

Petrus T.J.M. van Groenendael

**BIT 10<sup>TH</sup> ANNIVERSARY SURVEY**

## **BIT 10<sup>TH</sup> ANNIVERSARY SURVEY**

Petrus T.J.M. van Groenendael  
Bachelor's thesis  
Spring 2014  
Business Information Technology  
Oulu University of Applied Sciences

## ABSTRACT

Oulu University of Applied Sciences  
Degree Programme in Business Information Technology

---

Author: Pieter van Groenendael

Title of Bachelor's thesis: BIT 10<sup>th</sup> Anniversary Survey

Supervisor: Ilkka Mikkonen

Term and year of completion: Spring 2014

Number of pages: 32 + 3 appendices

---

The purpose of this study was to gain knowledge about the current situation of BIT degree programme graduates at Oulu University of Applied Sciences, and additionally gain feedback on the degree programme for further improvement. The research was commissioned by OUAS, in honor of the degree programme's 10<sup>th</sup> anniversary in the autumn of 2014.

The research task was completed in two parts. Firstly, preliminary research was done in order to build a theoretical foundation in order to familiarize the subject with the topic, as no previous research has been conducted about BIT degree programmes in Finland. Secondly, a practical research part was developed in the form of a survey, and sent out to 79 graduates, of which 28 responded in a survey and two agreed for an in-depth interview.

The main conclusion, which can be drawn from the survey results, is that BIT graduates are doing very well in their current occupation, as 92.9% of the respondents had found an active occupation in employment or additional studies. Additionally, feedback on the degree programme was relatively good, although many students suggested that the course curriculum was too broad and unspecialized and requested more specific courses and/or the option to pursue minor and major study subjects.

---

Keywords: Survey, Anniversary Survey, Polytechnic Education, Business Information Technology, BIT, Oulu University of Applied Sciences, OUAS

## TABLE OF CONTENTS

1. INTRODUCTION.....	5
2. BIT DEGREE PROGRAMME.....	7
2.1. Oulu University of Applied Sciences .....	7
2.2. Description of the BIT degree programme.....	7
3. RESEARCH METHODS .....	9
3.1. Quantitative research methods .....	9
3.2. Qualitative research methods .....	9
4. SURVEY DESIGN.....	11
4.1. Question design .....	11
4.2. Survey length .....	12
5. RESEARCH CONSTRUCTION .....	13
5.1. Contact list .....	13
5.2. Questionnaire construction .....	14
5.3. Interview construction .....	14
6. RESEARCH PROCESS.....	14
7. EMPIRICAL RESULTS .....	16
8. INTERVIEWS .....	25
8.1. Interview 1.....	25
8.2. Interview 2.....	27
9. CONCLUSION .....	29
10. REFERENCES.....	31
11. APPENDICES.....	33

## 1. INTRODUCTION

This year, Oulu University of Applied Sciences will celebrate the 10<sup>th</sup> anniversary of its Business Information Technology degree programme. Following this event, OUAS has commissioned a research to gather information about the degree graduates' life after finishing the BIT degree programme.

The objective for this research is to gather feedback from BIT graduates to the UAS. This information will then be used to evaluate the strengths and weaknesses of the degree programme, its development over time and its contribution in supporting graduates' future study and / or work related career plans.

The target group for this research consists of every person who has graduated from the BIT degree programme at Oulu University of Applied Sciences since the start of the degree programme (76 at the time of writing).

The main research task consists of conducting a survey where graduates will be asked about their post-graduate activities, whether the BIT degree programme has helped them to achieve their career goals, and feedback on the programme's quality. In addition to the main research task, a comparison of feedback on degree quality from older graduates against feedback from more recent graduates is to be done in order evaluate the development of the BIT degree programme over time.

In retrospect, three research questions can be derived from the research task. The first research question being: *"What is the current situation of BIT graduates?"* the second question being: *"Has the BIT degree programme helped students to advance in their careers?"* and the third: *"How can we use given feedback to improve the BIT degree programme?"*

A satisfying answer to the first research question consists of a combination of answers to questions regarding additional studies, employment, change of location, and/or other activities. The second and third research questions will be answered by an analysis of questions regarding feedback on the degree programme.

This thesis will be completed in two stages. The first stage of this thesis will provide theoretical foundation for the research. Topics of the theoretical foundation include background information on the UAS, the BIT degree programme, official statistics, and statistical research theory. The second stage will be a practical research in the form of a survey and interviews.

Data will be collected using both quantitative and qualitative methods. The quantitative data will serve as the general picture of post-graduate activity, and will be gathered from survey results. Qualitative data gives the user a more elaborate example of BIT post-graduate life, and will be gathered from a number of personal interviews in addition to the survey data.

## **2. BIT DEGREE PROGRAMME**

The following chapter is designed to provide the reader with general information about Oulu University of Applied Sciences and the BIT degree programme.

### **2.1. Oulu University of Applied Sciences**

With an approximate of 9,000 students, Oulu University of Applied Sciences (OUAS) is one of the largest universities of applied sciences in Finland. As of autumn 2013, these students are divided over 33 bachelor's degree programmes and 10 master's degree programmes. Currently, an approximate of 240 international degree students and 280 exchange students studying at one of the three international degree programmes (Oulu University of Applied Sciences 2014a, date of retrieval 05.05.2014; Oulu University of Applied Sciences 2014b, date of retrieval 13.05.2014).

### **2.2. Description of the BIT degree programme**

The Business Information Technology degree programme at Oulu University of Applied Sciences had its first enrollment in 2004, becoming one of only five Universities of Applied Sciences in Finland to conduct the degree programme. Oulu University of Applied Sciences has targeted student enrolment at 50% Finnish students and 50% foreign students. So far, the BIT degree programme has had students from over 30 different nationalities. This can be mostly thanked for by the possibility for foreign applicants to take the entrance examination to the degree programme in various international locations, such as Finnish embassies. For example, in the spring of 2013 there were entrance exams in 16 countries at 23 locations (Vanhanen, Kitinoja, & Holappa 2013, 68-69).

The objective of the BIT degree programme is described on the University of Applied Sciences website as follows:

*“The objective of the Degree Programme in Business Information Technology is to educate internationally oriented experts for business and software development, as well as other positions in the field of information technology, i.e. digital media and IT support”* (Oulu University Of Applied Sciences 2014c, date of retrieval 05.05.2014).

The BIT degree programme is divided over 210 ECTS credits in 3.5 years. The programme's focus has been derived from its corresponding Finnish degree programme, called TIK (Vanhanen, Kitinoja, & Holappa 2013, 68). The BIT curriculum contains studies in software development, programming, digital media, network, web and mobile technologies as well as

international business skills. Additionally, the programme offers students preparation for careers in the field of information technology, oriented towards software development and software business, with an emphasis on international business skills and entrepreneurship (Oulu University of Applied Sciences 2014c, date of retrieval 05.05.2014). Also, Oulu University of Applied Sciences currently offers the possibility for students to pursue a double degree at partner universities in Neu-Ulm (Germany) and Fremont (California, USA).



### **3. RESEARCH METHODS**

In order to get clear feedback from the survey, both quantitative and qualitative research methods will have to be used, as answers to the research questions will be based on statistical data and interpretations of students' opinions. An elaborate description of both methods and their usages follow below.

#### **3.1. Quantitative research methods**

Quantitative research refers to systematical, empirical investigation of social phenomena via mathematical, statistical, numerical data and/or computational techniques. The objective of quantitative research is to gain statistical data from a target group in a reliable and unbiased way. This is done by sampling data from a number of individuals within the target group, after which this data can be used to estimate results of the whole group. Although results may benefit from increased sample size, it is never guaranteed that this method will produce perfectly accurate, reliable and unbiased information. Even so, quantitative research is the most accurate research one can do in order to generate and link empirical data to large target groups (Davies 2007, 9 – 10, 51-68).

In general, quantitative research is done using scientific methods. This includes model, theory and hypothesis generation, development of measurement instruments and methods, experimental control and manipulation of variables and the collection, modeling, and analyzing of empirical data (Wikipedia 2014a, date of retrieval 20.05.2014). In many cases, quantitative research (*what, where, when*) is used in combination with qualitative research (*why, how*).

#### **3.2. Qualitative research methods**

Qualitative research refers to the creation of theoretical ideas by gathering qualitative data and comparing it with experimental research, which starts with a theoretical position and accumulates data in order to test its validity. The objective of qualitative research is to gather more in-depth information on certain phenomena than can be done with quantitative research methods. This data is then used to create a theoretical idea, which in combination with another research hypothesis (e.g. empirical data derived from quantitative research) can provide a basis for a research statement (Davies 2007, 9-10, 135-149). Accordingly, qualitative research commonly relies on data from (non-)participant observation, field notes, reflective journals, (semi-)structured

interviews, unstructured interviews, and the analysis of documents and materials (Wikipedia 2014b, date of retrieval 20.05.2014).

## **4. SURVEY DESIGN**

Survey development starts after the research tasks and objectives are identified and created, and ends just before the start of practical fieldwork.

The early stages of creating a survey should include a careful review of the literature and talks with experts, as this helps with conceptualizing and increases the possibility of preventing potential problems. Additionally, reviewing previous survey works and discussing with survey commissioners may assist in the determination of a suitable hypothesis, sample group approach and set of survey questions. One should also note that these stages include assessment of the survey infrastructure, finding potential partners which could assist with the survey initiative, and the creation of plans for data gathering, entry, analysis and presentation (Iarossi 2006, 9-12).

It is common for the initial questionnaire to be revised many times, until the survey commissioner and survey executive agree that a suitable combination of properly formulated questions and survey length is found. As soon as the questionnaire is completed, a data entry form has to be developed to accumulate the questions in a presentable form. A well-designed data entry form has two characteristics. Firstly, it has an interface similar to the paper questionnaire. Secondly, it contains a number of form validity checks and cross-question consistencies, in order to provide proper data entry and avoid invalid answers. Once completed, the data entry form should be thoroughly tested before fieldwork begins. This is an important step, as errors in the data entry form can cause delays in later stages of the survey which in severe cases could cause unusable survey data. The most common data entry form errors are related to specification errors and programming errors (Iarossi 2006, 20-23).

### **4.1. Question design**

Constructing effective questions requires field experience, as well as basic knowledge of linguistic and cognitive psychology. Although techniques have been developed to help assess the level of readability and difficulty of questions, one cannot gain the ability to design a question by reading a book. When a designer develops a question, he or she should be able to put himself in the position of the least educated respondent. This means that he or she must be able to predict the cognitive abilities of the respondents and design the questions accordingly (Iarossi 2006, 27-29).

Question wording plays a very important role in question design. Several studies have shown that changing a single word in a question can have a very significant impact on response distribution

and accuracy. For example, by asking a group of respondents if they saw “a” broken light and asking another group if they saw “the” broken light in a movie, the word “the” suggests the presence of an object, even if it is non-existing, which encourages false recognition and thus influences questionnaire responses.

Because of every question’s uniqueness, there is no accepted universal theory on question wording. However, there are generally agreed guidelines on the constitution of good and bad questions. In order to be as clear as possible and avoid unnecessary confusions and misinterpretations, the wording of a good question generally follows four criteria. The question must be brief, objective, simple and specific (Iarossi 2006, 29-30).

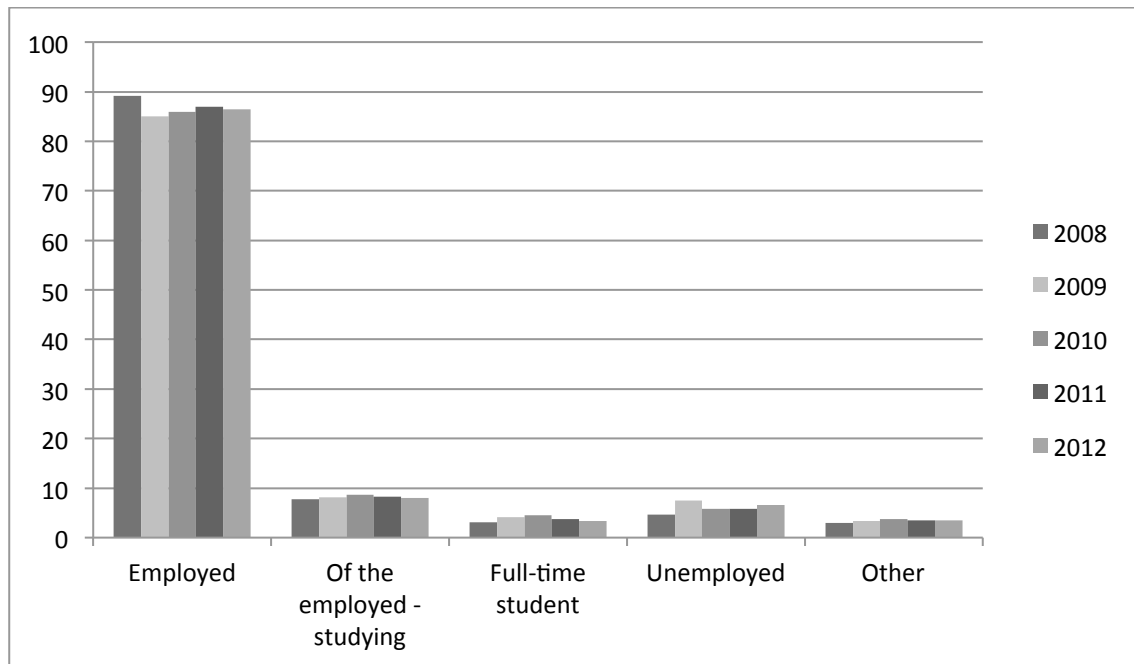
Firstly, a general rule of thumb to keep a question brief is to avoid exceeding 20 words and use a maximum of three commas. However, this alone does not conclude a good question. Besides appearance, a good question should also be judged on its contextual simplicity. This means that the designer should avoid asking more than one question at a time, and prevent the use of hidden questions and/or suggestions. For example, “*how much interest do you pay on your loan?*” implies the hidden implication of having a loan. A way to improve reliability of collected data is to ask separate questions as follows: “*Do you have a loan?*” and “*What interest rate are you paying?*” Likewise, complex topics should not be phrased in a single question, as this will magnify confusion and possibly result in inaccurate answers. An exception these guidelines are when a question tries to probe memory or sensitive topics. Experiments have shown that answer accuracy for these topics has improved when question length has increased (Iarossi 2006, 31-46).

#### **4.2. Survey length**

Existing research has shown that there is no clear association between survey length and participation, as increased survey length has shown to have little to no impact on response rate. However, there is a strong relationship between survey length and data accuracy. Questionnaires of increased length place more stress on the respondent’s time and memory, which results in a higher rate of response errors. Although it may seem that most respondents are willing to answer the questionnaire, they may try to complete the questionnaire quickly by providing random answers to the questions, hence providing biased information. This may be problematic, as providing random answers creates an uncontrollable form of bias. A rule of thumb could be that a digital survey should not take more than 5-10 minutes to fill in and an interview should not be longer than 30-45 minutes (Iarossi 2006, 78-80).

## 5. RESEARCH CONSTRUCTION

The following chapter describes the construction phase of the research construction. Topics regarding reaching contacts, constructing the questionnaire and interviews are included. Additionally, the following figure (see figure 1) represents the average occupation rates for UAS graduates in Finland, which will be set as general guidelines for analysis of the survey results.



*FIGURE 1. Statistics of polytechnic degree (BSc) graduate employment rates in Finland (Statistics Finland 2010, date of retrieval 16.05.2014; Statistics Finland 2011, date of retrieval 16.05.2014; Statistics Finland 2012, date of retrieval 16.05.2014; Statistics Finland 2013, date of retrieval 16.05.2014; Statistics Finland 2014, date of retrieval 16.05.2014)*

### 5.1. Contact list

The construction of the research started with determining the target group and gathering contact information in order to reach the graduates. Oulu University of Applied Sciences has provided a list of contact information of all BIT graduates at the time of their graduation. Hence, some of the contact information might be outdated or otherwise incorrect. However, this problem is solvable as the target group size is relatively small, and contacting individuals with e.g. invalid e-mail addresses remains possible. In order to give a somewhat accurate conclusion to the survey, the minimum desired amount of respondents to the survey was set at around 50% of 79 graduates.

## **5.2. Questionnaire construction**

The process of creating the survey started with the division of the three research questions into the format of a questionnaire. A rough estimation was made that 10-15 questions would suffice, as gained empirical data from the questionnaire would be specific enough to answer the research questions without compromising data quality through being too lengthy. The first draft of the questionnaire was revised a number of times in cooperation with the thesis supervisor Ilkka Mikkonen and senior lecturer Anu Niva, until a suitable questionnaire was created according to guidelines from the theoretical framework (see chapter 5).

## **5.3. Interview construction**

In order to draw a conclusion or create a theoretical idea from the research, the empirical data gathered from the questionnaire using quantitative methods should be combined with qualitative data from in-depth interviews with individuals from the target group. The interview questions were developed with the intention to gain understanding of the respondents' feedback on the degree programme. The interview included questions about topics concerning the degree programme and other study related matters and feedback on their development, as well as questions about non-study related matters, which can be linked to the quality of studying at the BIT degree programme.

# **6. RESEARCH PROCESS**

After the construction of the research, it was time to send out the questionnaire and conduct the interviews. The survey tool 'Webropol' was used to send the initial questionnaire to the list of contacts by e-mail and to collect responses. In order to maximize the response rate, a test was performed to check the validity of the contact's e-mail addresses before sending out the questionnaire. Sequentially, the questionnaire was successfully sent to a total of 79 e-mail addresses.

Within a timeframe of seven days, the initial response rate was 17 completed questionnaires and 10 questionnaire visitors. As the initial questionnaire results were insufficient for using as solid grounds for drawing conclusions, a reminder was sent out to all participants who had not answered the questionnaire within seven days after the initial questionnaire was sent out. This

resulted the response rate to increase to 28 completed questionnaires and 15 questionnaire visitors. The reason of the high amount of unanswered questionnaire visits (around one-third of the total amount of visits) remains unclear, and could be subject to many factors. However, in relation to the theoretical part, factors such as the survey's high relevance in relation to the respondents and the relatively short questionnaire length should play a minimal role in the high rate of unanswered questionnaire visits. Consequently, the high rate of unanswered questionnaire visits could be linked to limited respondents' time or low prioritization of the questionnaire in relation with other tasks. However, there are no solid grounds to support this argument.

Additionally, the amount of respondents which had not answered the questionnaire, including visitors, was 51 after both the initial questionnaire and the reminder had been sent out. Inactive use of the e-mail addresses, spam filtering and/or low priority status of the e-mail containing the questionnaire may have been contributing factors to this amount, although it is difficult to prove this theory without conducting additional research.

The initial target for the research was to conduct around five interviews. However, some of the desired interviewees were not timely reachable before the thesis approval deadline, hence it was only possible to conduct two interviews during the survey process. The respondents who agreed to participate in the interviews were personally contacted, after which the interviews took place on mutually agreed times and locations. The interviews were recorded into a text format during the interview process, and afterwards encoded into a presentable format.

After the survey data from both the questionnaire and the interviews was collected, the data was analyzed and formatted according to the thesis guidelines (Oulu University of Applied Sciences 2013, 22-40).

## 7. EMPIRICAL RESULTS

The following chapter contains empirical survey data from the Webropol questionnaire, which will later be analyzed in the conclusion section of this research. Figures 2-11 and table 1 represent the raw statistical data which the survey respondents provided, as well as some text input.

### 1. In which year did you start the BIT degree programme?

Number of respondents: 28

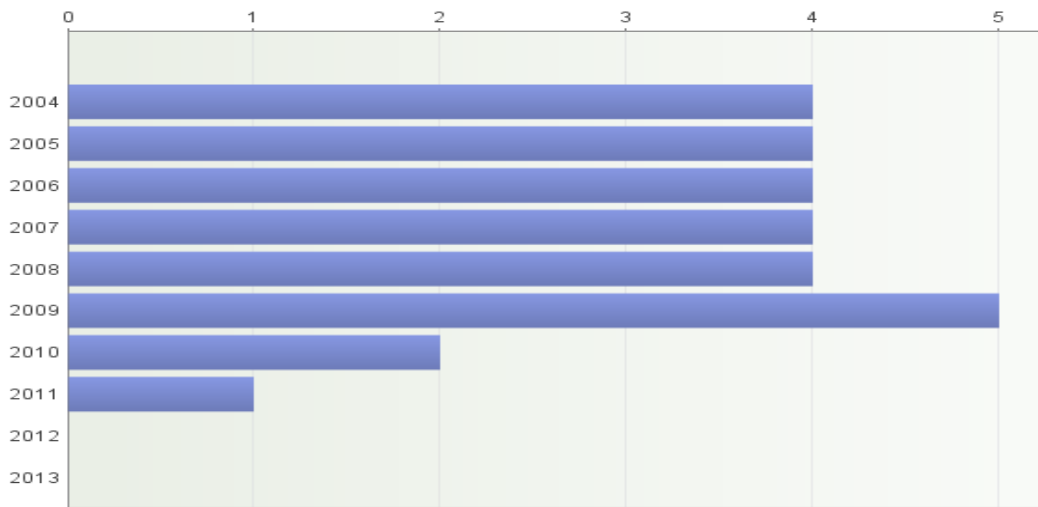


FIGURE 2. Starting years of BIT graduates

### 2. In which year did you graduate from the BIT degree programme?

Number of respondents: 28

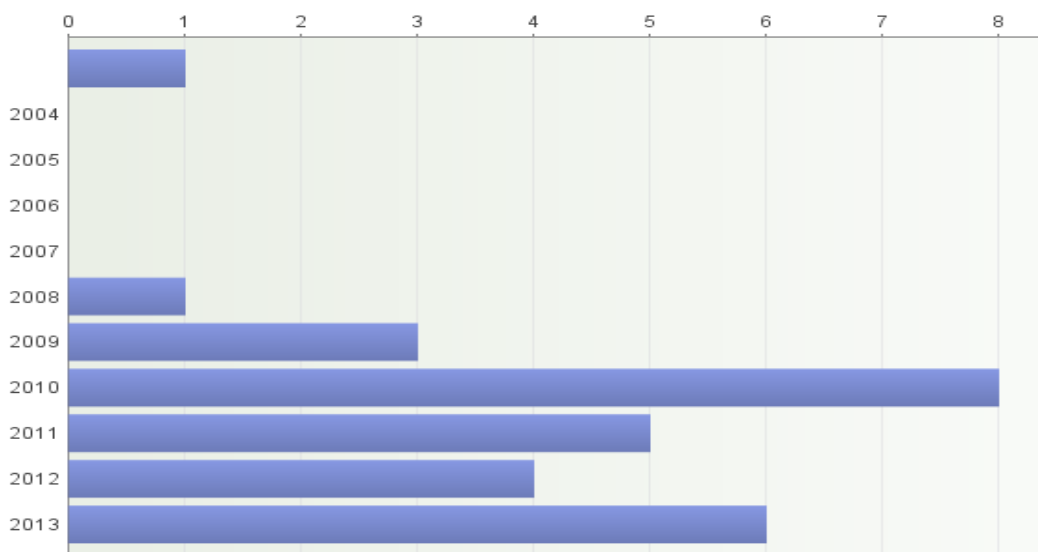


FIGURE 3. Graduation years of BIT graduates



### 3. Do you currently live in Finland?

Number of respondents: 28

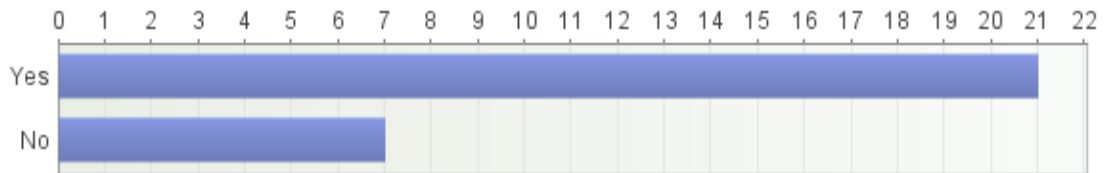


FIGURE 4. Amount of BIT graduates living in Finland

### 4. What has been your main activity after recently graduating from the BIT degree programme?

Number of respondents: 28

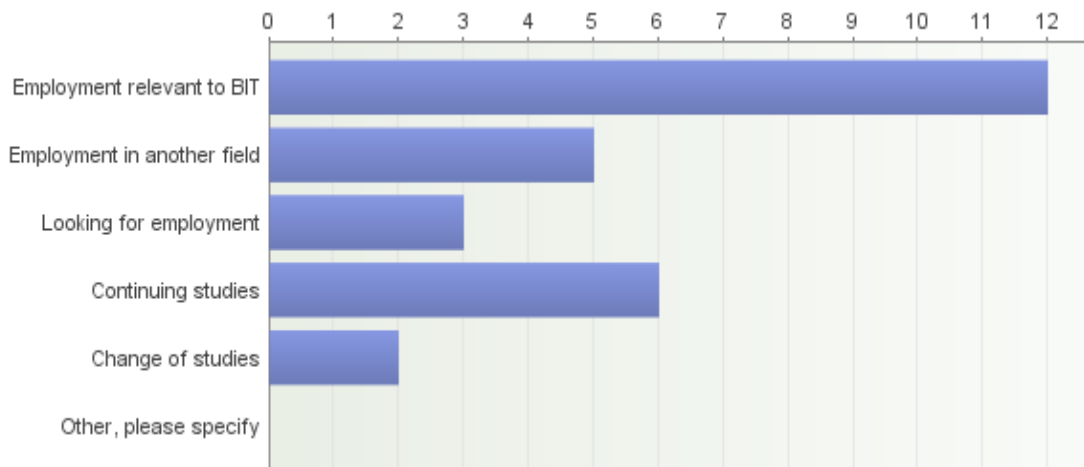


FIGURE 5. Main activity of BIT graduates

## 5. Have you done / are you studying any other degree programmes at a higher institute after graduating from BIT?

Number of respondents: 28

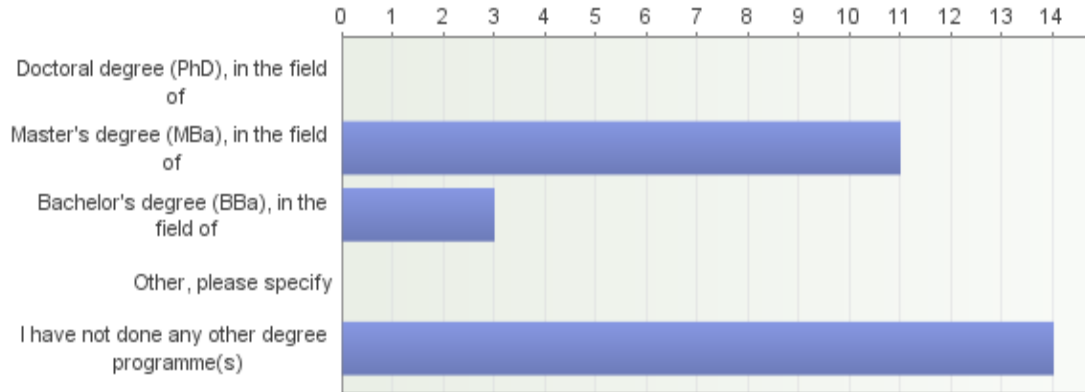


FIGURE 6. Degree programme selection of BIT graduates

### Open text answers: Master's degree (MBa), in the field of

- Information Processing Science (5)
- Software development
- Social responsibility and sustainability
- Software Engineering and Management
- International Business
- IT
- Medicine

### Open text answers: Bachelor's degree (BBa), in the field of

- Information Management and Corporate Communications
- Geography
- European Business Management

## 6. What is your current occupational situation?

Number of respondents: 28

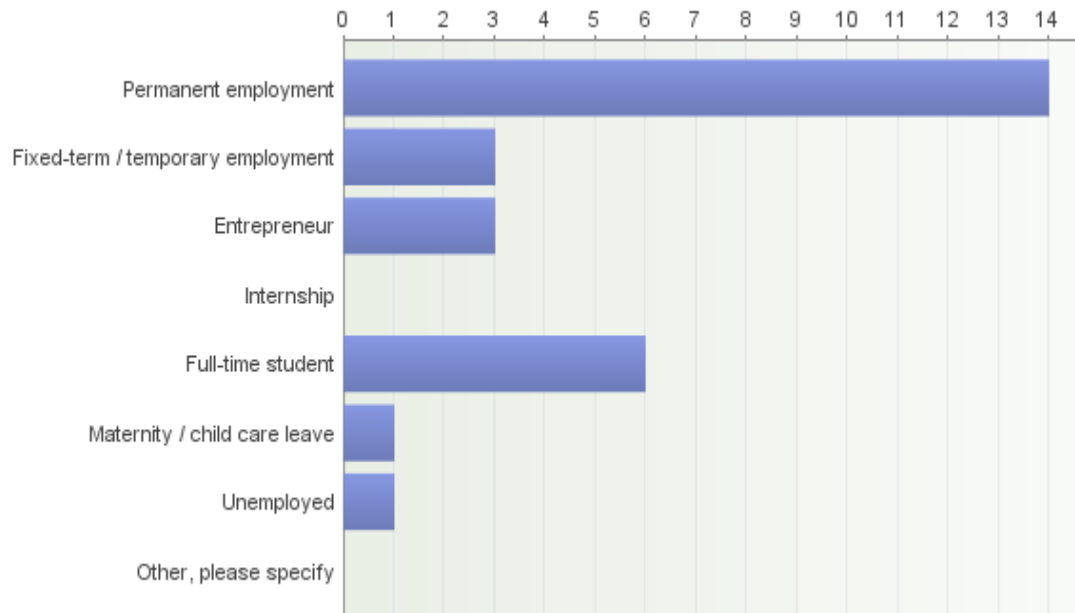


FIGURE 7. Occupational situation of BIT graduates

## 7. In which field are you employed?

Number of respondents: 19

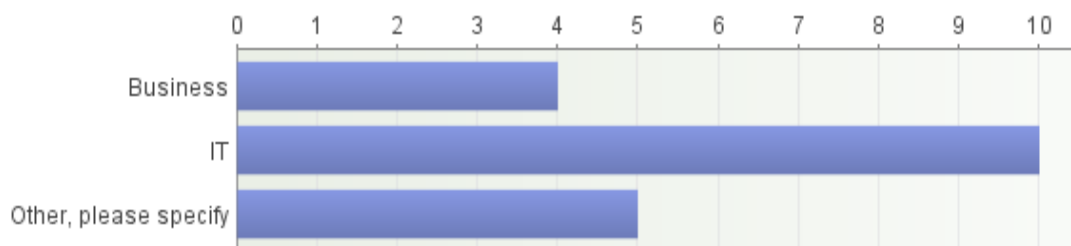


FIGURE 8. Fields of employment of BIT graduates

Open text answers: Other, please specify

- Agriculture
- Marketing
- RDI related to business and information management
- Banking
- Service

## 8. How quickly did you get a job after graduating?

Number of respondents: 20

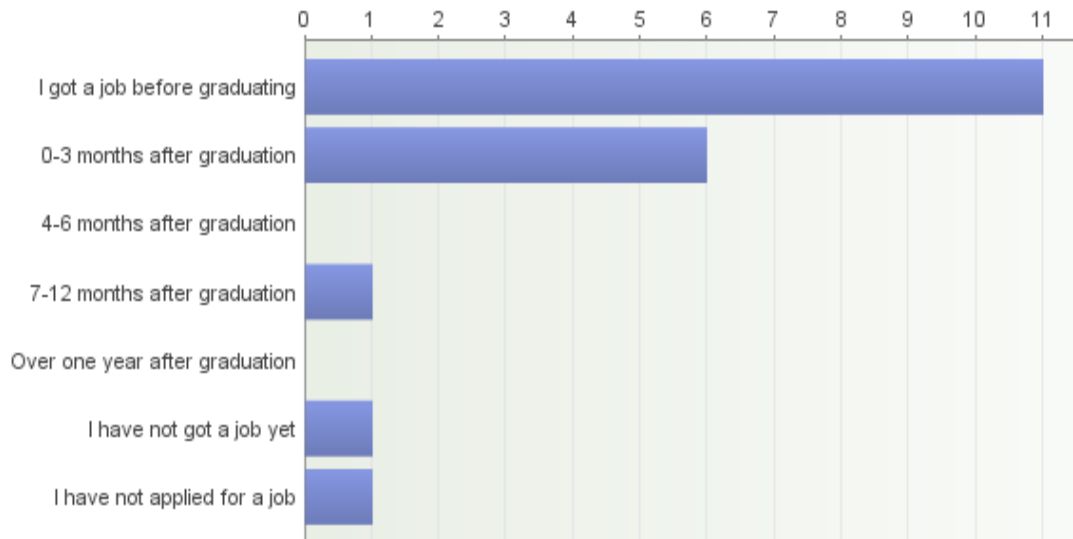


FIGURE 9. Speed at which BIT graduates found employment

## 9. What is your current position in the company?

Number of respondents: 15

### Position

- Dev Team Leader
- Web Developer
- CEO
- Marketing Manager Communication
- Product manager
- Designer
- BI Specialist
- Data analyst
- Project Officer
- Consultant
- Specialist, Web/SEO
- Application Designer
- Web Designer and Developer
- Cash Manager
- Paper delivery

## 10. What is your main job description within the company?

Number of respondents: 13

- Programming, team management
- Web development
- Well as an entrepreneur I do everything and then some more.
- Internal and external Corporate Communication as well as Marketing Activities
- Product management and product presentations to potential customers.
- Designing and developing websites, training and helping other employees in updating the websites.
- Business Intelligence
- Administrative tasks related to research, development and innovation (RDI) activities
  - Project planning and preparation of funding applications
  - Participating in project implementation and assessment
  - Providing support for the School's internal stakeholders in project activities (especially in budget-related issues)
  - Communication and co-operation with external interest groups, including current and potential project partners, as well as external funding bodies
  - RDI representative in the School's Communications Team
- Liaison between clients in finance and our internal teams in software development.
- Content editing and search engine optimization of the company web pages.
- Design and make website, newsletters and web shops
- I am a member of a specialist group that takes care of large companies that are currently our customers. My role is to take care that the payment solutions that I/we have sold them, meets their needs.
- I deliver newspapers each morning

## 11. Does the BIT degree programme correspond to your current occupation?

Number of respondents: 28

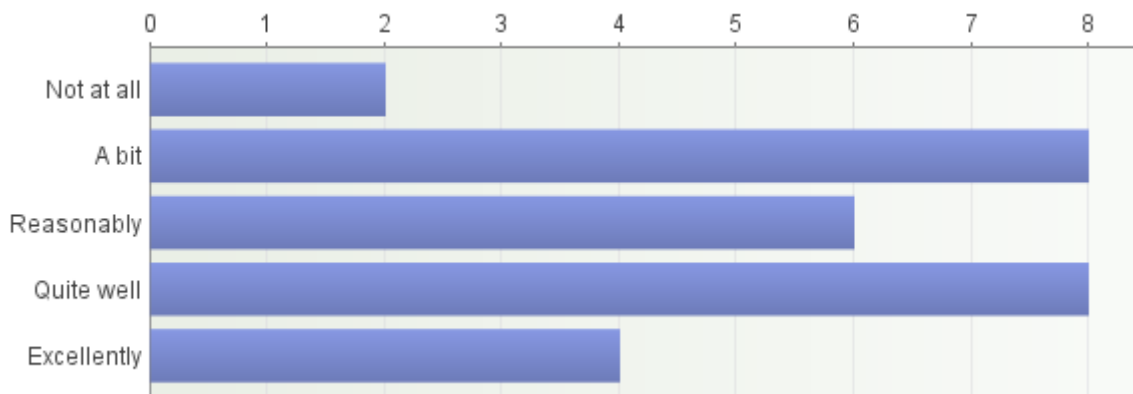


FIGURE 9. Correspondence of BIT degree programme towards graduates' current occupation

## 12. How would you rate the next items from 1 (weak) up to 5 (excellent)?

Number of respondents: 28

TABLE 1. Feedback on degree programme related services

	1	2	3	4	5		Total	Average
Course curriculum	0	3	13	10	2	.	28	3.39
Course quality	2	4	8	11	3	.	28	3.32
Teaching quality	1	5	8	13	1	.	28	3.29
Facilities (e.g. Library)	1	3	4	12	8	.	28	3.82
Student services	1	3	3	15	6	.	28	3.79
Total	5	18	36	61	20		140	3.52

## 13. How likely are you to recommend the BIT degree programme to others?

Number of respondents: 28

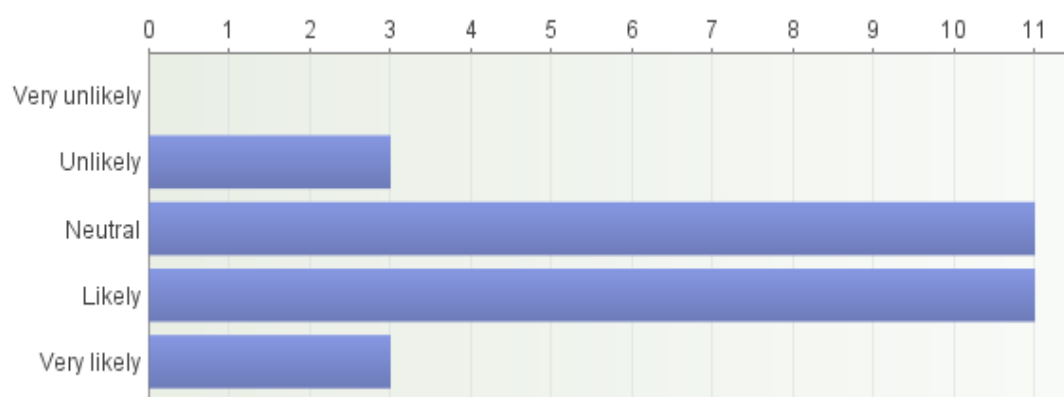


FIGURE 10. Likeliness of BIT graduates to recommend the programme to others

#### 14. When you think of the BIT curriculum, how would you develop it to improve its relativity to working life?

Number of respondents: 16

- More programming lessons, and deeper too
- After my studies I felt like I knew (very) little of some areas of IT taught in the courses but I was not confident in my skills with any. Realistically learned everything I know today from my first work practice place and the places I've worked for after graduating.
- More technical lecturers and more technical courses
- Well it has been very long time since I left and the curriculum has changed a lot since we started, in fact by the time we graduated it barely resembled what we did. So I can't really comment on this.
- At that time courses weren't so close to each other so I would recommend courses to relate more even the subject is changing.
- Many practical assignments to give a proper feeling of how it would actually be working with some projects.
- It will be helpful for students to have as many as options as possible. for example if a student works on Java programming, I suggest if there are consecutive Java classes but not only introduction to java. I have had a project I did on Java and it was quite advanced than the school actually thought me
- Less business-related and more IT-related courses
- Teaching methods,  
Application Areas,  
More engagement with real practices
- More optionality to specialize, many of the people at the time felt like working in an international team was a bonus but would have preferred more of the content from the Finnish taught IT programme at SBIM.
- I would offer more courses on search engine and social media marketing.
- Less Business and more IT
- introduce more web development courses
- I think they are trying. I have no comments at the moment
- There were some very good quality courses and some right awful ones. This is the real problem; I believe there is too much variance in teacher quality. For example, some teachers do not have language skills to teach at this level, while others do not possess enough knowledge on the subject they are teaching.
- BIT program gives knowledge over IT and Business, but neither of them will result in deep insight which will be necessary to get a job on those fields. BIT is a place for people who do not know what they want to do in their lives. It gives a good back up knowledge for becoming an entrepreneur, although unlikely in the field of business or IT. I think there should be possibility to choose a field to put more time into and not try to get education in everything.

## 15. General feedback and additional comments

Number of respondents: 7

- Programming part too weak, need to improve quite a lot.
- It's good to hear you're nearing graduations, Pieter. :)
- Am so grateful for having such a chance to study BIT in a very comfortable way. I thank you all
- The Quality of teaching has to improve.
- Very happy to see that the programme is managed by Ilkka, the man with balls to deal with bureaucracy and smarts of a real sensei :)
- best of luck
- This degree was too easy, more reading and more requirements for passing the courses would be appreciated.

## 16. Additionally, we are planning to organize a BIT 10th Anniversary Dinner in November 2014. Would you be likely to participate?

Number of respondents: 28

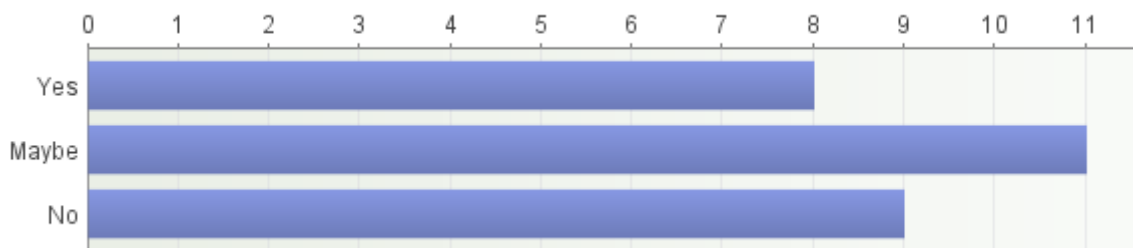


FIGURE 11. Participation of the BIT 10th anniversary dinner



## 8. INTERVIEWS

This chapter contains survey data from the conducted interviews, which will later be analyzed in the conclusion section of this research.

### 8.1. Interview 1

**Q: During which years have you been studying the BIT degree programme?**

2010-2013

**Q: What have you been doing from graduation up to the present?**

Started at Uni. Oulu at the GS3D master's degree programme

**Q: What is your honest opinion about the BIT programme (including but not limited to courses, teachers and facilities)?**

- The selection of courses could be tightened, so that students can get a clearer vision on minor/major subjects (software engineer, business process modeler), more focus
- Facilities were excellent
- Teaching staff was excellent, supported students as much as they could
- Somewhat better educated for Master's degree programme due to more practical experience (IT project and documentation is the basic example of projects)
- Exposed to many cultures and ideas, good education which up until then I didn't have

**Q: What are the things which should be considered to be changed for the development of the programme?**

One thing: professional presentation course. A significant amount of coursework is based on presentations.

**Q: Do you have comments on improving the programme in other ways, e.g. social media?**

Video editing course for school's marketing (student's creation examples)

**Q: Any comments about things related to non-studying activities? (Student organizations, activities (day trips, sports), parties, student housing, work, climate, etc.)**

Osako's setup is very good, as well as Trapesti. Not so much participation in parties etc. as I have already done that in the past. Good events as not all of them were just parties but also day trips and so on.

### **Space for open comments**

The BIT degree programme gives Oulu / Finland a very good international presence by bringing international people to one place and then spreading the knowledge, in other words, it makes people aware of Finland

## 8.2. Interview 2

**Q: During which years have you been studying the BIT degree programme?**

2009-2013

**Q: What have you been doing from graduation up to the present?**

Studying 'Information Systems and Processing' master's degree at Uni. Oulu

**Q: What is your honest opinion about the BIT programme (including but not limited to courses, teachers and facilities)**

I don't think that the programme provides the complexity of going to work in the workforce, e.g. not on par with real world applications

Facilities and resources (computers, software, library system works well) were great, provided me with everything I needed

**Q: What are the things which should be considered to be changed for the development of the programme?**

More combined basic courses (e.g. php, html etc) and then more advanced professional studies depending on your preferences.

**Q: Do you have comments on improving the programme in other ways, e.g. social media?**

I don't think that there is enough information for the international students on the stuff which actually affects us. E.g. some forms might be missing or some general information is not in English.

**Q: Any comments about things related to non-studying activities? (Student organizations, activities (day trips, sports), parties, student housing, work, climate, etc.)**

There are very few international members in the OSAKO board. Sometimes it's a bit boring as stuff is more aimed at Finnish students. There is not really a place for international students apart from ESN. There should be a something targeted at international students which aren't the same as the exchange student parties.

## 9. CONCLUSION

The initial research questions “*What is the current situation of BIT graduates?*”, “*Has the BIT degree programme helped students to advance in their careers?*” and “*How can we use given feedback to improve the BIT degree programme?*” can be carefully answered with a research statement consisting of the analysis of answers from the survey questionnaire and interviews.

The results of the study have shown that nearly all of the respondents’ current occupation is related to employment, self-employment or further studies, with only one graduate having indicated that he/she is unemployed, and one student on maternity leave. Also, a major part of the respondents started employment before graduating or within 3 months of graduation. This results in an employment rate of 71.4% and a studying rate of 21.6% amongst questionnaire respondents, which results in a slightly lower employment rate and a slightly higher studying rate than the average in UAS graduates in Finland (see figure 1). Numbers regarding unemployment (3.5%) and other occupations (3.5%) are comparable to the national average. Additionally, the greater part of employed graduates is working in the field of IT, with others working in business or miscellaneous fields. Common company positions of graduates included positions in (web) development, design or management (CEO in case of self-employed respondents), with according job descriptions.

Respondents who decided to continue studying had mostly chosen to continue their studies in the form of a Master’s Degree. These Master’s Degree studies were usually a follow-up to the technical side of the BIT degree programme, with the exception of a few business related Master’s Degree programme students and one Master’s Degree programme in Medicine student. Other respondents who decided to continue studying had chosen a Bachelor’s Degree programme in a variety of subjects, of which one was a double degree study at Oulu University of Applied Sciences’ partner university in Neu-Ulm.

Of all respondents, 75% has indicated that they are currently living in Finland, which in combination with the high employment rate and company positions could be an indication of a fertile job market for BIT graduates within Finland. This number can also be related to the large amount of opportunities for graduates to extend their studies with a Master’s Degree programme at Universities around Finland, or to study another Bachelor’s Degree programme.

Results from the personal feedback part of the survey are as follows: Firstly, answers to the question “*Did the BIT degree programme correspond to your current occupation?*”, were

reasonably mixed. Two respondents found that the BIT degree programme did not assist them in their current occupation at all, which might relate to the to the respondents which were unemployed or on maternity leave. The other responses to the question were “a bit” (8), “reasonably” (6), “quite well” (8) or “excellently” (4). These answers can be numerically calculated (3.14) to form an average feedback which indicates that the BIT degree programme corresponds just a bit more than “*reasonably*” to graduates’ working life.

Secondly, feedback regarding the degree programme’s related services and the facilities at Oulu University of Applied sciences revealed that the respondents were averagely quite satisfied with things related the degree programme’s course curriculum (3.39), course quality (3.32) and teaching quality (3.29), and very satisfied with the school’s facilities (3.82), and student services (3.79). This might be an indication that the school’s facilities and student related services are not as significantly related to possible negative feedback on the degree programme as study related issues, which puts emphasis on the latter to be improved in order to increase the quality of studying at the BIT degree programme.

Thirdly, respondents answered in varying trends to the question “*When you think of the BIT curriculum, how would you develop it to improve its relativity to working life?*” Most respondents answered that they would like to see more IT related courses in the degree programme, as most of them felt that, for example, their programming skills and practical knowledge fell short in real-life practices upon graduation from the degree programme. Additionally, there was a request for the optionality to specialize more within the degree programme. This can be done by, for instance, creating course packages which will define minor and major studying subjects.

Lastly, on average, most respondents responded positively about recommending the BIT degree programme to others.

## 10. REFERENCES

Brace, I. (2008). *Questionnaire Design : How to Plan, Structure and Write Survey Material for Effective Market Research*. London: Kogan Page Ltd.

Davies, M. B. (2007). *Doing a Successful Research Project Using Qualitative or Quantitative Methods*. New York: Palgrave MacMillan.

Iarossi, G. (2006). *Power of Survey Design : A User's Guide for Managing Surveys, Interpreting Results, and Influencing Respondents*. Herndon, VA, USA: World Bank Publications.

Oulu University of Applied Sciences. (2014a). *About Oulu UAS*. Retrieved 05 29, 2014, from Oamk.fi: <http://www.oamk.fi/english/info/>

Oulu University of Applied Sciences. (2014c). *Business Information Technology*. Retrieved May 5, 2014, from Oamk.fi: [http://www.oamk.fi/english/studies\\_and\\_applying/bachelors\\_degrees\\_in\\_english/degree\\_programmes/business\\_information\\_technology/](http://www.oamk.fi/english/studies_and_applying/bachelors_degrees_in_english/degree_programmes/business_information_technology/)

Oulu University of Applied Sciences. (2014b). *Koulutus ja hakeminen*. Retrieved 05 13, 2014, from Oamk.fi: [http://www.oamk.fi/koulutus\\_ja\\_hakeminen/](http://www.oamk.fi/koulutus_ja_hakeminen/)

Oulu University of Applied Sciences. (2013). Thesis instructions. Oulu, Finland. Retrieved 06 01, 2014, from <https://oiva.oamk.fi/utills/opendoc.php?aWRfZG9rdW1lbnR0aT0xMDAwMjEzNDM=>

Statistics Finland. (2010). *Main type of activity of graduates one year after graduation at the end of 2005 - 2008*. Retrieved 05 16, 2014, from Statistics Finland: [http://tilastokeskus.fi/til/sijk/2008/sijk\\_2008\\_2010-03-23\\_tau\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2008/sijk_2008_2010-03-23_tau_001_en.html)

Statistics Finland. (2011). *Main type of activity of graduates one year after graduation at the end of 2009*. Retrieved 05 16, 2014, from Statistics Finland: [http://tilastokeskus.fi/til/sijk/2009/sijk\\_2009\\_2011-03-02\\_tau\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2009/sijk_2009_2011-03-02_tau_001_en.html)

Statistics Finland. (2012). *Main type of activity of graduates one year after graduation at the end of 2010*. Retrieved 05 16, 2014, from Statistics Finland: [http://tilastokeskus.fi/til/sijk/2010/sijk\\_2010\\_2012-03-06\\_tau\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2010/sijk_2010_2012-03-06_tau_001_en.html)

Statistics Finland. (2013). *Main type of activity of graduates one year after graduation at the end of 2011*. Retrieved 05 16, 2014, from Statistics Finland:

[http://tilastokeskus.fi/til/sijk/2011/sijk\\_2011\\_2013-03-06\\_tau\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2011/sijk_2011_2013-03-06_tau_001_en.html)

Statistics Finland. (2014). *Main type of activity of graduates one year after graduation at the end of 2012*. Retrieved 05 16, 2014, from Statistics Finland:

[http://tilastokeskus.fi/til/sijk/2012/sijk\\_2012\\_2014-02-12\\_tau\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2012/sijk_2012_2014-02-12_tau_001_en.html)

Statistics Finland. (2014b). *Transition from school to further education and work*. Retrieved March 28, 2014, from Tilastokeskus: [http://tilastokeskus.fi/til/sijk/2012/sijk\\_2012\\_2014-02-](http://tilastokeskus.fi/til/sijk/2012/sijk_2012_2014-02-12_tie_001_en.html)

[12\\_tie\\_001\\_en.html](http://tilastokeskus.fi/til/sijk/2012/sijk_2012_2014-02-12_tie_001_en.html)

Vanhanen, R., Kitinoja, H., & Holappa, J. (2013). *FINNIPS - Joint efforts for internationalisation*. Jyväskylä: JAMK University Of Applied Sciences.

Wikipedia. (2014b). *Qualitative Research*. Retrieved 05 20, 2014, from Wikipedia:

[http://en.wikipedia.org/wiki/Qualitative\\_research](http://en.wikipedia.org/wiki/Qualitative_research)

Wikipedia. (2014a). *Quantitative research*. Retrieved 05 20, 2014, from Wikipedia:

[http://en.wikipedia.org/wiki/Quantitative\\_research](http://en.wikipedia.org/wiki/Quantitative_research)



**BIT 10th anniversary survey**

**1. In which year did you start the BIT degree programme? \***

**2. In which year did you graduate from the BIT degree programme? \***

**3. Do you currently live in Finland? \***

- Yes
- No

**4. What has been your main activity after recently graduating from the BIT degree programme? \***

- Employment relevant to BIT
- Employment in another field
- Looking for employment
- Continuing studies
- Change of studies
- Other, please specify

**5. Have you done / are you studying any other degree programmes at a higher institute after graduating from BIT? \***

Select the highest level applicable

- Doctoral degree (PhD), in the field of
- Master's degree (MBA), in the field of
- Bachelor's degree (BBA), in the field of
- Other, please specify
- I have not done any other degree programme(s)

**6. What is your current occupational situation? \***

- Permanent employment
- Fixed-term / temporary employment
- Entrepreneur

- Internship
- Full-time student
- Maternity / child care leave
- Unemployed
- Other, please specify

**Only answer questions 6-10 if you are employed**

**7. In which field are you employed?**

- Business
- IT
- Other, please specify

**8. How quickly did you get a job after graduating?**

- I got a job before graduating
- 0-3 months after graduation
- 4-6 months after graduation
- 7-12 months after graduation
- Over one year after graduation
- I have not got a job yet
- I have not applied for a job

**9. What is your current position in the company?**

Position

**10. What is your main job description within the company?**

**11. Does the BIT degree programme correspond to your current occupation? \***

- Not at all    A bit    Reasonably    Quite well    Excellently

**12. How would you rate the next items from 1 (weak) up to 5 (excellent)? \***

	1	2	3	4	5	.
Course curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	.
Course quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	.
Teaching quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	.
Facilities (e.g. Library)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	.
Student services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	.

**13. How likely are you to recommend the BIT degree programme to others? \***

- Very unlikely
  Unlikely
  Neutral
  Likely
  Very likely

**14. When you think of the BIT curriculum, how would you develop it to improve its relativity to working life?**

**15. General feedback and additional comments**

**16. Additionally, we are planning to organize a BIT 10th Anniversary Dinner in November 2014. Would you be likely to participate? \***

- Yes  
 Maybe  
 No