



**Centre for Innovation
and Technology Transfer
Management**

WARSAW UNIVERSITY OF TECHNOLOGY

CAREER IN FOUR SENTENCES

ANALYSIS OF RESPONSES FROM
WARSAW UNIVERSITY OF TECHNOLOGY
GRADUATES



WUT

Career in four sentences. Analysis of responses from Warsaw University of Technology graduates

REPORT

as part of the study entitled

Success stories. Warsaw University of Technology graduates (a diagnosis of professional success factors)

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WARSAW UNIVERSITY OF TECHNOLOGY



**Warsaw University
of Technology**

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INTRODUCTION

The study entitled “Success stories. Warsaw University of Technology graduates (a diagnosis of professional success factors)” provided a wealth of interesting opinions, memories and recommendations from 110 Warsaw University of Technology (WUT) graduates. They offered some interesting facts about their careers and experiences related to studying at the WUT, and spoke about the difficulties they encountered and successes they had. This material was used to produce a series of five reports, offering a comprehensive discussion of a range of topics related to success: the definitions of success, the impact of external and internal factors on success, the importance of family in achieving success and also the question of whether WUT graduates’ successes were the product of favourable circumstances or rather the result of hard work.

The five reports drawn up as part of the study entitled “Success stories. Warsaw University of Technology graduates (a diagnosis of professional success factors)”:

1. “What is success for Warsaw University of Technology graduates? Analysis of study results”
2. “How to become successful? Diagnosis of success factors among Warsaw University of Technology graduates”
3. **“Career in four sentences. Analysis of responses from Warsaw University of Technology graduates”**
4. “Coincidence or hard work – the factors behind Warsaw University of Technology graduates’ success”
5. “The impact of family background on the educational choices (until entry into higher education) and success of WUT graduates”

This report focuses on WUT graduates’ subjective summaries of their careers, based on their completion of four open-ended sentences.

1. STUDY BACKGROUND

This is part of a series of studies to investigate the needs and expectations of WUT graduates' employers, conducted since 2016 by the Research and Analysis Department of the Centre for Innovation and Technology Transfer Management at the Warsaw University of Technology (DBA CZiITT PW). By diagnosing the professional status of WUT graduates on the labour market and identifying the circumstances that helped to achieve this status, valuable insights into the quality of education at WUT were gained. The conclusions drawn from the study have illuminated certain aspects that are useful for managing the quality of education at WUT. Research of graduates' careers forms part of the efforts by tertiary institutions to perform the broadest-possible evaluation of educational outcomes and to examine how these outcomes contribute to graduates' future careers.

2. METHODOLOGY

This study aimed to diagnose the factors behind WUT graduates' professional success. The aim was translated into six research questions (two of which are analysed in this report):

- » How do WUT graduates define "success"?
- » What are the unique academic/scientific, commercial and social achievements of WUT graduates?
- » What did the career paths of WUT graduates look like (milestones, motivations)?
- » **What were the internal factors behind WUT graduates' success?**
- » **What were the external factors behind WUT graduates' success?**
- » What role did WUT play in graduates' success?

An additional objective of the study was to promote Warsaw University of Technology by creating material on WUT graduates' success stories to be published on WUT's website.

The study was based on individual in-depth interviews (IDI) with successful WUT graduates, i.e. alumni with an outstanding track-record of academic or scientific achievements, professional successes, community involvement, or work in high-profile organisations. The question of whether or not a graduate became successful was ultimately left to the subjective opinion of that graduate. Individual in-depth interviews involve direct interaction between researchers and respondents. It is based on a scenario comprising a set of subjects to be addressed to gain insights into the experiences, interpretations of events and in-depth opinions of the respondents¹.

The following thematic areas were discussed in the interviews:

- » success: definition, types of success, respondents' achievements;
- » professional career: what the career looks like, milestones, current position, barriers and difficulties encountered during the career;
- » education: what did education outside tertiary institutions look like, which study programme was chosen and how it was completed, the best memories from WUT, an assessment of WUT's educational services and overall activities, respondents' assessment of whether they would choose the same educational pathway, educational activities after graduating;
- » external (family, environment) and internal factors (personality traits);
- » advice for WUT students and candidates;
- » four sentences to be completed – career path summary.

A variety of channels were used to recruit respondents:

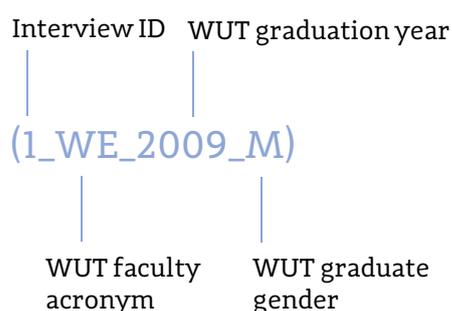
- » recommendations from the management and staff of individual WUT Faculties;
- » recommendations from WUT graduates (respondents);
- » own search using LinkedIn, <https://www.eksperci.pw.edu.pl/> and other pw.edu.pl domain websites and websites of high-profile companies in individual industries

¹ Cf. Babbie, E., *The Basics of Social Research*, Fourth Edition, Thomson Wadsworth 2008, p. 335-337.

- specific to profiles of WUT Faculties;
- » announcements on social media (Facebook, LinkedIn) with information about the study and a link to the registration form;
- » posters displayed within WUT's spaces.

The interviews were recorded², and reflections were formulated as preliminary reports in which their authors provided tentative interpretations of the responses. Some of the interviews were also fully transcribed. Due to their structured format, the preliminary reports were the first tool to analyse individual stories. They also helped to create “personas” – graphics depicting graduates' careers and opinions, available on pw.edu.pl domain websites.

Explanation of cited sources:



This report deals with the final part of the interview, in which respondents were asked to complete the following four sentences:

- » I got to where I am in my career thanks to
- » If I could go back in time, I would change
- » The thing I regret the most about my career is
- » The thing I appreciate the most about my career is

Completing sentences is a type of verbal projection technique. It is used not only to elicit a more nuanced response, but also to prompt the respondent to adopt a different way of thinking. Projection techniques are designed to elicit quick responses, initial associations and spontaneous answers that can later be explained by the respondents. Using this technique at the end of the interview enabled the respondents to provide a summary of their thoughts.

The completed parts of the sentences could refer to the respondents' individual personality traits and ambitions, as well as to the external factors that helped them, or made it more difficult, to achieve success. Hence the content of the completed sentences are related to the selected study questions. This part of the interview usually involved some time to think over the answer – the responses were rarely provided immediately, and due to the highly generalised nature of the sentences, they had to be synthesised. The respondents needed a minute to collect their thoughts and complete the sentences. In some cases they referred to what they had said earlier in the interview, e.g. when describing the difficulties they had encountered during their careers. Occasionally, the completed parts of sentences 2 and 4 were similar or related to the same event – this necessitated a comparison of the number of instances in which this was the case, and a consideration of whether there should be any changes in the sentences used in future studies to avoid such repetitions.

Having a large number of respondents allowed a quantitative assessment of their answers and a range of comparisons. Providing a quantitative listing of the four completed sentences, allowed to identify the main answer categories according to which the coded responses were grouped. The purpose of the coding was to encapsulate the content into common and more general phrases to avoid focusing on differences at the initial stage and instead concentrate on similarities between interviews. If the answer to the question about the most appreciated thing in their career referred to relations with co-workers, this option was included in the set of answers. Each respondent

² All the interviews were recorded following respondents' full consent.

AGNIESZKA MARACH

- **Internship**
at Kuryłowicz & Associates (2011)
- **Architect**
Hejna Architekci (2011)
- **GRADUATE**
of the Faculty of Architecture
field: architecture and urban
planning (2014)
- **self-employment**
Studio Architektury Agnieszka Marach (2015)
- **Project Manager/ Senior Architect**
at APA Wojciechowski Sp. z o.o. (2016)
currently implementing a project of a wooden office
building, which requires a lot of learning and exploring
new systems and possibilities



GREATEST ACCOMPLISHMENTS

- 2nd place in the competition for an office complex project
- obtaining construction qualifications
- continuous interest in the project developed as part of engineer's thesis - adaptation of the sailing club
- becoming a project manager, leading teams and projects in the studio where she works

ADVICE FOR STUDENTS

- "Do your best and follow an ambitious path. Try to observe which courses you like the most."
- "Take care of your professional development during your studies - take up internships and apprenticeships."

THOUGHTS ON THE CAREER

"I am at this point in my career because...
of my commitment."

"What I appreciate most about my career...
are people and working with them."

"Success is about fulfilling yourself in the professional field, developing and achieving your professional goals while maintaining the balance in other parts of life."

MEMORIES FROM WUT

"Trip to Giżycko, to the Boyen Fortress. It was a several days long summer seminar, during which project activities were organized."

TIME AT WUT - KEY ASSETS

- creativity and problem solving
- gained basic project competences

provided answers individually, without any knowledge of the answers provided in earlier interviews, so that subsequent respondents could mention similar experiences, as well as describe other experiences. After the coding phase, the first raw categories emerged, which were fairly numerous and detailed. After browsing through them, it was possible to link them thematically, and some could be summed together – e.g. the “pursuing my passion” and “I like what I do” categories were merged into a single category. The process was repeated for all four questions. Consequently, several main categories were created for each question, focusing on individual topics, which were distinct from each other – one topic could not be classified under two main categories at the same time. The categories are not equal in numbers and, in addition, should be treated as multiple response questions that are not mutually exclusive – a respondent could, for instance, state that they did not regret anything about their careers while also mentioning that they could change a thing or two. Accordingly, the number of responses under main categories is not equal to the number of respondents, nor to the sum of responses under sub-categories. Each main category was summarised on a scale of 0-1, where 0 meant no response to any option under the category, and 1 meant that at least one option was mentioned.

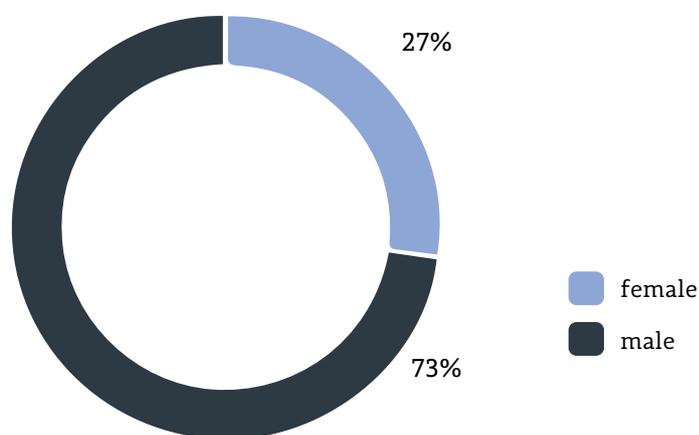
The number of the respondents was large enough to illustrate a distribution of responses, although without a more extensive statistical analysis, since the study was based on qualitative methods. Due to the adjustments made in the interview scenario after a pilot run of the study, not all respondents were asked to complete each sentence. The numbers specific to individual sentences are provided under corresponding subsections.

3. RESULTS OF DATA ANALYSIS

3.1 STATISTICAL PROFILE OF THE WARSAW UNIVERSITY OF TECHNOLOGY GRADUATES

The respondents graduated from 19 Faculties of the Warsaw University of Technology. Among the 110 WUT graduates interviewed, 80 were male and 30 female.

Chart 1 Respondents' gender



Source: by DBA CZiITT PW, 2020, n=110.

This proportion was similar to the overall gender distribution of WUT students. According to data from the POL-on system, in 2019 there were 25,133 WUT students, 33.3% of which were women³. A similar proportion was found for doctoral students – out of 1,263 students, 32.9% were women⁴. The nationwide average for Poland in the academic year 2018/2019 was slightly higher, with 36 female students per 100 male students⁵. Interviews with women delved into the gender-specific perception of education at WUT to see if gender was considered a factor. One positive conclusion is that gender-based discrimination was rarely mentioned. The WUT graduates covered by the study were satisfied with their choice of technical study programmes.

³ As of 31 December 2019.

⁴ Kobiety na politechnikach. Raport 2019, Fundacja Edukacyjna Perspektyw, 2019, p. 19.

⁵ Ibid, p. 3.

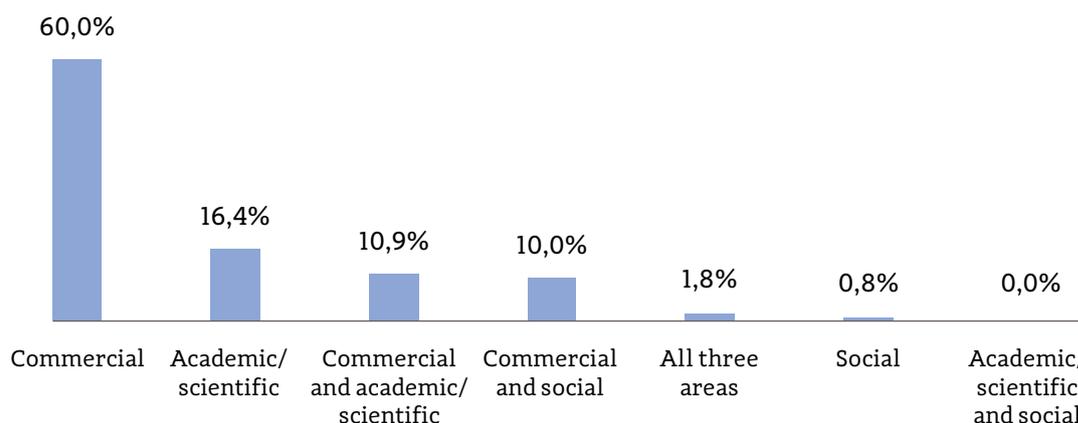
My mum had always been in favour [of me studying at WUT], and she had never given me any reason to think that I would not make it just because I was a girl.
 [27_WMEiL_2015_F]

... I think women are not bold enough. Once you find that courage, for example by becoming involved in the student government, where you sometimes need to argue your point and negotiate things with professors while relying on specific legal acts, once you learn this, it's no longer a problem.
 35_WIM_2012_F

The interviews also showed that the Faculties of Chemistry and Architecture had substantial proportions of female students, so the female graduates of these Faculties felt no imbalance in this regard.

Based on the interview, the researchers could decide whether the interviewee's successes were commercial, academic/scientific or social. One interviewee could be ascribed several categories of success at the same time. The prevailing type of success was commercial – this was the case for more than 82% of WUT graduates⁶. Almost a third of the respondents claimed to have achieved academic/scientific success⁷. Significant achievements related to social involvement were mentioned by 10.9% of interviewees. Among the 110 studied graduates, two were considered successful in all the three categories. One was an alumna of the Faculty of Architecture, currently a project manager at an architectural studio, and the other was an alumnus of the Faculty of Chemistry, now the owner of the largest chemical company in Central and Eastern Europe.

Chart 2 WUT graduates' success areas



Source: by DBA CZiITT PW, 2020, n=110.

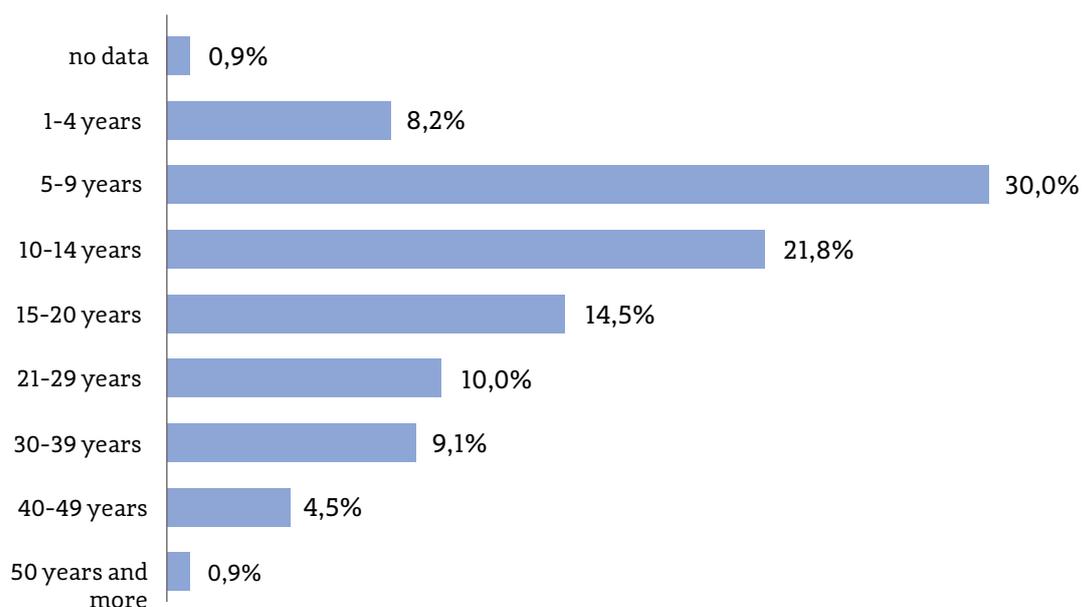
The studied population varied by years of professional experience, although the majority of WUT graduates (90.9%) had worked longer than five years. Regardless of the basis of employment, this period will be described as “professional experience” in the report⁸. The majority of the respondents had 5-9 years of experience (30%), followed by those who had 10-14 years of experience (21.8%). In one case it was difficult to establish the exact number of years of professional experience, hence it was considered to range between 5 and 14 years of job market activity (marked as “no data” on the chart). Among the respondents there were also WUT graduates who were at a late point in their careers (14.5% of alumni with a career spanning more than 30 years), adding more complexity and variety to the respondents' stories.

⁶ Commercial success was identified in four categories: “commercial success”, “commercial and academic/scientific success”, “commercial and social success” and “all three areas”.

⁷ Academic/scientific success was identified in three categories: “academic/scientific success”, “commercial and academic/scientific success” and “all three areas”.

⁸ The number of years of professional experience was established by obtaining information about all places of employment and the length of service in each of them.

Chart 3. Professional experience of WUT graduates (years)



Source: by DBA CZiITT PW, 2020, n=110.

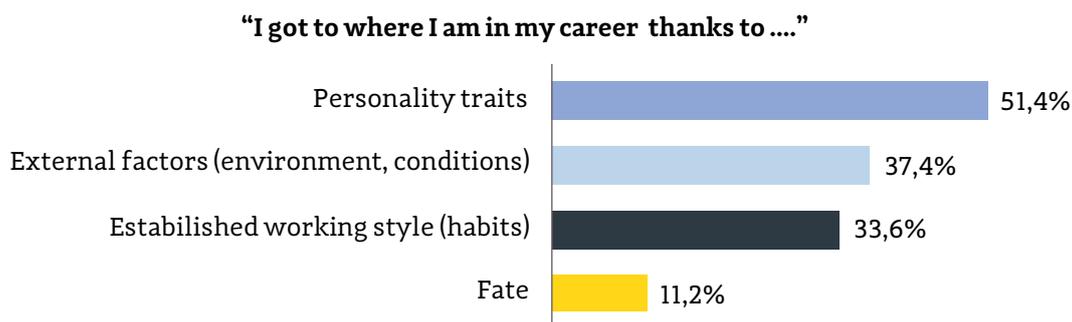
3.2 "I GOT TO WHERE I AM IN MY CAREER THANKS TO ..."

The first sentence to be completed by the interviewees concerned the people and things thanks to whom or which they were at the current point of their careers. It was formulated as: "I got to where I am in my career thanks to...". A total of 107 studied graduates completed this sentence. Based on the analysis of different responses, four main categories could be identified. They were distinct from each other, meaning that options included in one category could not be matched with the other three categories. It should be noted, however, that the responses were not necessarily mutually exclusive – interviewees who mentioned their personality traits could also indicate that they received help from others, and describe the conditions in which they functioned. This is why the options do not sum up to 100% – they could be considered as responses to multiple-choice questions. The responses were categorised into four groups:

- » **"Personality traits"** – when WUT graduates talked about themselves, their activities, efforts and steps taken;
- » **"External factors"** – memories of their environment (family members, co-workers) and conditions (place of employment, university) that were helpful;
- » **"Fate"** – factors considered to be unrelated to the respondents' actions and their immediate environments, things that happened "on their own" (or at least were seen as such by the respondents);
- » **"Established working style (good habits)"** – this includes the respondents' claims about their own activities specifically related to the experience they had gained, e.g. they had become hard-working after some time, it was a good habit they had developed later in their career.

"Personality traits" was the prevailing category. The options it included were mentioned by slightly more than half (51.4%) the respondents – 17 female and 38 male. Random factors were the least likely to be mentioned – slightly over 11% of the respondents claimed that their careers were influenced by a coincidence, force majeure or other favourable chains of events that were beyond their control.

Chart 4. Distribution of responses completing the sentence “I got to where I am in my career thanks to”



Source: by DBA CZiITT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=107.

The majority of the responses (27.1%) referred to individual commitment, being hard-working and having skills. They were included in the main category “Established working style (good habits)”. This was followed by traits such as perseverance, persistence, determination (23.4%), which were included in “Personality traits”. The interviewees described them with different synonyms, but they all involved striving towards a goal. A comparable number of answers related to help from family and co-workers, as well as individual skills – almost 17% of the interviewees stated that they were at this point in their careers thanks to themselves. Table 1 shows the options into which the main categories were broken down. Each respondent could name several topics related to a single category, but this was summarised on a scale of 0-1, where 0 meant no response related to the category, and 1 – at least one statement related to the category.

Table 1. Complete the sentence “I got to where I am in my career thanks to” – number of answers and percentage of respondents

“I got to where I am in my career thanks to...”	Number of responses	% respondents
Personality traits, including:	55	51,4
Persistence, perseverance, determination, tenacity	25	23,4
Thanks to myself	18	16,8
General: personality, skills, talent	8	7,5
“I like what I do”, passion, dreams, being curious about the world	7	6,5
Courage, risk-taking	2	1,9
External factors (environment, conditions), including:	40	37,4
People, co-workers, environment, mentor	19	17,8
Family, close ones	19	17,8
WUT	13	12,1
Established working style (good habits), including:	36	33,6
Being hard-working, committed and able to plan	29	27,1
Being willing to grow, ambitious, ready to learn from mistakes	4	3,7
Experience and knowledge	3	2,8
Fate, including:	12	11,2
Luck, coincidence, fate, force majeure	10	9,3
Favourable circumstances, chain of events	2	1,9

Source: by DBA CZiITT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=107.

Table 2 contains the number of responses under the main category according to professional experience. Three groups could be distinguished based on years of experience. External factors were the most likely to be mentioned by groups with shorter professional experience. Respondents with professional experience spanning 10-14 years considered their established working style to be the key factor that helped them get to the current point in their careers. Those with more than 15 years' experience were more likely to mention personality traits from among the four categories.

Table 2. Distribution of responses completing the sentence “I got to where I am in my career thanks to” relative to professional experience

Years of experience	Fate	External factors (environment, conditions)	Personality traits	Established working style	Numbers of respondents
No data	0	100%	100%	0	1
1-4 years	11%	67%	44%	11%	9
5-9 years	3%	39%	33%	30%	33
10-14 years	13%	33%	46%	50%	24
15-20 years	19%	31%	56%	31%	16
21-29 years	9%	18%	45%	18%	11
30-39 years	20%	30%	90%	40%	10
40-49 years	20%	40%	100%	20%	5
50 years and more	0	0	0	100%	1
					110

Source: by DBA CZiITT PW, 2020

No such variation was found in terms of the type of success – personality traits were mentioned the most for the commercial, social and academic/scientific areas alike.

3.3 WHAT WOULD YOU CHANGE IF YOU COULD GO BACK IN TIME

This section focuses on the completed sentences starting as “If I could go back in time, I would change ...”. Based on the responses provided by 108 WUT graduates, three categories were created:

- » “I wouldn’t change anything”
- » “I would do some things differently”
- » “I would have done more”

The first category is distinct for obvious reasons – the interviewee did not see the need to change anything in his or her professional life. The other two categories were formed due to the considerable variety of the things that the respondents would change if they could go back in time. The third category is distinct in that it relates to things the respondents did but now believe they should have done more.

USAMAH AFIFI

GRADUATE

Faculty of Power and Aeronautical Engineering
field of study: Aeronautical Engineering (1997)



WUT Business School

supplementing analytical skills with business skills, an impulse for dynamic development

working at PwC

a lot of learning, the beginning of the activity into the consulting industry

working at IBM

supporting global companies in technology transformation and business change

PRESIDENT AND OWNER OF AN INTEGRATOR COMPANY

energy and gas industry technologies

RUNNING A CONSULTING COMPANY

in the field of digital transformation

LECTURER

at WUT Business School and at SWPS

INVESTMENT IN AN EU PROJECT

related to customer experience



GREATEST ACCOMPLISHMENTS

- proving himself as an entrepreneur
- cooperation with WUT

ADVICE FOR STUDENTS

- "Work on your communication skills and never stop developing in that direction."
- "Don't stop being curious about the world and exploring different fields of knowledge."

THOUGHTS ON THE CAREER

"I am at this point of my career because... of determination".

"What I appreciate most about my career... honesty and diligence."

"Success means achieving your own goals, pursuing self-development, getting satisfaction from it despite many failures, and the opportunity to test yourself in various situations."

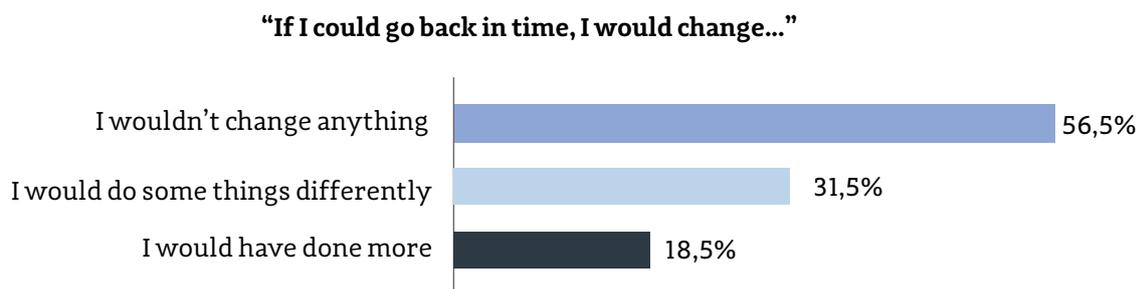
MEMORIES FROM WUT

"I remember meeting very interesting people, building relationships and facing difficulties with learning together (...). Generally, it was an interesting period of discovering the real world."

TIME AT WUT - KEY ASSETS

- determination
- analytical thinking
- ability to seek knowledge
- ability to solve problems

Chart 5. Distribution of responses completing the sentence “If I could go back in time, I would change ...”.



Source: by DBA CZiITT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=108.

Respondents were the most likely to complete the sentence relating to the possibility of going back in time by saying that they would not change anything in their past (56.5% respondents, including 42 male and 19 female). The other main categories could be summarised as striving to achieve even more and to become competent in more fields, as well as the wish to change past decisions or attitudes. Among those respondents who mentioned that if they could go back in time, they would do more or do things differently, the majority of responses concerned learning – being more diligent, hard-working and conscientious, and more generally changing some educational decisions, e.g. the choice of the thesis/dissertation subject, study programme, or opting for a second study programme.

Table 3. Complete the sentence “If I could go back in time, I would change ...” – number of responses and percentage of respondents

“If I could go back in time, I would change”	Number of responses	% respondents
I wouldn't change anything, including:	61	56,0
Nothing – I don't want to change anything	57	52,3
Nothing – I'm not sure what would happen	4	3,7
I would do some things differently, including:	34	31,2
Educational decisions	16	14,7
Life-related decisions made earlier, less worries	6	5,5
Career decisions, more guided	5	4,6
Less work, stress	3	2,8
In general – I would change much	3	2,8
Relations with people	3	2,8
I would do more, including:	20	18,3
Learn more, have a different attitude do learning	12	11,0
Be more committed (at the university, at work)	6	5,5
Study abroad, Erasmus	3	2,8

Source: by DBA CZiITT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=108.

The majority of WUT graduates were content with their current professional status. If they would like to make any changes, they would not be radical – such changes could help them early on in their careers, although this became only evident in hindsight. These potential adjustments would not lead to any fundamental changes in the professional paths of the respondents, or at least any preconceived changes.

(...) if I had not made the decisions that I made and if I had not gone the career path that I went, I would not be here. I would probably be somewhere else now, doing something different (...), but I would not have achieved what I have achieved and would not have the satisfaction that I have now.

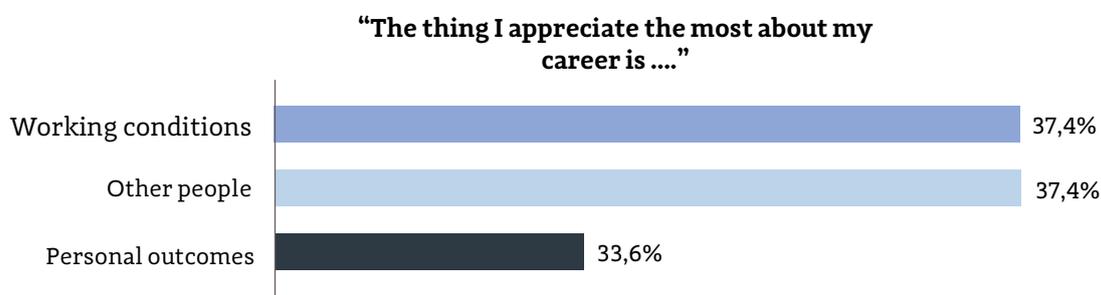
12_WCh_2012_F

There were only three cases of responses indicating that the interviewee would change some things (without being specific), or that they would generally wish for some things to turn out differently. There were no differences relative to the professional experience or the areas of success – in all the sub-groups the prevailing view of the respondents was that they would not change anything.

3.4 APPRECIATED ELEMENTS OF CAREER

In the question about what WUT graduates appreciated the most about their careers, the answers were distributed almost equally between the three main categories: appreciating others, appreciating the working conditions and appreciating the achieved personal outcomes. Responses were provided by 107 WUT graduates.

Chart 6 Distribution of responses completing the sentence “The thing I appreciate the most about my career is”



Source: by DBA CZliTT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=107.

The first main category – “I appreciate other people” involves good memories of close ones, co-workers, people from the University, etc. Ten respondents also indicated that they appreciated help they received from others, and this was included in the same category. This involves memories of people, for instance, from whom they could learn, who gave them some valuable insights, thereby influencing the quality of their work or their career development. One of the subjects addressed in the interview scenario related to the family environment and its impact on educational choices and the future career path. This aspect was dealt with extensively in one of the reports produced as part of the “Success stories” study. Since family and close ones were often noted by the respondents as having helped them along their career paths, it is worth taking a closer look at the individual stories, in which parents of most WUT graduates provided them with motivation and advice. Recognising the importance and value of higher education, “parents-advisers” did not pressure the studied graduates into choosing specific study programmes, nor did they interfere with their decisions. On the contrary, they often encouraged their passions.

My parents never tried to get me to develop in subjects I wasn't particularly interested in. I was never forced to make such choices.

106_WIBHiŚ_2015_F

The „working conditions” category is varied, since many responses from the interviews can be matched to it.

What the respondents appreciated the most was having an interesting job that they liked. This category also included satisfaction with how they did their jobs, with their extensive knowledge and employment stability. The last category – “Personal outcomes” – involved respondents appreciating their individual benefits, the skills they acquired and their achievements. Independence was the most frequently mentioned, and other prominent aspects included development opportunities and being able to combine work with passion.

⁹ Płaszczycza M., The impact of family background on the educational choices (until entry into higher education) and success of WUT graduates, CZliTT PW, Warsaw 2020.

Table 4. Complete the sentence “The thing I appreciate the most about my career is” – number of responses and percentage of respondents

“The thing I appreciate the most about my career is”	Number of responses	% respondents
Other people, including:	40	37,4
Other people, co-workers, friends	38	35,5
Knowledge passed by others, learning from others	11	10,3
Working conditions, including:	40	37,4
Interesting tasks, no boredom, “I like what I do”	13	12,1
Experiences, new knowledge, creativity, challenges	8	7,5
In general: everything, the nature and conditions of the job, stability, no stress	8	7,5
Impacts, major projects for the community, satisfaction	7	6,5
International activity, mobility, travelling	5	4,7
Interdisciplinary knowledge, level, quality of education	5	4,7
Personal outcomes, including:	36	33,6
Freedom, independence, self-reliance, keeping up with the changes	15	14,0
Self-fulfilment, development, learning, sharing knowledge	12	11,2
Combining work with passion, achieved goals	5	4,7
Honesty, diligence	4	3,7
Recognition, being respected	2	1,9

Source: by DBA CZliTT PW, 2020 Source: by DBA CZliTT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=107.

Table 4 shows that the distribution of responses in all the main categories was uneven. This means that there was no single most appreciated sphere of life indicated by WUT graduates. Professional experience was not a differentiating factor, either – the only group in which there were differences under the main categories, “working conditions” being the most appreciated one, had a professional experience of 5-9 years. Some differences can also be noted in terms of the type of success, as shown by Table 5.

Table 5. Distribution of responses completing the sentence “The thing I appreciate the most about my career is” for type of success

Type of success cumulatively	The thing I appreciate the most is: other people	The thing I appreciate the most is: working conditions	The thing I appreciate the most is: personal outcomes	Number of respondents
Commercial success	39%	36%	27%	66
Academic/scientific success	17%	50%	44%	18
Social success	0	100%	0	1
Commercial and academic/scientific success	42%	25%	42%	12
Commercial and social success	55%	18%	36%	11
Academic/scientific success and social success	0	0	0	0
All three types of success	0	50%	50%	2
				110

Źródło: opracowanie własne DBA CZliTT PW, 2020.

WUT graduates who were commercially successful were the most likely to answer that they appreciated mainly other people and working conditions. Among those who achieved academic/scientific success, the majority of responses related to the “Working conditions” category. Most WUT graduates were commercially successful. The professional sphere was one of the main topics of the interviews, during which the respondents were eager to talk about their current activities and professional challenges and milestones. WUT graduates appreciated their jobs for such reasons as being able to gain new experiences, perform creative and interesting tasks, carry out satisfactory projects and work in an international environment.

To sum it up in one sentence, I guess it wasn't that I found an interesting job, but an interesting job found me.

98_WF_2015_M

Enjoying your work is about a lot of things, it's about doing interesting things and not hating your job. After all, we spend much of our life at work.

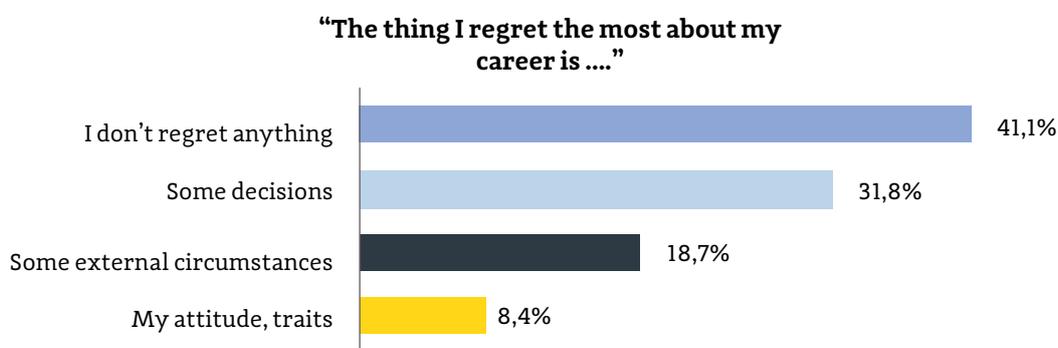
30_WMEiL_1998_M

3.5 “THE THING I REGRET THE MOST ABOUT MY CAREER IS”

The last of the four sentences, relating to the things respondents regretted in their careers, was completed in a similar fashion to the second sentence. A total of 27% WUT graduates who claimed in second sentence that they would not change anything in their past careers also had no regrets about their career. The responses provided by 107 graduates were divided into four categories:

- ≥ “I don’t regret anything”
- ≥ “I regret some decisions”
- ≥ “I have regrets about some external circumstances”
- ≥ “I regret my attitude, my personal traits”.

Chart 7 Distribution of responses completing the sentence “The thing I regret the most about my career is”



Source: by DBA CZliTT PW, 2020, more than one answer could be given in an open-ended question, n=107.

In explaining why they chose the “I don’t regret anything” answer, WUT graduates indicated that despite some mistakes or bad decisions, they accepted their lives as they were.

No. I have no regrets. Even the “bad” things, if you will, can actually be turned into something good, and they can make you stronger. So, no, I don't regret them.

95_WM_2000_M

Other answers were rare, although it was relatively common for the respondents to mention that they regretted making decisions too late – in other words, WUT graduates did not feel that they wasted their time, but that they not always made the best use of it, which is a sign of their ambition. Some of the respondents regretted spending too much time working on a computer.

When mentioning facts related to external circumstances that they regretted – the third category in Table 6 – the respondents meant limitations beyond their control. Almost one in five respondents remembered having encountered such obstacles.

Table 6. Complete the sentence “The thing I regret the most about my career is” – number of answers and percentage of respondents

“The thing I regret the most about my career is”	Number of responses	% respondents
I don't regret anything, including:	44	41,1
Nothing	41	38,3
Nothing, despite mistakes	4	3,7
Decisions, including:	34	31,8
Decisions about change made too late, not taking on the risk	14	13,1
Lack of planning, order, distractions from academic/scientific work	10	9,3
Gaps in knowledge, not enough learning, not pursuing development in other fields	7	6,5
Decision about the location, profession to work in	5	4,7
External circumstances, including:	20	18,7
Not moving abroad	6	5,6
Approaching end of career	4	3,7
Lack of development opportunities – conditions (lack of partners, environment, space)	4	3,7
Family costs, lack of time	4	3,7
Too much time spent on a computer, at work, time-consuming activities	3	2,8
Attitudes, traits, including:	9	8,4
Attitudes towards work	4	3,7
Not keeping deadlines	3	2,8
Lack of courage	3	2,8

Source: by DBA CZliTT PW, 2020, the percentages do not sum up to 100% because more than one answer could be given in an open-ended question, n=107.

In terms of the length of professional experience, there were no significant differences between the two most common categories of answers. The “I don't regret anything” answer was given in particular by those respondents who had longer professional experience (10 years and more). Among the respondents whose professional experience spanned more than 20 years, the responses were distributed fairly evenly. In the case of one interviewee from the group with professional experience spanning over 40 years, the answers included both main categories – „I don't regret anything” and “I regret some decisions”. This means that the interviewee did not regret anything in his career, although there were some decisions he could make differently.

Table 7. Distribution of responses completing the sentence “The thing I regret the most about my career is” relative to professional experience

Years of experience	I don't regret anything	The thing I regret the most is: some decisions	The thing I regret the most is: my attitude, personal traits	The thing I regret the most is: some external circumstances	Number of respondents
no data	0	100%	0	0	1
1-4 years	33%	56%	0	22%	9
5-9 years	48%	18%	3%	24%	33
10-14 years	42%	25%	8%	21%	24
15-20 years	50%	31%	19%	13%	16
20-29 years	27%	45%	18%	0	11
30-39 years	30%	40%	10%	20%	10
40-49 years	20%	20%	0	20%	5
50 years and more	0	100%	0	0	1
					110

Source: by DBA CZiITT PW, 2020.

Among the WUT graduates who were commercially successful, one in four said that they did not regret anything in their career. Almost a third admitted that there were some decisions they regretted in hindsight.

Table 8. Distribution of responses completing the sentence “The thing I appreciate the most about my career is” for type of success

Area of success	I don't regret anything	The thing I regret the most is: some decisions	The thing I regret the most is: my attitude, personal traits	The thing I regret the most is: some external circumstances	Number of respondents
Commercial success	41%	29%	8%	21%	66
Academic/scientific success	39%	11%	0	28%	18
Social success	0	0	100%	0	1
Commercial and academic/scientific success	50%	58%	8%	18%	12
Commercial and social success	27%	45%	18%	0	11
Academic/scientific success and social success	0	0	0	0	0
All three types of success	50%	50%	0	0	2
					110

Source: by DBA CZiITT PW, 2020.

TOMASZ KORNUTA, PhD

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research staff member

IBM Research, Almaden Research Center, USA (2018)

SENIOR APPLIED RESEARCH SCIENTIST

NVIDIA, USA (2019)

MEMBER OF THE ADVISORY BOARD

Semiotic AI, USA (2020)



GREATEST ACCOMPLISHMENTS

- former coworkers willing to cooperate in the future
- a compliment from the manager when leaving IBM Research: "Thanks to you and your achievements, I was perceived as a good manager"

ADVICES FOR STUDENTS

- "Explore different fields of study until you find the one that interests you."
- "Leave your comfort zone, do the internships, go abroad."
- "Work as a team, but think as an individual."
- "Look for a job that interests you and will be rewarding."
- "Work smart, not just to fill the time between 9:00 am and 5:00 pm."

THOUGHTS ON THE CAREER

"I am at this point of my career because..."

of the strong foundations acquired at WUT, the ability to change specialization, hard work and support from family and friends."

"What I appreciate most about my career..."

is freedom, working with interesting people from different cultures, and a chance to explore the world."

MEMORIES FROM WUT

"The moment when my thesis supervisor asked me to be on the first name basis with him after 12 years of working together."

"Working in a team with people from different specializations, doing projects together. Spending time at student residence hall „Riviera” and robotics laboratory 012."

TIME AT WUT - KEY ASSETS

- software engineering
- project management
- an impulse to follow his passion

4. SUMMARY

The analyses conducted as part of the study entitled “Success stories. Warsaw University of Technology graduates (a diagnosis of professional success factors)” covered the answers given by WUT graduates in individual in-depth interviews in the form of completing four sentences. The study had both a quantitative component – as it covered more than 110 respondents, the answers could be summed up in figures – and a qualitative one, as the answers required interpretation and contextualisation against the biographical background, with researchers asking each interviewee about school memories, the role of significant others in their careers, and professional and academic/scientific experience. The four completed sentences served to summarise the interviews, which is why they addressed subjects that were relevant to the presented research questions. On this basis we could identify what played the key role in how the career paths of the studied WUT graduates developed.

The picture that emerges from the study is one of stable careers in which the interviewed WUT graduates would make no changes. A large majority of them were content with the place they were in. When completing the sentence about what helped them reach the current point, they usually mentioned help and support from other people, their hard work and determination.

Based on how the respondents completed the sentence starting with “If I could go back in time, I would change”, we concluded that they rarely regretted things that changed their careers. If they could change something by going back to the past, they would rather focus more on new areas to complement what they were doing in their current occupations – this shows that they were ambitious and able to engage in a mature reflection on their current professional responsibilities and status. Only a small fraction of respondents mentioned that they would change “many things” or “generally everything”, albeit in many cases these opinions did not invalidate the successes they talked about throughout the interview.

In the third sentence starting with “The thing I appreciate the most in my career”, the free associations of many WUT graduates naturally led to different conclusions, although many of these associations were similar among the 110 respondents. One of the things mentioned by many respondents was the appreciation of others: family members, superiors, co-workers, academic supervisors. While other factors – such as good working conditions, development opportunities, international cooperation opportunities – were naturally part of the big picture as well, it was the human factor that in many instances played a particularly important role, be it competent co-workers, easygoing bosses or supportive parents or partners.

The fourth sentence was completed in a manner corresponding to the second sentence – those respondents who did not want to change anything in their careers were also less likely to regret anything about it. One interesting finding is that some of the interviewees claimed to have regretted not delving deeper into areas in which they would like to become experts. In saying so, however, they did not express resentment about lost opportunities or poor career choices. Rather, it signified their willingness to pursue development in some new areas to enrich their already strong professional track-record.

The experiences, reflections and opinions shared by 110 WUT graduates provide valuable insights into what matters in a career and what can help people become more successful. The series of studies which has resulted in five publications provides readers – especially WUT candidates and students – with important insights that will enrich their career expectations and help them plan their activities to “get the most out of their university time”, as noted by the majority of WUT graduates who had been successful in their professional, academic/scientific and social lives.

As an addition to the reports, we included information about organisations bringing together WUT graduates and publications focusing on WUT graduates. The list has been compiled based on online sources. WUT Faculties are welcome to expand this list.

Table 9. List of information about graduates published by WUT Faculties

Faculty	Association/ Organisation	Publications/ Websites
Warsaw University of Technology – general	Association of Warsaw University of Technology Graduates WUT Seniors Club	WUT Golden Book WUT Golden Diplomas online: www.placpolitechniki1.wordpress.com www.wutsquare.wordpress.com
Faculty of Architecture	Academic Association of the Faculty of Architecture at the Warsaw University of Technology	W. Karczmarczyk (2018), <i>Wydział Architektury Politechniki Warszawskiej: wspomnienia, 1950-2015</i> W. Karczmarczyk (2019), <i>A'51: absolwenci WA PW rocznik'51</i>
Faculty of Automotive and Construction Machinery Engineering	WUT Faculty of Automotive and Construction Machinery Engineering Graduates Club	online: www.simr.pw.edu.pl/Strona-glowna-wydzialu-SiMR/Cooperation/graduates
Faculty of Building Services, Hydro and Environmental Engineering	Association of the Graduates of Hydraulic Engineering and Water Management at WUT Association of the Graduates of Sanitary Engineering Graduates Club of the Institute of Environmental Engineering Systems at WUT	A. Kulig, K. Wojdyga (red.) (2016), <i>Od Inżynierii wodnej przez technikę sanitarną do inżynierii środowiska w 100-letniej tradycji Politechniki Warszawskiej</i> M. Degles (1997), <i>Zjazd Absolwentów Instytutu Systemów Inżynierii Środowiska Politechniki Warszawskiej: [13/14.06.1997]</i> Faculty of Environmental Engineering (presently: Faculty of Building Services, Hydro and Environmental Engineering) (2011), <i>60-lecie Wydziału Inżynierii Środowiska Politechniki Warszawskiej. 1915/-2011</i> The „100-tu Absolwentów na 100-lecie Wydziału” (“100 graduates for the 100th Anniversary of the Faculty”) campaign – results published online on the Faculty’s Library FB account online: https://is.pw.edu.pl/absolwent
Faculty of Chemical and Process Engineering	Association of Graduates and friends of Faculty of Chemical and Process Engineering at WUT	
Faculty of Chemistry	”Klatrat” – Association of Students and Graduates of the Faculty of Chemistry at WUT	
Faculty of Civil Engineering		W. Przychoda (2014), <i>Wspomnienia zatrzymane w kadrze: absolwenci Wydziału Inżynierii Lądowej Politechniki Warszawskiej: rok rozpoczęcia studiów 1964</i> G. Jemielita (2005), <i>Jubileusz 90-lecia Wydziału Inżynierii Lądowej Politechniki Warszawskiej</i> G. Borończyk-Płaska, H. Zobel (2015), <i>100-lecie odnowienia tradycji Wydziału Inżynierii Lądowej</i>
Faculty of Civil Engineering, Mechanics and Petrochemistry in Płock		(1997), <i>30 lat Politechniki Warszawskiej w Płocku: zjazd absolwentów (Płock 04.X.1997 r.)</i> (1987), <i>Absolwenci Ośrodka Naukowo-Dydaktycznego Filii Politechniki Warszawskiej w Płocku</i> A. Kowalski (1977), <i>Absolwenci Filii Politechniki Warszawskiej</i> M. Rutkowska (2012), <i>45 lat Politechniki Warszawskiej w Płocku, spis absolwentów 1971-2011</i> online: www.pw.plock.pl/Absolwenci

CAREER IN FOUR SENTENCES. ANALYSIS OF RESPONSES FROM WUT GRADUATES

Faculty	Association/ Organisation	Publications/ Websites
Faculty of Electrical Engineering	Association of the Graduates of the Faculty of Electrical Engineering at the Warsaw University of Technology	Z. Grunwald (1983), <i>Zarys Historii Wydziału Elektrycznego 1921-1981</i> J. Dąbrowski et al. (2015), <i>Okruchy wspomnień absolwentów Wydziału Elektrycznego Politechniki Warszawskiej rocznik 1953-58</i> online: www.ee.pw.edu.pl/main/strefa-absolwenta/
Faculty of Electronics and Information Technology	Associations of Graduates of Electronics at the Warsaw University of Technology @ELKApw	R. Morawski (2001), <i>Wczoraj, dziś i jutro Wydziału Elektroniki i Technik Informacyjnych Politechniki Warszawskiej</i> J. Modelski, K. Zaremba (2005), <i>Instytut Radioelektroniki - wczoraj, dziś, jutro</i> online: www.elka.pw.edu.pl/Spolecznosc/Absolwenci
Faculty of Management		D. Niziałek (2001), <i>Absolwenci studiów inżynieryjno- ekonomicznych, organizacji zarządzania, zarządzania i marketingu od 1955 do 2001 roku</i> D. Niziałek (2003), <i>Absolwenci studiów inżynieryjno- ekonomicznych, organizacji zarządzania, zarządzania i marketingu od 2001 do 2003 roku</i> online: www.wz.pw.edu.pl/Kandydat/Opinie-absolwentow
Faculty of Materials Science and Engineering	Association of Materials Engineering Graduates at WUT	Association of Institute of Printing Technology Graduates at WUT (2013) Institute of Typography at WUT 1968-2013 online: www.wim.pw.edu.pl/Absolwenci
Faculty of Mathematics and Information Science		online: ww2.mini.pw.edu.pl/studia/inzynierskie-i-licencjackie/rekrutacja/opinia-absolwentow/
Faculty of Mechatronics		F. Szafranski, D. Holejko (2017), <i>Księga wspomnień 1953-2017. T. 1</i> F. Szafranski, D. Holejko (2018), <i>Księga wspomnień 1953-2018. T. 2</i> S. Hawrat, E. Makowska (1997), <i>Absolwenci: 35-lecie Wydziału Mechatroniki</i> S. Hawrat(1977), <i>Wydział Mechaniki Precyzyjnej 1962-1977: absolwenci 1955-1977</i> I. Trendak, M. Stachura (2016), <i>Zarys historii i osiągnięć Instytutu Automatyki i Robotyki Politechniki Warszawskiej (1957-2015)</i> A. Szwendowski (2012), <i>Od Katedry Optyki do Zakładu Inżynierii Fotonicznej Politechniki Warszawskiej 1953-2008</i> online: www.facebook.com/HenrykTREBERT/
Faculty of Physics		online: https://absolwenci.fizyka.pw.edu.pl/lista
Faculty of Power and Aeronautical Engineering		C. Rzymkowski, K. Kędzior (2015), <i>60-lecie Katedry/Zakładu Teorii Maszyn i Mechanizmów/Robotów</i> (2000), <i>IV Zjazd Wychowanków Wydziału Mechanicznego Energetyki i Lotnictwa Politechniki Warszawskiej z okazji 40-lecia Wydziału MEiL i 175 lat kształcenia technicznego na Politechnice Warszawskiej</i> (2002), <i>V Zjazd Absolwentów Wydziału Mechanicznego Politechniki Warszawskiej immatrykulowanych w latach 1945 i 1946</i>
Faculty of Mechanical and Industrial Engineering	Association of Institute of Printing Technology Graduates	online: www.wip.pw.edu.pl/poligrafia/O-nas/Absolwenci
Faculty of Transport		online: www.wt.pw.edu.pl/Absolwenci

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Appendix

Stages of open-ended question coding:

Stage 1: Response categorisation

Table 10. Example of coding 110 responses

I got to where I am in my career thanks to...	Coincidence	Own work	Favourable circumstances	Family support	Perseverance	Personality	Thanks to myself
"coincidence"	1						
"my own work and favourable circumstances"		1	1				
"surely thanks to family support and my own perseverance"				1	1		
"my personality"						1	
"myself"							1

Source: by DBA CZiITT PW, 2020

Stage 2: Category merging

Table 11. Example of merging categories

I got to where I am in my career thanks to...	FATE:		ESTABLISHED WORKING STYLE:	PERSONALITY TRAITS:			EXTERNAL FACTORS:
	Coincidence	Favourable circumstance	Own work	Thanks to myself	Perseverance	Personality	Family support
"coincidence"	1						
"my own work and favourable circumstances"		1	1				
"surely thanks to family support and my own perseverance"					1		1
"my personality"						1	
"myself"				1			
main category choice number	2	1	3	1			1

Source: by DBA CZiITT PW, 2020

Stage 3: Counting responses under the main categories on a scale of 0-1, where 0 means no responses involving any option within the category, and 1 means that at least one option was mentioned

Table 12. Table fragment with double-checked option inside the category

I got to where I am in my career thanks to...	FATE:	Coincidence	Favourable circumstances	PERSONALITY TRAITS:	Perseverance, tenacity	Personality	Courage
"thanks to a good measure of luck I had in life and some happy coincidences, but also thanks to my hard work and certain courage, or tenacity, if you will"	1	1	1	1	1		1
"thanks to luck, tenacity and generally my personality"	1	1		1	1	1	
main category choice number		2			2		

Source: by DBA CZiITT PW, 2020

