3-4) segments (interval 1-11)
- Average score on all segments (ratio)
- Lack of information on 11 environmental segments

Use of electronic information services

- Use of 22 services (yes/no) (non-use: all no)
- Use of Wolters (yes/no)
- Use of market services (yes/no)
- Use of amount of wolters
- Use of amount of market services
- Frequency of all services combined (ratio: hours/minutes per year/month/week), (recode into ordinal)
- Experience of user (scale: years/months)
- Reasons for not using (nominal)
- Use of any of the Lotus Notes services (yes/no of ten services)
- Use of notes (yes/no)
- Frequency of use of notes (ratio; hours/minutes per year/month/week)

Intermediate usage

- Not using because of intermediate usage (yes/no)
- Asking others (yes/no)
- Frequency of asking others (times per year/month/week)
- Asking to whom (nominal; hierarchical levels)
- Searching for others (yes/no)
- Searching for whom
Accessibility

- Proximity of KRC (yes/no on location)
- Accessibility of 6 sources (nominal)
- Quality of 6 sources (nominal)
- Awareness of possibilities (agree-disagree 1-5)
- Use at home and/or office (yes/no)
- Perceived accessibility (2 ordinal items 1-5)
- Self-perception of user (ordinal: 1-4)

Organizational characteristics

- Information/encouragement (scale 3 statements)

Effects of use

- User perceptions on individual effects (two scales of three statements)
- Perceptions on organizational effects

Relationships 106

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram](image-url)
Task — Task

Differences:
- discipline — deliberation with clients: Kruskal Wallis chi = 29.0**. Consultants highest with means of 2.0 on a negative scale, tax advisors lowest with 2.4.

Correlations:
- hierarchy — contact with clients: Spearman's $Rho = .35$** for tax advisors

Task — Use

Differences:
- discipline — use of Internet: Cramer's $V=.35$**; Kruskall Wallis chi = 80.6**; 60% of consultants, 22% of auditors, 25% of tax advisors
- discipline — non-use: Cramer's $V=.29$**; 42% of auditors, 36% of consultants, 9% of tax advisors, 0% of legal advisors
- discipline — use of wolters: Anova $F=126.4$**. Bonferroni shows only a not significant difference** between legal and tax. All others are significant**: 100% of legal, 87% of tax, 37% of auditors, 5% of consultants
- discipline — use of market services: Anova $F=13.8$**. Bonferroni shows only not significant differences** between auditors and tax, and legal and consultancy. All others are significant**: 91% of legal, 63% of consultants, 40% of tax, 39% of auditors.
- Discipline — use of different wolters kluer cd-rom’s. Anova $F=761.1$** for Fiscal library (Bonferroni** is significant between tax and the other disciplines (tax = 84%, others close to zero)). Anova $F=52.4$** for Guidelines (Bonferroni** is significant between auditors and tax & consultants (33% of auditors, close to zero for the others)). Anova $F = 16.9$** for Compendium (Bonferroni is significant** between auditors and tax & consultants (14% of auditors, zero to other two)).
- Discipline — use of notes. Anova $F = 62.0$**. Bonferroni shows only not significant differences between auditors and tax, and between legal and management consultancy. All other differences are significant**: tax 98%, auditors 95%, legal 64%, consultancy 60%.

Task — Intermediate usage

Differences:
- Hierarchy — not-using because of intermediate usage: Cramer's $V=.32$**: 45% of Anova's $F=32.4$**. Bonferroni shows significant differences** between all three layers: 45% of partners/directors, 25% of managers, 9% of seniors/juniors.
- Hierarchy — asking others: Anova $F = 17.3$**, Bonferroni shows significant** differences between juniors/seniors and the other two: partners 45%, managers 44%, juniors/seniors 24%.
- Hierarchy — frequency of asking others. Anova $F = 6.6$**. Bonferroni only shows significant difference** between partners and juniors/seniors: partners 7.8 times per month, juniors/seniors 2.2 times per month
- Discipline — (non-)use KRC: Anova $F = 13.5$**. Bonferroni shows significant differences** between consultants and auditors & tax: consultants 86%, tax 64%, audit 60%.
- Hierarchy — (non-) use KRC: Anova $F = 36.0$**. Bonferroni shows significant differences** between juniors/seniors and the other two layers. Partners 97%, managers 85%, juniors/seniors 59%.
**Task — accessibility**

- Hierarchy — accessibility of 6 sources. Cramer’s V = .24**
- Hierarchy — quality of 6 sources. Cramer’s V = .23**

**Task — Environmental uncertainty**

Differences:

- discipline — importance of individual segments. Kruskal Wallis chi ranges for the significant items from 21.4 to 302.4 in the items listed in table ..
- hierarchy — importance of total environment. Anova F = 8.0**, Levene’s test p > .05, Bonferroni shows significant differences** between junior and partners and between juniors and managers for auditors
- discipline — amount of important segments (score 3-4). Anova F = 8.4** with Levene’s test p > .05. Bonferroni tests show significant differences** between auditors (mean = 7.8) and consultants (mean = 6.7)
- discipline — average score on all segments. Anova F = 4.2**, Bonferroni** between auditors (2.91) and consultants (2.77).
- discipline — lack of professional knowledge. Anova F = 17.2**. Bonferroni shows significant differences between consultants and the others**: consultants 30%, auditors 12%, tax 5%, legal 0%. Also with management & organization: Anova F = 7.5**. Bonferonii shows significant differences** between consultants and auditors & tax: consultants 29%, auditors 14%, tax 13%.
- Discipline — lack of industry information. Anova F = 16.5**. Bonferroni shows significant differences between auditors and tax & consultancy**: auditors 57%, consultants 37%, tax 28%.

**Environmental — Use**

Correlations:

- importance of legislative information — use of wotlers: Spearman’s rho = .46**
- importance of legislative information — use of amount of wotlers: Spearman’s rho = .45** (also with use of fiscal library: rho = .42**; IP/VP: rho = .23** and VpB: rho = .23**)
- importance of international information — use of Internet: Spearman’s rho = .22**.

**Accessibility — intermediate usage**

Differences:

- proximity KRC — (non-) use KRC: Independent T-test T = -11.34** with assumption of unequal variances (F=329**); 84% of all professionals on KRC location versus 49% of all other professionals

**Use — Effects**

Correlations:

- Amount of info services — effects on information behavior: Pearson r = .25**
- Amount of market services — effects on information behavior: Pearson r = .30**
- Amount of time spend — effects on information behavior: Pearson r = .25**
- Use of Internet — effects on information behavior: Pearson r = .22**
- Amount of info services — effects on results of behavior: Pearson r = .24**
- Amount of market services — effects on results of behavior: Pearson r = .34**
- Use of Internet — effects on results of behavior: Pearson r = .26**
Variables 206

Task characteristics

- Discipline (auditors, tax, legal, business consultancy)
- Hierarchy: Management level (partner, manager, senior, junior)

Individual characteristics

- gender (male/female)
- years of employment (ratio)
- age (ratio)

Environmental uncertainty

- Importance of 11 environmental segments (ordinal 1-4)
- Average score on 4 dimensions (scale)
- Lack of information on 11 environmental segments
- Interest for client info (scale of 5 client items (1-5))
- Interest for prospect info (scale of 5 prospect items (1-5))

Environmental scanning

- Use of 6 information sources (ordinal 1-5)
- Use of traditional sources (scale of 4 items)

Use of electronic information services

- Use of electronic sources of env. scanning (scale of 2 items – see above)
- Use of 5 market-related services (yes/no)
- Frequency of use of the market related services (ratio)
- Use of several wolters services (yes/no)
- Use of Wolters (yes/no)
- Use of market services (yes/no)
- Frequency of use of the wolters services (ratio)
- Experience of user (scale: years/months)
- Reasons for not using (nominal)

Intermediate usage

- Not using because of intermediate usage (yes/no)
- Asking others to search wolters (yes/no)
- Asking others to search market services (yes/no)
- Frequency of asking others (times per year/month/week)
- Asking to whom of Wolters (nominal: hierarchical levels)
- Asking to whom of market services (nominal: hierarchical levels)
- Searching for others (yes/no)
- Searching for whom
- Preference for intermediate users (nominal: choice of 5)

Accessibility

- Awareness of possibilities (agree-disagree 1-5)
- Accessibility of Wolters Kluwers (scale of 2 items)
- Self-perception of user (ordinal: 1-4)
Organizational characteristics

- Information/encouragement (scale 2 statements)

Effects of use

- User perceptions on individual effects of wolters kluwer (6 items 1-5)
- User perceptions on individual effects of market services (6 items 1-5)
- Perceptions on organizational effects (6 items 1-5, one scale)

Relationships 206

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram](image)

**Figure A.2. Important relationships in 2-of-6**

**Individual characteristics – use**

Correlations:

- Work experience – use of compendium: Pearson r =.30** and use of guidelines r =.23**

**Individual characteristics – intermediate usage**

Differences:

C.6
• Gender – asking others in wolters: T-test=2.9** with assumption of equal variances (F=3.4, p>.05)
• Correlations:
• Age – asking others in wolters: Pearson r=.29**
• Years of employment – asking others in wolters: Pearson r=.39**

**Task — Use**

Differences:
• Discipline – use of wolters. Kruskal Wallis chi = 50.1** (Anova not possible because of Levene’s test). 100% of lawyers, 89% of tax advisors, 36% of auditors.
• Discipline – Fiscal library. Kruskal Wallis chi = 111.8**; Tax 84% rest close to zero
• Discipline – legal library. Kruskal Wallis chi = 76.6**; legal 100%, tax 34%, rest 0%
• Discipline – Guidelines. Kruskal Wallis chi = 12.7**; audit 15% rest 0%

Correlation:
• Hierarchy – frequency of use wolters kluwer (recode to ordinal): Spearman's Rho = .45**

**Task — Intermediate usage**

Differences:
• hierarchy – not using because intermediate usage. Anova F=7.0**. Bonferroni shows significant differences** between partners and the rest of the organization. Partners 100%, managers 30%, seniors 25%, assistants 10%

Correlation:
• same as difference: hierarchy and not using because intermediate usage. Spearman's rho = -.42**.
• Hierarchy – asking others for wolters. Spearman’s Rho = -.50**
• Hierarchy – asking others for market services. Spearman’s Rho = -.57**
• Hierarchy – frequency of asking others for market services. Spearman’s Rho = -.28**

**Task — Environmental uncertainty**

Differences:
• discipline – uncertainty on client info: Anova F = 8.8**. Bonferoni shows significant differences between tax and auditors & consultants and between legal and consultants**. Consultants 3.4, auditors 3.2, tax 2.8, lawyers 2.8.
• discipline – uncertainty on professional knowledge. Kruskal Wallis chi = 57.** (Anova is impossible because Levene’s test shows a significance of p<.05). Consultants 2.5, tax 3.8, lawyers 3.9.
• Hierarchy – interest in prospect info; Anova F=7.0**. Bonferroni shows significant difference between partners and assistants**. Partners 3.0, assistants 2.1.

**Task — environmental scanning**

Correlations:
• Hierarchy – use of client as info sourc: Spearman’s rho = .35**

**Task – effects**

Differences:
• Hierarchy – effects on finding unique info with wolters: Kruskal Wallis chi=15.5**. Mean partner 3.62 and 2.6 for seniors and assistants
Environmental uncertainty – scanning

Correlations:
- Interest in client items – use of traditional sources: Pearson r = .46**
- Interest in prospect items – use of traditional sources: Pearson r = .37**
- Environmental uncertainty clients – use of traditional sources: Pearson r = .38**
- Environmental uncertainty context – use of traditional sources: Pearson r = .29**

Environmental uncertainty – Use

Correlations:
- Interest in prospect items – use of electronic sources of scanning: Pearson r = .46**
- Interest in client items – use of electronic sources of scanning: Pearson r = .32**
- Environmental uncertainty clients – use of electronic sources of scanning: Pearson r = .35**
- Environmental uncertainty clients – use of fiscal library: Pearson r = -.27**
- Environmental uncertainty professional knowledge – use of fiscal library: Pearson r = .45**

Environmental uncertainty – intermediate usage

Correlations:
- Need for legislative info – asking others in wolters: Spearman’s Rho = .35**
- Interest in client info – asking others in market services: T = 3.3** with assumption of equal variances (F=1.11, p>.05). Mean = 2.6 for those who don’t and 3.0 for those who do
- Interest in prospect info – asking others in market services: T= 5.0** with assumption of equal variances (F=.46, p>.05). Mean = 2.1 for those who don’t and 2.8 for those who do

Use – Effects

Differences:
- Use of market-services – effects on unique info (Wilcoxon Z = -5.2**) and on new ideas (Wilcoxon Z=-3.0**)
- Experience – individual effects on wolters: Pearson r = .37**
- Self perception – individual effects on wolters: Spearman’s rho = .26**
- Use of market services – organizational effects: Pearson r=.23**

Use – Intermediate usage

Correlations:
- Self perception – indirect usage. Spearman’s rho =.29**

Accessibility – use

Correlations:
- Use of services – self perception: spearman’s rho = .57**
- Frequency of use – self perception: spearman’s rho = .40**. Also with experience of use: Spearman’s rho = .37**

Environmental scanning – effects

Correlation:
- Using traditional sources – organizational effects: Pearson r = .24**
Variables TV News

Task characteristics

- Job title
- Fulltime/parttime/free-lance
- Type of contract (temporary, ongoing)
- Work experience (ratio)
- Task characteristics (3 ordinal statements 1-5)

Individual characteristics

- Gender
- Age (ratio)
- Years of computer experience (ratio)

Environmental uncertainty

- Relative importance of subjects (% - interval)
- Relative importance of timeliness (% - interval)

Environmental scanning

- % of activities spent on source consultation (interval)

Use of electronic information services

- Frequency of use on 6 services (6 ordinal items 1-5)
- Amount of services used (interval)
- Use/non-use
- Split between press services and general services (all others, including Internet)

Intermediate usage

- Use of library (ordinal, dichotomous)
- Searching for others (ordinal, dichotomous)
- Asking others (dichotomous)

Accessibility

- Perceptions of accessibility (scale of 5 ordinal items 1-5)
- Self-perception of use (ordinal, 1-4)

Organizational characteristics

- Social influence (3 ordinal items 1-5)
- Creation of Awareness (scale of 2 ordinal items 1-5)

Effects of use

- Assessment information supply (one scale of three statements)
- Added value of use (scale of 2 ordinal items 1-5)
- Organizational effects (scale with 3 task effects and scale with 2 substitution effects)

C.9
**Relationships TV News**

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram: Important relationships in the TV News organization](image)

**Individual characteristics – use**

Differences:
- Gender – frequency of use of press agencies. T-test= -3.2** with assumption of unequal variances (F=7.3, p<.05). Mean of women = 4.0, men = 5.4.

**Individual characteristics – environmental uncertainty**

Differences:
- Gender and relative importance of national news: T=4.2** with assumption of unequal variance (F=8.0, p<.05). Women’s mean = 60%, Men’s mean = 28%.
- Gender and relative importance of foreign news: T=-3.9** with assumption of equal variances (F=2.5, p>.05). Women’s mean = 18%, men’s mean = 49%.

**Task – Use**

Differences:
- Job title – use of various services. Kruskall Wallis chi = 13.4** for use of NDP (means are higher for librarians than for the rest). Kruskal Wallis chi = 19.4** for use of press agencies (journalists score higher).
Task — environmental scanning

Differences:
- job title - % source consultation: Anova F=5.3**. Bonferonni not possible because too few values in some categories. Journalists mean = 50 (n=20), top journalists = 55 (n=4), librarians=80 (n=1), production=10 (n=2).

Task – effects

Correlations
- task analysability — effects of information overload: Spearman's rho = .39**

Environmental uncertainty— Use

Correlations:
- spot news – use of press agencies: Spearman's rho = .47** and use of press (yes/no): Pearson's r = .34**
- Importance of national news – use of press agencies (yes/no): Pearson’s r = .58**
- Importance of foreign news – use of press agencies (yes/no): Pearson’s r = .56**

Environmental uncertainty – effects

Correlation:
- importance of national news – assessment of info supply: Pearson's r = -.48**

Use — Effects

Correlations:
- Use of Internet – added value: spearman’s rho =.60** (rho=.54** for yes/no) and with use of Volkskrant (rho=.43**)
- Amount of services – added value: Pearson’s r=.44**; all general services Pearson’s r =.54**

Accessibility – use

Correlations:
- self-perception – use of services: Volkskrant (rho=.48** and rho=.42** for yes/no), Internet (rho=.72** and rho=.59** for yes/no), use of all general services (rho = .64**), amount of services (rho=.53**)
- perception of accessibility – use of Internet: spearman's rho = .39** (rho=.41** for yes/no)

Accessibility – organizational characteristics

Correlations:
- self-perception – assessment of use of others: kendall's tau c = .63**
- self-perception – talking with other on use: kendall’s tau c = .45**

Accessibility – effects

Correlation
- Self-perception – added value: Anova F =6.2**, means increase from 3.3 to 4.2
Organizational characteristics – use

Correlations:
- social influence (talking about services) – use of Internet (Spearman’s rho = .60**; rho = .48** for yes/no) and use of Volkskrant (Spearman’s rho = .41**; rho = .38** for yes/no), amount of services (rho = .43**), all general services (rho = .56**)
- social influence (assessment of other one’s use) – use of Internet (Spearman’s rho = -.62**; rho = .50** for yes/no), all general services (rho = .63**)
- Creation of awareness – Use of Internet: Spearman’s rho = .48** (rho = .43** for yes/no) and use of Volkskrant (rho = .37**)
- Creation of awareness – all general services Pearson’s r = .43**

Organizational characteristics – intermediate use

Correlations:
- Searching for others – social influence (talking to others: rho = .49**)

Organizational characteristics – effects

Correlations:
- Social influence (assessment of use of others) – added value (rho = .60**)
- Social influence (talking to others) – added value (rho = .49**)

Intermediate use – effects

Correlations:
- Searching for others (yes/no) – added value: Pearson’s r = .49**

Intermediate use – use

Correlations:
- Use of library (ordinal) – use of services (ordinal). NDP (rho = .83**), Volkskrant (rho = .47**). Note: these relationships also exist when either one or both are measured as dichotomous variables.
- Searching for others – use of services (both ordinal). Volkskrant (rho = .41**), Internet (rho = .44**). Note: these relationships also exist when either one or both are measured as dichotomous variables.
Variables Print holding

Task characteristics

- Department (nominal)
- Hierarchy
- Type of contract (fulltime, parttime, freelance)

Individual characteristics

- gender
- age
- work experience

Environmental uncertainty

- Importance of 11 environmental segments (1-4), average on all segments
- Lack of info on 11 segments (yes/no)

Environmental scanning

- Communication with others (6 items 1-5), scale internal interdependence (2 items),
  scale external interdependence (2 items)

Use of electronic information services

- use of Internet (yes/no)
- use of www (yes/no)
- use of other services (yes/no)
- frequency of use www (ratio)
- minutes per session (ratio)
- Time spent on ww (frequency * minutes)
- Barriers for not-using Internet (multiple response)
- www fit for type of info (location, segments)
- importance of internet (3 items 1-5)

Intermediate usage

- frequency of searching for others (ratio & ordinal)
- searching for whom (nominal)
- frequency of asking others (ratio & ordinal)
- asking whom (nominal)

Accessibility

- self-perception of use (1-4)
- experience with Internet (ordinal)
- access at home and/or office (nominal), access at home paid (yes/no), purpose
  work/private
- perception of accessibility (2 items 1-5)
- kind of pc (2 items)

Organizational characteristics

- social influence (2 items; attitude colleagues, assessment of competitors 1-5)
- creation of awareness (3 items 1-5)

C.13
Effects of use

- individual effects of www use (6 items 1-5; 2 scales)
- substitution effects of www (4 items 1-5)
- organizational effects (6 items, 2 scales)

Relationships Print holding

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram of relationships](image)

Figure A.4. Important relationships in the newspaper holding company

Individual characteristics – use

Difference:

- Gender – use of Internet (yes/no): T-test $T = -3.81^{**}$ with assumption of unequal variances ($F=13.7$, $p<.05$). Mean of women is 41%, mean of men is 80%.

Individual characteristics – accessibility

Differences:

- Gender – self perception: Mann Whitney $U = .76^{**}$, mean of men = 3.0, mean of women = 2.2.
Task — Use

Differences:
- Department — use of Internet (Cramer's V=.36**; 80% of IT versus 55% of sales), also with use of other services (Cramer's V=.46**; marketing and IT have highest scores).
- Department — use of Internet for subjects: contextinfo: Kruskal Wallis chi = 12.2** (highest scores for marketing), marketinfo Kruskal Wallis chi = 15.6** (highest scores for marketing) and amount of subjects (Kruskal Wallis chi = 11.5**) (highest scores for marketing)
- Correlations:
  - Hierarchy and internet used for amount of subjects: Spearman's rho=-.37** and for market info (rho = -.52**)
  - Hierarchy — use of Internet: Spearman's rho=-.25**

Task — environmental scanning

Differences:
- Departments — external interdependence. Anova F=3.23**. Bonferroni shows significant differences between IT (mean 2.6) and sales (mean=3.2)**
- Departments — internal interdependence. Anova F = 3.95**. Bonferroni shows significant differences between IT (mean is 3.2) and sales (mean = 4.8)**.
- Hierarchy — external interdependence: Spearman’s Rho = .23*.

Task — effects

Differences:
- Departments & information overload: Kruskal Wallis chi = 13.1** with 2.5 for sales and 4.0 for management.

Task — Environmental uncertainty

Correlations:
- Hierarchy — importance environment. Rho =.33**

Differences:
- Departments — average importance of environment: Anova F = 12.9**. Bonferroni shows significant differences** between IT (mean 1.95) and marketing & sales (2.7). Management scored 3.2.

Task — Accessibility

Correlations:
- Hierarchy — self perception:spearman's rho =.27**

Environmental uncertainty— Use

Correlations:
- Importance of environment — use of Internet for amount of subjects: Pearsons r = .48** and with use for market info (r=.54**) and context info (r=.33**)

Environmental scanning & use

Correlations:
- External interdependence — use of internet for amount of subjects: Pearson’s r=.45**, for market info r =.37** and for context info r =.33**

C.15
Environmental scanning & effects

Correlations:
- Importance of environment – individual effects on knowledge: rho=.41**

Environmental uncertainty – effects

Correlations:
- Importance of environment – individual effects on knowledge: rho=.31**
- Importance of environment – organizational effects for holding: rho=.27**

Accessibility – use

Differences:
- Kind of PC – use of Internet: Cramer’s V=.49** (more a laptop). Also relationship with use of other electronic information services (Cramer’s V is .41**).

Correlation:
- Self-perception – use of Internet: Rho=. 61**, use of other services rho =.45**, frequency of Internet use rho=.48**
- Self-perception – using Internet for variety of subjects: rho=.38**
- Accessibility – use of Internet (rho=.35**) 
- Time consuming – use of other services (rho=.31**)
- Frequency of use – ease of use (rho=.38**), time consuming (rho=.28**)
- Time spent on Internet – ease of use (rho =.35**) and time consuming (rho=-.31**)
- Internet used or amount of subjects – ease of use (rho=.34**), time consuming (rho=-.32**)

Accessibility – organizational characteristics

Correlations:
- self perception & importance of Internet connection: rho = .33**

Accessibility – effects

Correlations:
- self perception & individual effects info behavior: rho = .35** and effects on knowledge rho =.33**

Organizational characteristics – use

Correlations:
- information policy – use of Internet: rho=-.29** and with use of other services (rho=-.30**)
- everybody access to internet – amount of subjects used in internet: rho=.29**

Organizational characteristics – environmental uncertainty

Correlations:
- Importance of environment – importance of Internet connection: Spearman’s rho=.39**
- Importance of environment – stimulating use of Internet: rho =.31**

Intermediate use – use

Correlations:
- Searching for others: frequency of Internet use (rho=.42**) and time spent (rho=.39**)
- Asking others – use of Internet (rho=.38**)
Variables Print Journalists

Task characteristics
- Editorial team
- Job title
- Type of contract (fulltime, parttime, freelance)

Individual characteristics
- gender
- age
- work experience

Environmental uncertainty
- Importance of 8 environmental segments (1-4), two dimensions
- Lack of info on 8 segments (yes/no)

Environmental scanning
- % of source consultation (ratio), also on subject (location)

Use of electronic information services
- use of www, press (yes/no)
- use of other services (yes/no)
- frequency of use www, press (ratio/ordinal))
- minutes per session (ratio)
- Time spent on ww (frequency * minutes)
- Barriers for not-using Internet (multiple response)
- www fit for type of info (location, segments, amount of subjects)

Intermediate usage
- frequency of searching for others (ratio & ordinal)
- searching for whom (nominal)
- frequency of asking others (ratio & ordinal)
- asking whom (nominal)

Accessibility
- self-perception of use (1-4)
- experience with Internet (ordinal)
- access at home and/or office (nominal), access at home paid (yes/no), purpose work/private
- perception of accessibility (2 items 1-5)
- kind of pc (2 items)

Organizational characteristics
- social influence (2 items; attitude colleagues, assessment of competitors 1-5)
- creation of awareness (3 items 1-5)
Effects of use

- individual effects of www use (6 items 1-5; 2 scales)
- substitution effects of www (4 items 1-5)
- organizational effects (6 items, 2 scales)

Relationships Print Journalists

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

Figure A.5. Important relationships among the news paper journalists

Individual characteristics – use

Correlation:
- Age – use of press agencies: Pearson’s r = -.34**

Task – Use

Differences:
- Editorial teams – Frequency of Use of Internet: kruskal wallis chi = 13.8**. Special interest has average of 2.5, financial team 4.3 en internet team 4.5. Also – Time spend on Internet: Kruskal wallis chi = 13.8**. Special interest 3.08, financial team 5.6 and internet team 5.8

C.18
Editorial teams – Internet used for amount of subjects: Anova F = 4.5**. Bonferroni shows significant differences between internet team (4.5) and general news (.8) and special interest (1.4)*

Editorial teams – Internet used for financial news: Kruskal Wallis chi =21.5**; financial team has highest scores.

Task – effects

Differences:

Editorial teams: effects for holding: Anova F=4.44**. Very positive is internet team (4.0). Least positive financial team (2.7). Differences are significant** with Bonferoni

Task – Environmental uncertainty

Differences:

Editorial teams – need for hard news: Kruskal Wallis chi = 20.9** (1.5 for special interest to 3.2 for internet team)

Editorial teams – need for soft news: Kruskal Wallis chi =19.0** (1.5 for financial team to 3.1 for internet team)

Editorial teams – need for regional news: Kruskal Wallis chi = 27.8** (10% of financial-economic team to 53% of city team)

Editorial teams – need for national news: Kruskal Wallis chi = 15.0** (66% of financial-economic team to 32% of city team)

Environmental uncertainty— Use

Correlations:

Need for hard news – frequency of use of press: Spearman’s rho=.37**

Environmental scanning & use

Correlations:

source consultation – use of press agencies (yes/no): Pearson’s r = .36** and with frequency of use: Spearman’s rho = .44**.

Accessibility – use

Correlations:

self-perception – use of Internet (yes/no): Spearman’s rho = .75**

self-perception – use of other services (yes/no): (rho=.57**)

self-perception – frequency of internet use: rho = .67**. Also time spend: rho=.65**

internet experience – frequency of internet use: rho = .45**. Also time spend: rho=.57**

self perception – use of internet for economy/business: rho=.41**

Easy to use – use of internet (yes/no): rho = .41**

Easy to use – use of other services (yes/no): rho=.46**

Time-consuming – frequency of internet use: rho=.51**

Easy to use – amount of subjects via Internet: rho = .42**

Knowing connection – amount of subjects: rho = .37**

Accessibility & intermediate use

Correlations:

Experience – searching for others: rho = .45**
Accessibility – effects

- self-perception – effects on job performance: Spearman’s rho = .36*

Organizational characteristics – use

Correlations:
- Creation of awareness (stimulate) – Time spent on Internet: Spearman’s rho = .38**

Organizational characteristics – environmental uncertainty

Correlations:
- need for international news – creation of awareness (sufficient info): rho = .30**

Intermediate use – use

Correlations:
- searching for others – use of internet (yes/no): rho = .40**. With time spent: rho = .51**
- asking others – use of Internet (yes/no): rho = -.53**

Use – effects

Correlations:
- Frequency of use – effects on job performance: rho = .38**, with time spent rho = .348** and with Internet experience rho = .35**
Variables Horeca

Task characteristics
- Job/hierarchy (nominal)
- Relevance of information (4 statements 1-5)

Individual characteristics
- Education
- Gender
- Age

Environmental uncertainty
- Importance of 11 environmental segments (1-4), two dimensions (transactional, contextual)
- Importance of timeliness (nominal)

Environmental scanning
- Use of personal sources (3 items 1-5: 1 scale)
- Use of paper sources (4 items 1-5: 1 scale)

Use of electronic information services
- Future use (houding1): 1 statement 1-5
- Future use: expectancy when to start: nominal
- Use of Internet in organization: yes/no
- Amount of users in organization
- Use of other electronic information services

Accessibility
- Familiarity (houding2) with Internet (1 statement 1-5)
- Experience: amount of months internet connection (ratio)
- Perceived accessibility (6 statements 1-5: 2 scales)

Organizational characteristics
- Type of organization (multiple response)
- Amount of locations
- Amount of employees
- Age of organization
- Infrastructure: PC’s available, amount of PC’s, Kind of applications
- Marketing communication: frequency of advertising, focus of advertising (regional, national, international)
- Centralization of decision-making (4 statements 1-5)
- Amount of fixed suppliers
- Organizational lifecycle
- Social influence (3 statements)

Effects of use/Expectations
- Scepticism, enthusiasm and Relevance (9 statements 1-5: 3 scales)
Relationships Horeca

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram of relationships in horeca industry](image)

Figure A.6. Important relationships in horeca industry

**Task — Use**

- Lacking information – Months using Internet: Rho = -.36

**Environmental uncertainty— Use**

Correlations:
- Contextual environment – expecting to use: rho = .27**
- Transactional environment – expecting to use: rho = .26**

**Environmental uncertainty – effects**

Correlations:
- Contextual environment – enthusiasm: rho = .31**
- Transactional environment – enthusiasm: rho = .34**
- Contextual environment – relevance: rho = .29**
- Transactional environment – relevance: rho = .29**

**Environmental scanning & Environmental uncertainty:**

Correlations:
- Use of personal sources – contextual environment; Spearman’s rho = .31**, with colleagues: rho = .25**
- Use of personal sources – transactional environment; Spearman’s rho = .26**

**Accessibility – use**

- Familiarity – Use of internet in organization (yes/no): Spearman’s rho = .40**
- Familiarity – use of other services: rho = .28**
- Familiarity – frequency of use: rho = .35**
- Perceived accessibility (clear what to do) – frequency of use: rho = .24**

**Accessibility within**

- Familiarity – accessibility (clear): rho = .47**
- Familiarity – accessibility (effort): rho = .25**

**Accessibility – effects**

- Accessibility (effort) – Scepticism: Pearson’s r = .25**

**Organizational characteristics – use**

Differences:
- Type of organization – use of Internet in organization: Kruskal Wallis chi = 14.1**
  (hotels more than restaurants and both more than bars)

Correlations:
- Hotel – expectancy to use: rho = .27**
- Amount of employees – use of Internet (yes/no): rho = .28**
- Social influence (knowing others) – use of Internet (yes/no): Pearson’s r = .35**
- Social influence (knowing others) – frequency of use: rho = .50**
- Social influence (knowing others) – expectancy to use: rho = .28**
- Size (amount of employees) – use of Internet in organization: Pearson’s r = .32**
- Size (amount of employees) – expectancy to use: Spearman’s rho = .24**
- Infrastructure – use of Internet in organization: amount of PC’s r = .28**, amount of modems r = .38**, amount of cd-rom’s r = .30**, amount of applications r = .35**
- Infrastructure – use of other info services: amount of modems r = .28**, amount of cd-roms r = .40**, amount of applications r = .38**.
- Infrastructure – expectancy to use: amount of PC’s Rho = .36**, amount of modems Rho = .25**, amount of applications Rho = .28**

**Organizational characteristics – environmental uncertainty**

Correlation:
- Centralization – contextual environment: Spearman’s rho = .26**

**Organizational characteristics – environmental scanning**

Correlation:
- Centralization – use of personal sources: rho = .29**, with reading trade magazines: rho = .29**

**Organizational characteristics within**

Correlations:
- Hotels – social influence (knowing others): Pearson’s r = .33**
- Amount of employees – social influence (knowing others): Spearman Rho = .30**
Organizational characteristics & Effects

Correlations:
- Social influence (knowing others) - enthusiasm: Rho = .33**

Organizational characteristics & Accessibility

Correlations:
- Social influence (knowing others) - accessibility (clear what to do): Pearson's $r = .24**$

Use – effects

Correlations:
- Use of Internet in organization (yes/no) – Enthusiasm; $r = .24**$
- Use of internet in organization – relevance $r = .25**$
- Frequency of use – enthusiasm: rho = .43**
- Frequency of use – scepticism: rho = .34**
- Frequency of use – relevance: rho = .26*
- Expectancy to use – enthusiasm: rho = .51**
- Expectancy to use – relevance: rho = .49**
Variables Garment & Clothing industry

Task characteristics

- Job/hierarchy

Individual characteristics

- Gender
- Age
- Education

Environmental uncertainty

- Importance of 11 environmental segments (1-4: 3 scales)
- Importance in organization (percentage of employees)
- Interest in company information
- Interest in labor market

Environmental scanning

- Contact with number of branches
- Contact diversity
- New contacts
- Contact with governments and branch organizations
- Reading magazines
- Time spent on scanning (interval)

Use of electronic information services

- Use of Internet in organization (yes/no)
- Use of other electronic information services (yes/no)
- Experience with Internet (amount of months)
- Frequency of use (interval)
- Expectancy of use (nominal)
- Use of Internet for environmental segments (multiple response)

Accessibility

- Perceived accessibility (three statements)

Organizational characteristics

- Type of branch (garment, confection, retail)
- Diversity of branches
- Age of organization
- Size (amount of employees)
- Infrastructure: amount of PC's, CD-ROM's, modems, applications
- Centralization
- Social influence (attitude, knowing others, assessment of Internet penetration)

Effects of use/Expectations

- Added value of use (scale)
- Effects on information behavior (1 scale)
Relationships Garment & Clothing Industry

All arrows in the figures are significant (p<.01) correlations or differences between the variables. We only selected correlations with Pearson’s r or Spearman’s Rho is higher than .20. The direction of the arrows are based on theoretical assumptions and do not indicate statistically tested causal relationships. The thickness of the arrows give an indication of the relative degree and/or consistency of the statistical relationship.

![Diagram of relationships in garment & clothing industry](image)

**Figure A.7. Important relationships in garment & clothing industry**

**Individual characteristics — Use**
- Education — Months of Internet Use: Rho=.38*

**Environmental uncertainty— Use**
Differences:
- Interest in international information — use of Internet: Mann Whitney U = 749**

**Environmental uncertainty – effects**
- Contextual information – Added value of Internet

**Environmental scanning & use**
Differences:
- Reading magazines – use of Internet (y/n): Mann Whitney U = 789**
Accessibility – use

- Clear how to get a connection – use of Internet (y/n): Pearson's r = .31**

Organizational characteristics – use

- Branch diversity – Expectancy of use: Cramer's V = .33** (especially those in both confection and retail)
- Amount of employees – months of Internet use: Rho = .52**
- Infrastructure – use of Internet (yes/no): Amount of PC's (Rho = .42**)
- Infrastructure – use of other information services (yes/no): Amount of PC's (Rho = .29**)
- Infrastructure (amount of PC's) – months of Internet use: Rho = .53**
- Infrastructure (amount of PC's) – expectancy to use: Cramer's V = .39**
- Infrastructure (amount of applications) – use of Internet: Pearson's r = .44**
- Infrastructure (amount of applications) – use of other services: Pearson's r = .36**
- Social influence (knowing others) – use of Internet (y/n): Pearson's r = .42**
- Social influence (knowing others) – expectancy to use: Cramer's V = .45**

Organizational characteristics – environmental uncertainty

Differences:
- Confection companies – interest in international information: Mann Whitney U = 825**; 2.4 versus 2.9 of other companies
Correlations:
- Infrastructure (amount of applications) – interest in international information: rho = .28**
- Social influence (knowing others) – importance of environment for employees: Spearman's Rho = .28**
- Social influence (assessment of penetration) – interest in labor market (Rho = .35**), interest in competitors (rho = .33**), less interest in technology (rho = .40**), suppliers (rho = .29**),
- Social influence (assessment of penetration) – contextual information: Rho = .35**
- Social influence (other's attitude) – transactional environment: Rho = .29** and less interest in suppliers (Rho = -.34**)

Organizational characteristics – environmental scanning

Differences:
- Garment – contact with other garment companies: T = -3.42** with assumption of equal variances (F = 2.1, p > .05), garment 70%, others 36%
Correlations:
- Infrastructure – contact with different branches: Rho = .29**

Use – effects

- Months of experience – added value: Rho = -.39**