# Survey: Computer skills in Austria presented on 11 March 2014 

Austrian Computer Society OCG meinungsraum.at

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## 1 Study description

## 1 Survey description

\(\left.$$
\begin{array}{|l|l|}\hline \text { Client } & \text { Austrian Computer Society OCG } \\
\hline \text { Topic } & \text { Computer skills }\end{array}
$$ \begin{array}{l}Representative group of Austrians, age group 15 to 60 years (quotas according <br>

to sex, age, educational background, federal province, activity)\end{array}\right]\)| Disproportionate sampling (apprentices, pupils, students) |
| :--- |

2 Results

Q1 Acquisition of computer knowledge - self-study prevailing!
How and where have you acquired your present computer skills? Please state the percentage of computer knowledge and source.
Single response in \% (average value), $n=1,260$


## Q2 Cost takeover - computer skills as responsibility of the employer or your

 own responsibility!Who paid for the training courses to improve your computer skills?
Multiple response, data in \%, $n=1,260$


## Q3 Aided awareness ECDL: nearly three quarters know ECDL <br> Do you know the European Computer Driving Licence ECDL? <br> Single response, data in \%, $n=1,260$



## Q4a Training qualification: only one third without any computer training

Have you finished any of your courses/trainings with a test or maybe even a certificate?
Single response, data in \%, $n=1,260$


## Q4b Qualification certificate/test: 13.8\% have got an ECDL Certificate

Which certificate have you got and when have you made it?
Spontaneous answer, data in \%, $\mathrm{n}=386$, persons who finished their training with a test/certificate

| Projected to all respondents $=13.8 \%$ have got an ECDL certificate |  |  |
| :---: | :---: | :---: |
| Above average: |  |  |
|  | - women | 53\% |
|  | - age group 15-29 | 54\% |
|  | - apprentices | 59\% |
|  | - s | 65\% |
|  | - very good self-assessm | 49\% |
|  | - very good test result | \% |
| $\rightarrow$ ECDL Certificate leads to better self- assessment and test results than other training certificates! |  |  |
| 20\% of the ECDL Certificates and 19\% |  |  |
| of the 'other' certificates have been |  |  |
| made within the previous 3 years, on |  |  |
| average ECDL Certificates were made |  |  |
| 7 years ago, other certificates 8 years |  |  |
| ago (median) |  |  |

## Q5 High level of private equipment

First of all, tell us about your computer and Internet equipment at home. Please let us know whether you have got the following devices and services.


## Q6 Equipment at work: here the desktop PC prevails

Which of the following equipment does your employer provide?
Multiple response, data in \%, n=958 employed respondents


Q7 Being familiar with operating systems: everybody can handle Windows Which of the following computer operating systems are you familiar with and which operating systems can you handle?
Multiple response, data in $\%, n=1,260$


Q8 Frequency of use of devices - top 9:
How often do you use your computer/mobile device for the following activities?
Activities by default, data in \%, $n=1,260$, decreasing by frequency


## Q8 Frequency of use of devices - bottom 9:

How often do you use your computer/mobile device for the following activities?
Activities by default, data in \%, $n=1,260$, decreasing by frequency


Q9 Internet use for social media and cloud computing: Facebook and Youtube (still) dominating, whatsApp catching up
When have you used the following Internet services lately?
Answers by default, data in \%, $n=1,260$


## Q10 Use of PC/notebook at work: only $25 \%$ do NOT use a computer at work

Do you use your computer/notebook at work?
Single response, data in \%, $\mathrm{n}=970$, people who are employed (incl. apprentices)


## Q11 Use of mobile devices at work: relatively rare

Do you use mobile devices like tablet-PC or smart phone at work?
Single response, data in \%, $\mathrm{n}=970$, people who are employed (incl. apprentices)


Above average:

- men

30\%

- with school leaving exam 27\%
- training with certificate $30 \%$
- very good self-assessment 30\%
$\rightarrow$ Correlates with good selfassessment but not with good test result!

Q12 Total working time on the computer, ...:
How much of your total working time do you spend on the computer/notebook or on other mobile devices?

Single response, data in \%, $\mathrm{n}=970$, people who are employed (incl. apprentices)


Q13/14 Private computer use: two thirds use their PC/notebook and mobile devices daily
Take an average week, on how many days of the week do you use your computer/notebook or mobile devices privately?

Single response, data in \%, $n=1.260$


Q15 Private using intensity
How many hours per day do you use a computer or a mobile device privately or do you use the mobile net for private purposes (excluding phone calls) on average?

Single response, data in \%, $n=1,260$
Above the average (less than 1 hour/day):

- women $21 \%$
- employees 22\%
- bad self-assessment 36\%
- bad test results 22\%
$\rightarrow$ Correlation between little use and bad self -assessment and bad test results!

Every fourth person spends more than three hours per day on the computer privately!

I don't know, cannot estimate
$3 \%$
-

## Q16 Importance of computer skills at work: for three quarters (very) important

How important are computer skills for your career?
Scale from 1 to 5 , data in $\%, n=1,260$, mean value excl. 'I don't know, no answer"


| Mean value comparison: |  |  |
| :---: | :---: | :---: |
|  | 15-29 years | 1.8 |
|  | with school-leaving exam | 1.7 |
|  | pupils | 1.6 |
|  | students | 1.7 |
|  | training with certificate | 1.7 |
|  | very good self-assessment | 1. |
|  | very good test results | 1.9 |
| $\rightarrow$ High correlation between importance for career and good self-assessment, smaller correlation with good test results! |  |  |

■ very important
$\square$ rather important
$\square$ middle

- little important
$\square$ not at all important
$\square I$ don't know/no answer


## Q17 Self-assessment of general computer skills

How good are your general computer skills?
Scale from 1 to 5, data in \%, $\mathrm{n}=1,260$


| Mean value comparison: |  |  |
| :---: | :---: | :---: |
|  | men | 2.2 |
|  | 15-29 years | 2.0 |
|  | with school-leaving exam | 2.1 |
|  | pupils | 2.0 |
|  | students | 2.1 |
|  | training with certificate | 2.1 |
|  | very good test results | 2.4 |
| $\rightarrow$ Respondents with very good test results assess their own skills lower than the average! |  |  |

## Q18/Q19/Q20 Assess your own computer skills

How do you assess your computer skills in detail?
Scale from 1 to 5 , data in \%, $\mathrm{n}=1,260$

IT-Security


| $\square 1$ very good | $\boxed{2}$ rather good |
| :--- | :--- |
| $\boxed{\square}$ mediocre | $\boxed{4}$ rather bad |
| $\boxed{\square}$ very bad |  |



Q18/Q19/Q20 Assessment of own computer skills - comparison of mean values How do you assess your own computer skills in detail?
Single response ( $1=$ very good; $5=$ very bad), data in mean value, $n=1,260$


## 3 Results Sophia-Test

Details of the computer skills test

- Test with Sophia test software, online
- Evaluation according to Austrian system of school grades
very good = good =
satisfactory $=$ sufficient = fail =

```
90-100 per cent correct results
    80-89 per cent
    64-79 per cent
    51-63 per cent
    0-50 per cent
```


## Q21 Results Sophia-Test: Total

Single response, data in \%, n=494 (disproportionate 505)


$$
\left.\begin{array}{l}
\text { Mean value comparison ( } \varnothing \text { of reached } \\
\text { points): } \\
\circ \\
\hline
\end{array}\right) \text { men } \quad 48,4 \%
$$

## Q22 Results Sophia-Test: 3 Modules

Single response, data in \%, n=494 (disproportional 505)


IT Security


[^0]Self-assessment vs. results in general and for the individual modules
How good are your computer skills?
Single response, data in \%, $n=1,260$


## Self-assessment vs. results in general - by gender

How good are your general computer skills?
Single response, data in \%, $n=1,260$


Self-assessment vs. results in general - by age
How good are your general computer skills?
Single response, data in \%, $n=1,260$


## Self-assessment vs. results in general - by educational level

 How good are your general computer skills?Single response, data in \%, $n=1,260$

$\square$ very good good to mediocre $\square$ bad to very bad

Self-assessment vs. results in general - by occupation
How good are your general computer skills?
Single response, data in \%, $n=1,260$


## Test participants

data in \%, n=494 (disproportionate 505)


## Test result

How good are your computer skills?
Single response, data in \%, $n=1,260$


## 4 Summary

## Summary

## Education and training of computer application skills

- Nearly a third of the computer skills are self-taught, another $16 \%$ of the skills come from the help of family/friends $\rightarrow$ i.e. nearly half of the skills have been acquired other than in courses or formal education.
- $32 \%$ of the respondents have not had any computer training, $31 \%$ have gained a certificate, $37 \%$ have participated in training without a certificate. Students have less formal training than the average. Half of the certificates earned are ECDL certificates. The course costs are paid by the employers for $28 \%$, by the participants themselves for $26 \%$ and by the schools for $20 \%$.
- The ECDL is well-known: 71\% of the respondents know the ECDL, younger respondents being clearly above the average with $81 \%$.


## Private equipment and use

- Two thirds of the respondents (15-60 years) have got top equipment at home (Internet, desktop or notebook AND tablet or smartphone), with $96 \%$ Windows is the dominant operating system. 12\% are familiar with Apple, younger respondents use Apple significantly more often (19\%).


## Summary

- Two thirds of the respondents use their PC/notebook and also their private mobile devices daily for private purposes, students and retirees being clearly above average here. All in all $24 \%$ of the respondents use the computer privately for 3 to more hours every day.
- Classic applications like e-mails (88\% frequent use), file management (71\%) and online-banking (65\%) dominate. 50\% use social media frequently, not surprisingly above all Facebook and YouTube.


## On-the-job equipment and use

- $36 \%$ of the employed respondents have got top equipment at work (notebook OR tablet OR smartphone are provided by the employer), $23 \%$ are provided with a mobile device by their employers - here men and persons with higher educational level are above average.
- More that every second person employed spend at least have of their working time at the computer, women and persons with higher educational level are above average here.
- Note: $74 \%$ of the respondents think that computer skills are very ( $47 \%$ ) or rather important (27\%) for their professional career, younger respondents think that computer skills are even more important for work.


## Summary

## Self-assessment of computer skills

- $45 \%$ of the respondents think that their overall computer skills are very good, another $15 \%$ still think they are rather good. Younger persons (15-29), pupils and students, persons with school-leaving exam and those who finished their training with a certificate assess themselves better.
- Interesting: Respondents with very good test results assess their computer skills a bit worse than the average, our theory concerning this phenomenon is: they are able to assess their knowledge and especially their application skills more realistically.
- In detail: 78\% assess their basic computer skills very/rather good, 84\% their basic Internet skills and 49\% their IT security knowledge.


## Self-assessment vs. test results (Sophia-Test)

- The results say something else: only $7 \%$ of the respondents who did the test (494 respondents) reached a very good test result (90-100\%), 32\% a good/mediocre result (64-89\%), 61\% did poorly (less than 64\%). Men and young persons did better, the difference by demographic features was relatively small.


## Summary

## Test results in detail

- In the area basic computer skills the Sophia-Test brought the worst results: Here 75\% had a bad test result, only $7 \%$ had very good results. But: 49\% have assessed their basic computer skills as being very good!
- For basic Internet skills self-assessment and test results are a bit closer: 54\% think they are very good in this area, $41 \%$ reached a very good test result. Here the discrepancy can be noted for the sample who did poorly (only $2 \%$ assess themselves rather/very bad, $49 \%$ did rather/very poorly).
- In the area IT security we see a different situation: only $14 \%$ assessed themselves good here, $54 \%$ did well in the test, however. (Note: this part of the test focuses mostly on knowledge and is less application-oriented than the other two parts of the test.)
> Conclusion: While there is theoretic computer knowledge there is a lack of actual computer application skills.


## 5 Random sample description

### 5.1 Sample description (weighted)



Highest completed educational level

|  |  |  |
| :--- | ---: | ---: |
|  | Rate | Per cent |
| Without school-leaving | 844 | 67,0 |
| exam | 416 | 33,0 |
| With school-leaving exam | 1260 | 100,0 |
| Total |  |  |


| Austrian provinces |  |
| :--- | ---: | ---: |
|  Rate Per cent <br> Burgenland 42 3,3 <br> Carinthia 84 6,7 <br> Lower Austria 242 19,2 <br> Upper Austria 210 16,7 <br> Salzburg 79 6,3 <br> Styria 184 14,6 <br> Tyrol 106 8,4 <br> Vorarlberg 54 4,3 <br> Vienna 258 20,5 <br> Total 1260 100,0 |  |

Size of municipality

| Population | Rate | Per cent |
| :--- | ---: | ---: |
| under 2,000 | 184 | 14,6 |
| $2,000-4,999$ | 267 | 21,2 |
| $5,000-19,999$ | 273 | 21,6 |
| $20,000-49,999$ | 89 | 7,1 |
| $50,000-99,999$ | 63 | 5,0 |
| $100,000-499,999$ | 126 | 10,0 |
|  | 258 | 20,5 |
| 500,000 and more | 1260 | 100,0 |
| Vienna) |  |  |
| Total |  |  |

### 5.2 Sample description (weighted)

| Occupation |  |
| :--- | ---: | ---: |
|  Rate Per cent <br> Pupils 76 6,0 <br> Apprentices 13 1,0 <br> Students 38 3,0 <br> Employed (part-/full-time) 958 76,0 <br> Not employed (leave, at home, 126  <br> looking for work) 50 10,0 <br> Retired 1260 4,0 <br> Total  100,0 |  |

Household size
Household size

|  | Rate | Per cent |  |
| :--- | ---: | ---: | :---: |
| 1 person | 212 | 16,8 |  |
| 2 persons | 411 | 32,6 |  |
| 3 persons | 269 | 21,4 |  |
| 4 persons | 261 | 20,7 |  |
| More than 4 persons | 107 | 8,5 |  |
| Total | 1260 | 100,0 |  |

Children under 14 in the household

|  | Rate |  |
| :--- | ---: | ---: |
| Yes | 342 | 27,1 |
| No children under 14 in the | 706 | 56,0 |
| household | 1048 | 83,2 |
| Total | 212 | 16,8 |
| Question not asked | 1260 | 100,0 |

## 6 Contact

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[^0]:    ■ very good ( $100 \%-90 \%$ )

    - good to mediocre (89\%-64\%)
    $\square$ bad to very bad ( $63 \%-0 \%$ )

