University Education vs. Startup Community

Juraj Danko (sudanec@gmail.com)

Ladislav Rampášek (rampasek@gmail.com)

György Tomcsányi (tomcsanyi2@uniba.sk)

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Motivation

The size of the Startup community has significantly risen in the past few years. The raise is obvious not only in the technical hubs of the youth of today like Berlin or Tallin, but also becomes interesting in Central Europe. The ultimate question intended to be answered in this document is the usefulness of the university education in building a startup.

To define a startup, many approaches need to be considered. Actually, we have let tens of discussions and have found many different definitions by many members of the community. Some of them state that startup needs to be IT/technical oriented, some do not. However, for the purpose of this document, following weak Investopedia definition would be more than enough:

"A company that is in the first stage of its operations. These companies are often initially bank rolled by their entrepreneurial founders as they attempt to capitalize on developing a product or service for which they believe there is a demand. Due to limited revenue or high costs, most of these small scale operations are not sustainable in the long term without additional funding from venture capitalists." I

However, the questionnaire was not only to be filled by startup members. Whole community (investors, angels, event organizers, mentors, etc.) opinions are interesting as they also play great role in the determination of the respective startup successfulness.

As for sure experience play role in the future of any entrepreneurship, the question actually is, how important and useful is the university experience; how important it is to have a master's degree and if it is useful to do postgraduate studies or not.

Where we asked

In Slovakia, we tried to find the opinions and ideas at following venues:

- StartupCamp Bratislava (http://www.startupcamp.sk/)
- Startup Weekend Bratislava (http://bratislava.startupweekend.org/)
- StartupCamp Košice (http://www.startupcamp.sk/)

Additionally, we have visited following venues in Czech Republic:

Startup Weekend Prague (http://prague.startupweekend.org/)

We also included opinions of the visitors of Austrian venues:

Startup Lounge Vienna (http://startuplounge.in/)

Available on Internet: http://www.investopedia.com/terms/s/startup.asp#axzz1vJX7u65m

Methodology

The questionnaire tried to be quite exhaustive, so that the person asked would get much information to it. Logically, this made people somehow think it is wasting paper and useless, but still made our results more comprehensive.

All the results are to be presented objectively; however, further data that are not covered by the questionnaire are sometimes added as for explaining and narrowing the results.

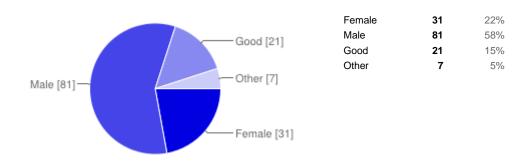
Results

A highly representative amount of 140 filled questionnaires have passed to the counting stage of the questionnaire.

Let's get to the results:

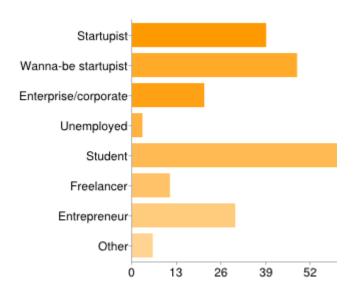
1. Your sex:

This is actually the sad part of the community. As most projects are technically-based, most members are males. However, the tendency to involve the marketers and salesmen make the ratio somehow better.



2. Your business (multiple choice):

Our target group consisted mainly of young people interested in startups. We divided them into two main groups: working people (startupists, employed, freelancers) and soon to be working people (students, wanna-be startupist). Further division is depicted in the chart below.

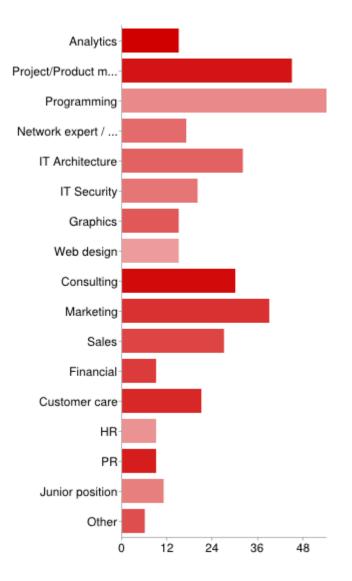


| Startupist | 39 | 28% |
|----------------------|----|-----|
| Wanna-be startupist | 48 | 35% |
| Enterprise/corporate | 21 | 15% |
| Unemployed | 3 | 2% |
| Student | 65 | 47% |
| Freelancer | 11 | 8% |
| Entrepreneur | 30 | 22% |
| Other | 6 | 4% |

People may select more than one checkbox, so percentages may add up to more than 100%.

3. Your specialty/position (multiple choice):

As most of the venues we visited were technically oriented, the majority of our respondents are young IT professionals. Most of them have a university degree or are still students. More than the half of the non-student group have a master's (or equivalent) degree or a PhD. People with technical and business education were well represented in our survey.

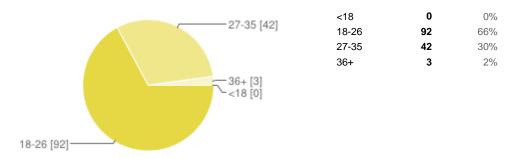


| Analytics | 15 | 11% |
|-------------------------|----|-----|
| Project/Product manager | 45 | 34% |
| Programming | 59 | 45% |
| Network expert / admin | 17 | 13% |
| IT Architecture | 32 | 24% |
| IT Security | 20 | 15% |
| Graphics | 15 | 11% |
| Web design | 15 | 11% |
| Consulting | 30 | 23% |
| Marketing | 39 | 30% |
| Sales | 27 | 21% |
| Financial | 9 | 7% |
| Customer care | 21 | 16% |
| HR | 9 | 7% |
| PR | 9 | 7% |
| Junior position | 11 | 8% |
| Other | 6 | 5% |

People may select more than one checkbox, so percentages may add up to more than 100%.

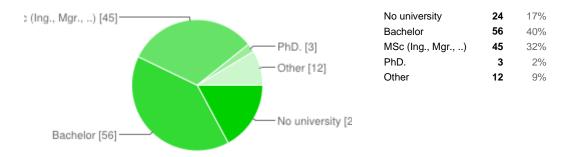
4. Your age:

Following results show that the community is very young; it can be seen that the youth of the technical population is getting well organized in the startup community.



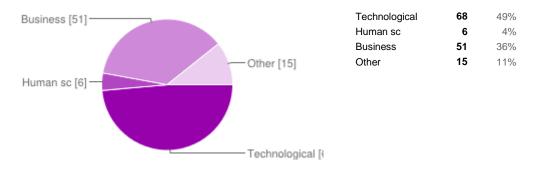
5. Your highest reached education:

As for the average age of the community being very low, many of the respondents are still students, some of them don't have a degree yet. That is also a reason why in the following statistics the "no university" answers makes up to 17%.



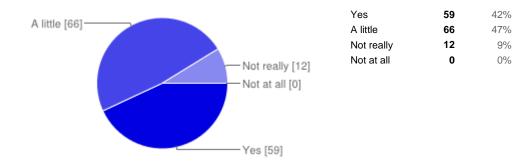
6. Your education:

Fortunately, the community has quickly found out that not only technical skills, but also business orientation and experience are necessary for launching a project. Logically, more and more business people occur on the venues.

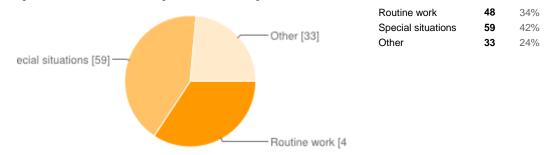


7. Do you find your education useful for your job?

Most of our respondents find that their education is useful. This question was answered similarly by students and non-students, but non-students had a bigger representation of the answer "Not really". The answers imply that skills acquired in school are necessary for everyday work but they are more important for special situations.



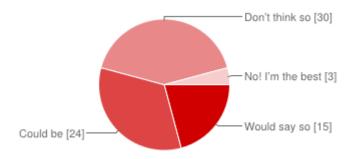
7a. If yes, in which field of your work do you find it to be most useful?



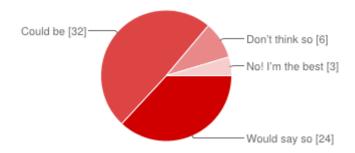
8. Would you do your job better if you were further educated?

This question brought the first bigger difference in the two groups. Non-students (who mainly have a master's degree) don't think that further education would significantly improve their job related skills. In contrary to this, most of the students find further education to be a good investment.

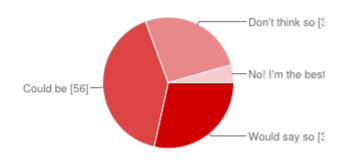
Non-students:



Students:



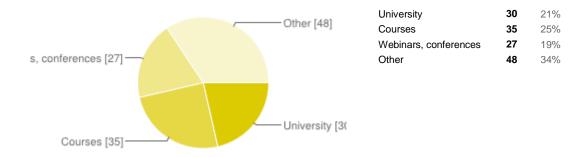
Total:



| Would say so | 39 | 28% |
|------------------|----|-----|
| Could be | 56 | 40% |
| Don't think so | 36 | 26% |
| No! I'm the best | 6 | 4% |

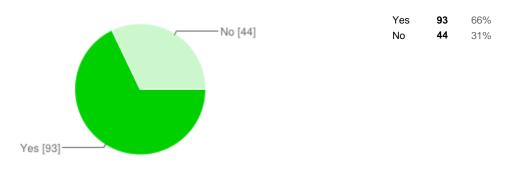
8a. If yes, what kind education would help you?

Following chart proves the importance of the new means of education. Webinars and conferences are becoming more and more popular and are also accepted as a meaningful way of getting information and skills.



9. Would you prefer a university-educated colleague to a colleague with lower education?

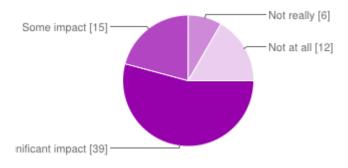
This result speaks for itself. Most of the respondents are university-educated and they would prefer to have similar colleagues. ¾ of the students answered yes, which is more than in the other group.



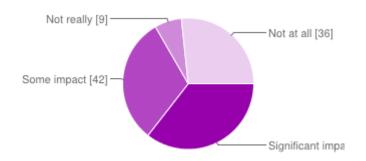
10. Do you have an impact on HR/employing policy in your company?

Most of our non-student respondents have a significant impact on employing, which makes the answers of next questions interesting. Thus in the next parts we present mainly the results of this group.

Non-students:



Total:

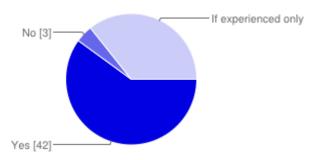


| Significant impact | 48 | 34% |
|--------------------|----|-----|
| Some impact | 42 | 30% |
| Not really | 9 | 6% |
| Not at all | 36 | 26% |

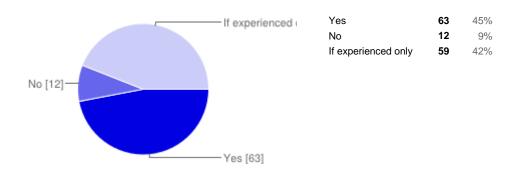
11. Would you employ a person without university education as a programmer?

Most of the non-students would employ a person without university education.

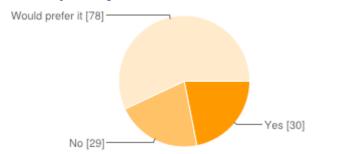
Non-students:



Total:

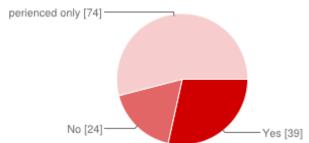


11a. Would you require a technical education?



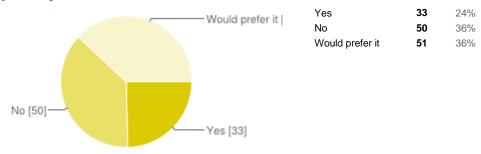
| Yes | 30 | 21% |
|-----------------|----|-----|
| No | 29 | 21% |
| Would prefer it | 78 | 56% |

12. Would you employ a person without university education as a project/product manager?

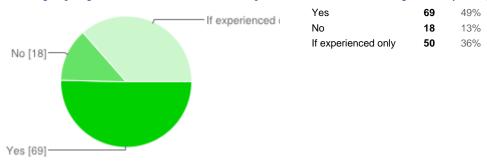


| Yes | 39 | 28% |
|---------------------|----|-----|
| No | 24 | 17% |
| If experienced only | 74 | 53% |

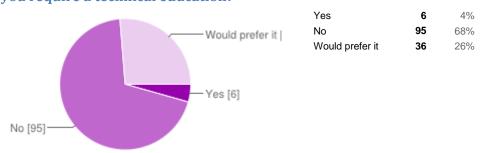
12a. Would you require a technical education?



13. Would you employ a person without university education as a sales person / HR / PR?



13a. Would you require a technical education?

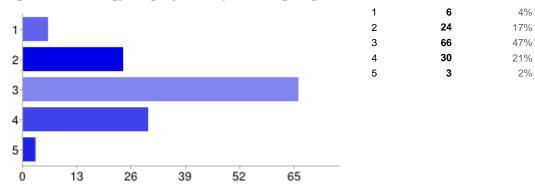


4%

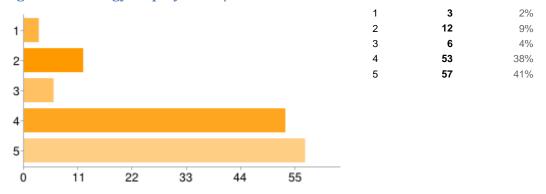
2%

The following set of questions target to investigate the most important qualities an IT/technological employee should have. Respondents rated the features due to their importance on the scale 1 (least) - 5 (most). In short, the ideal employee should be a responsible team player, who can effectively concentrate to get the job done. Experience in the profession, analytical thinking, and an open mind are the qualities that respondents believe to be the most important predispositions for such an employee. On the other hand, theoretical background, marketing feeling, and contacts to the professional community stand in the second rows of importance. Surprisingly, a good technology employee does not have to be necessarily a friendly dude, unless he is able to work for the team.

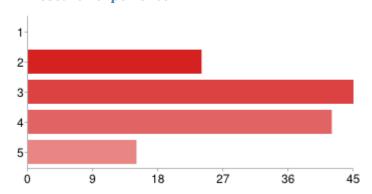
14. A good technology employee has/is: - Outgoing



14. A good technology employee has/is: - Effective and concentrated

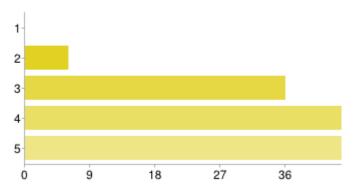


14. A good technology employee has/is: - Theoretical background for his work, research experience



1 **0** 0% 2 **24** 17% 3 **45** 32% 4 **42** 30% 5 **15** 11%

14. A good technology employee has/is: - Experience with the work



0 0% 6 4% 36 26% 44 31% 45 32%

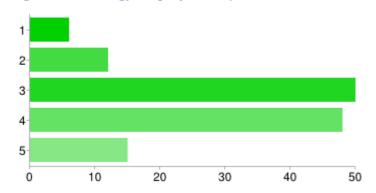
2

3

4

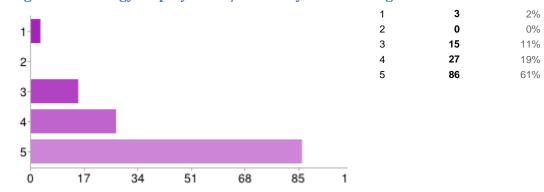
5

14. A good technology employee has/is: - Contacts to the respective professional community

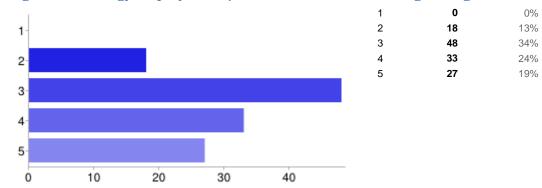


1 6 4% 2 12 9% 3 50 36% 4 48 34% 5 15 11%

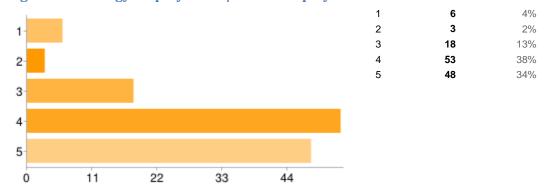
14. A good technology employee has/is: - Analytical thinking



14. A good technology employee has/is: - Creative and marketing feeling



14. A good technology employee has/is: - Team player



2%

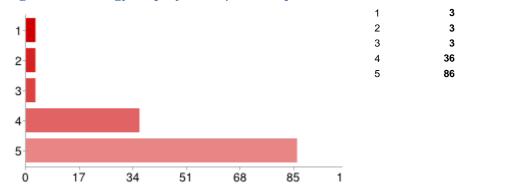
2%

2%

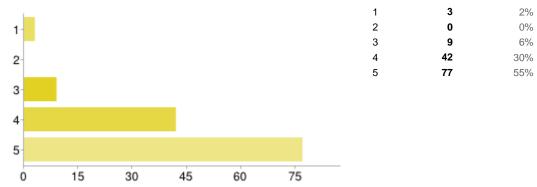
26%

61%

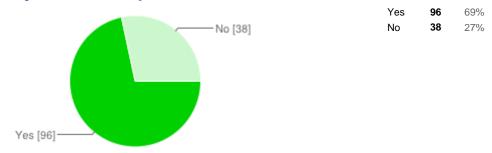
14. A good technology employee has/is: - Responsible



14. A good technology employee has/is: - Flexible, open-minded

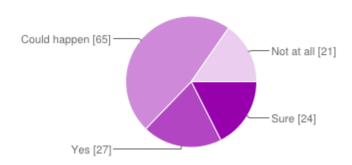


15. Would you prefer a partnership/cooperation with a company let by university-educated tech management (meaning technical directors & developer team leaders)?



16. Do you find further education (more than MSc or equivalent) useful for any work at commercial world at all?

This seems a little surprising. More than half of the respondents see the further education useful for business.



 Sure
 24
 17%

 Yes
 27
 19%

 Could happen
 65
 46%

 Not at all
 21
 15%

16a. If so, could you name an example of such a work?

Research

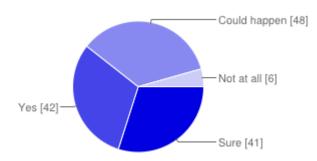
google prefers people with phd

advanced bio-tech

advanced input methods

17. Do you find constant academic education & cooperation with universities useful for business?

There have been many bad examples and failures when it comes to the cooperation of universities and the commercial world. Fortunately, startupists are still willing to try to move it forward.



| Sure | 41 | 29% |
|--------------|----|-----|
| Yes | 42 | 30% |
| Could happen | 48 | 34% |
| Not at all | 6 | 4% |

17a. If so, do you have some experience with this? Name it

tech inovations

For analytics of big chunks of data

no but it is great to pick the best students and engage them into company

my diploma thesis was in cooperation with business and results of the research

9%

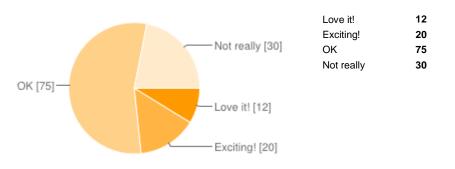
14%

54%

21%

18. Did you like this questionnaire?

Well, the questionnaire was long and exhausting, so... it was a little boring. However, we are happy that the answers were not too bad and actually some people appreciate our effort.



Conclusion

In general, we may conclude that the community around the startups finds the education useful, however, not necessary for success. The hands-on experience, personal contacts, and team spirit are crucial for startups and often harder to acquire than the education itself, thus more valuable. Nonetheless, companies and employees with university education do have some implicit advantage.

Surprisingly, further education (like PhD.) is also viewed to as somehow useful. This is probably as in startup sphere innovation and courage to investigate and research new approaches is indeed important. Here, people with a PhD might have a small advantage. However this more applies for the team leaders and startup founders than for the regular employees.

Another situation is in industry leading companies like Google, Microsoft, Facebook, etc. where employees with PhD. are often preferred. In our region the situation is different, may be because of the bad relation or contact of the postgraduated people with the commercial world in Middle Europe, where the PhD education is still to find its place on the local markets.

In general, the results could be considered as positive. There are still many shortages and problems in use of the education in the business areas; however, the overview and further knowledge is seemed as something positive by the community.

Last but not least, we would like to cordially thank to all the respondents in our research and organizers of the mentioned startup gatherings for their time and cooperation.

Pseudo anonymous questionnaire

Please send to sudanec@gmail.com or deliver to a person who gave this to you (filled).

If not stated otherwise, this is a single-choice questionnaire. The questionnaire is focused on the technology startup community; the purpose is to find some correlation between the respective business area, and university education.

Thank you for being honest and thank you for your time!

| 1. | Your sex: | | | | |
|----|------------|---------------------------|--------------------|-------------------|------------------------|
| | | □Female | □Male | □Good | □Other: |
| 2. | Your busin | ess (multiple choic | e): | | |
| | | \square Startupist | ☐Wanna-be start | upist | ☐ Enterprise/corporate |
| | | \square Unemployed | □Student | □Freelancer | □Entrepreneur |
| | | \square Other: | | | |
| 3. | Your speci | alty/position (multi | ple choice): | | |
| | | \square Programming | \square Graphics | □Marketing | □Sales |
| | | \square Analytics | ☐IT Architecture | ☐Web design | □ Consulting |
| | | □ Network expert | / admin | ☐IT Security | □Financial |
| | | \Box Customer care | □PR | □HR | ☐ Junior position |
| | | □ Project/Product | manager | ☐ Other manager: | |
| | | \square Other creative: | □Oth | er technical: | \Box Totally other: |
| 4. | Your age: | | | | |
| | | □<18 | □18-26 | □27-35 | □36+ |
| 5. | Your highe | est reached educati | on: | | |
| | | ☐No university ☐Other | □Bachelor | □MSc (Ing., Mgr., |) □PhD. |
| 6. | Your educ | ation: | | | |

| | | □Technological | ☐ Human sc | ☐Business | □Other: |
|-----|------------|----------------------------|-----------------------|---------------------------|----------------------------|
| 7. | Do you fir | nd your education u | seful for your job? | | |
| | | □Yes | □A little | \square Not really | □Not at all |
| | a. If | yes, in which field o | of your work do you | ı find it to be most ı | useful? |
| | | \square Routine work | ☐ Special situation | ıs | □Other: |
| 8. | Would yo | u do your job bette | r if you were furthe | r educated? | |
| | | \square Would say so | \square Could be | ☐Don't think so | \square No! I'm the best |
| | a. If | yes, what kind edu | cation would help y | ou? | |
| | | \square University | □Courses | ☐Webinars, confe | erences \square Other: |
| 9. | Would yo | u prefer a university | y-educated colleagu | ue to a colleague wi | ith lower education? |
| | | □Yes | □No | | |
| 10. | Do you ha | ive an impact on HR | A/employing policy | in your company? | |
| | | \square Significant imp. | \square Some impact | \square Not really | \square Not at all |
| 11. | Would yo | u employ a person v | without university e | education as a prog | rammer? |
| | | □Yes | □No | \Box If experienced of | only |
| | a. W | ould you require a | technical education | 1? | |
| | | □Yes | □No | \square Would prefer it | |
| 12. | Would yo | u employ a person v | without university 6 | education as a proje | ect/product manager? |
| | | □Yes | □No | \Box If experienced of | only |
| | a. W | ould you require a | technical education | 1? | |
| | | □Yes | □No | \square Would prefer it | |
| 13. | Would yo | u employ a person v | without university 6 | education as a sales | person / HR / PR? |
| | | □Yes | □No | ☐ If experienced o | only |
| | a. W | ould you require a | technical educatior | 1? | |

| □Yes | □No | □w | ould prefe | er it | | |
|---|--------------------|------------|--------------|-------------|---------------|------------|
| | | | | | | |
| 14. A good technology employe | | | | | 4 (1 .) = | , |
| Please, evaluate following f | eatures due to t | heir impo | rtance on | the scale : | 1 (least) - 5 | (most) |
| | 1 | 2 | 3 | 4 | 5 | |
| Outgoing | | | | | | |
| Effective and concentrated | | | | | | |
| Theoretical background for his wo | ork, | П | П | П | П | |
| research experience | | | Ш | | | |
| Experience with the work | | | | | | |
| Contacts to the respective | | | | | | |
| professional community | | | | | | |
| Analytical thinking | | | | | | |
| Creative and marketing feeling | | | | | | |
| Team player | | | | | | |
| Responsible Flexible, open-minded | | | | | | |
| riexible, open-illilided | | | | | | |
| | | | | | | |
| 15. Would you prefer a partner | ship/cooperatio | n with a c | ompany le | t by unive | ersity-educa | ited tech |
| management (meaning tecl | nnical directors 8 | & develop | er team le | aders)? | | |
| | | · | | , | | |
| □Yes | □No | | | | | |
| 16. Do you find further education world at all? | on (more than N | 1Sc or equ | uivalent) us | seful for a | ny work at | commercial |
| □Sure | □Yes | □с | ould happe | en □No | ot at all | |
| a. If so, could you nan | ne an example o | f such a w | ork? | | | |
| | | | | | | |
| 17. Do you find constant acade | mic education & | cooperat | ion with u | niversities | s useful for | business? |
| □Sure | □Yes | □c | ould happe | en □No | ot at all | |
| a. If so, do you have s | ome experience | with this? | ? Name it | | | |
| | | | | | | |
| 18. Did you like this questionna | ire? | | | | | |
| □Love it! | ☐Exciting! | □о | K | □ N | ot really | |