

## issit2011 zm

International Seminar on Scientific Issues and Trends













## Proceeding

International Seminar on Scientific Issues and Trends (ISSIT) 2011

# SAFE AND SECURE TECHNOLOGY AS THE SUPPORT CAPABILITY TOURISM OF NATION

October 22<sup>nd</sup>, 2011
Sahid Raya Hotel and AMIK BSI Yogyakarta



Published by:

Institute for Research and Community Services Bina Sarana Informatika

## Proceeding

## INTERNATIONAL SEMINAR ON SCIENTIFIC ISSUES AND TRENDS (ISSIT) 2011

"Safe and Secure Technology As Support Capability Tourism of Nation"

October 22<sup>th</sup>, 2011

Academy of Bina Sarana Informatika



Supported by:













International Seminar on Scientific Issues and Trends (ISSIT) 2011 "Safe and Secure Technology As Support Capability Tourism of Nation"

October 22<sup>th</sup>, 2011 Academy of Bina Sarana Informatika

Editor: 1. Nurvi Oktiani

- 2. Kartika Yuliantari
- 3. Kusuma Hati
- 4. Budi Prayogi

ISBN: 978-602-99213-1-1

Copyright © the Author

Publication Rights in Academy Bina Sarana Informatika Yogyakarta. Articles in these proceeding can be used, modified, and distributed freely for noncommercial purposes, provided not delete or alter author attributes. Reproduction of part or all of the contents of this book in any form, without the prior written permission of the Publisher and Author. Academy Bina Sarana Informatika Yogyakarta not responsible for any writings and opinions expressed by authors in these proceedings.

## PREFACE

International Seminar on Scientific Issues and Trends (ISSIT) 2011 is a scientific meeting in issues and trends is the International level, where inside there are the researchers and practitioners who can show the results of their latest research as well as discuss current issues and trends. This seminar is also a gathering place of ideas of thinkers who might be thinking that is pure and applied. Some researchers who will show results of their research from leading universities in Indonesia, Japan, Canada, Australia and Malaysia.

Collection of papers packed in the form of proceeding and grouped according to the study area include Computer, Economy, Communication, Law, Language and

Tourism.

The paper published in 2011 this gum has through the stages of evaluation by the reviewers, reviewers who are competent in their fields. Committee congratulate and thank you for participation and papers in the Proceeding contain gum is 2011. The committee also like to thank all stakeholders who have supported and active in participation success of this international seminar.

Suggestions and criticisms in order to perfection ISSIT Proceeding 2011 is expected. Committee Hope fully this can be used as a reference in the development and improvement of learning technologies in the field of Information Technology

and its applications.

Yogyakarta, October 22th, 2011 Program Chair

Hendra

Proceeding ISSIT 2011, Page: iii

## CONTENTS

|      |   | PAGE               |
|------|---|--------------------|
| PREI | FACE  | iii                |
| CON  | OF DADED INDICAL PROST  | v                  |
| LIST | OF PAPER INNOVATION   | xi                 |
| A. ( | Computer Science  |                    |
| A-1  | DESIGN AND IMPLEMENTATION OF SHORT MESSAGING SERVICE APPLICATION USING RC4 ENCRYPTION ALGORITHM FOR JAVA-BASED DEVICES            |                    |
|      | Foni Agus Setiawan, Prabowo Pudjo Widodo, Amirul Akbar  | A-1                |
| A-2  | DESIGN OF FUZZY LOGIC FORMATION CONTROLLER IN MULTI-ROBOT COORDINATION  | 770 V 201402       |
|      | Andi Adriansyah   | A-10               |
| A-3  | IDENTIFICATION SYSTEM MOTORCYCLE ENGINE DAMAGE SOUND BASED USING SVM  | And a contain dead |
|      | Ari Fadli, Risanuri Hidayat, Litasari   | A-19               |
| A-4  | DESIGNING OF DATA WAREHOUSE FOR ACADEMIC STUDY IN ACADEMY OF BINA SARANA INFORMATIKA Diah Puspitasari                             | A-25               |
| A-5  | COMPARISON THE TRANSPORTATION PROBLEM SOLUTION BETWEEN NORTHWEST-CORNER METHOD AND STEPPING-STONE METHOD WITH BASIS TREE APPROACH | A STE              |
|      | Maxsi Ary, Didin Syarifuddin  | A-35               |
| A-6  | INTEGRATED ONLINE AIRLINE TICKETING RESERVATION AN IMPLICATION TO IMPROVE BUSINESS AND TOURISM IN INDONESIA                       |                    |
|      | Rianto  | A-45               |
| A-7  | DISTRIBUTION OF SETTLEMENT POPULATION PATTERN ANALYSIS BASED ON SATELLITE IMAGE USING LEVELSET METHOD AND MORPHOLOGIC FILTERING   |                    |
|      | Tb. Ai Munandar, Maria Adelvine Londa, Pranowo  | A-49               |
| A-8  | A PATH PLANNING SCHEMA FOR UAV IN 3D SPACE  | \$00 <b>2</b> 25   |
|      | H H. Triharminto, T.B. Adii, N.A. Setiawan  | A-55               |

Proceeding ISSIT 2011, Page: v

| A-9  | ROAD TRAFFIC CONGESTION MODELING SYSTEM USING ADAPTIVE NEURO FUZZY INFERENCE SYSTEM (ANFIS):  |                   |
|------|---|-------------------|
|      | CASE STUDY CILEDUG KEBAYORAN LAMA ROUTE<br>TW Wisjhnuadji, Prabowo Pudjo Widodo   | A-65              |
| A-10 | HYBRID IMPLEMENTATION OF LEVEL SET AND SKELETONISATION FOR BATAK TOBA HANDWRITING Suriski Sitinjak, Lantik, Pranowo                             | A-67              |
| A-11 | THE SELECTION DECISION BEACH AREA TOURISM POTENTIAL OF THE MOST DEVELOPED IN GUNUNG KUDUL REGENCY   | 4 22              |
|      | Ruhul Amin, Anastasia Siwi Fatma Utami  | A-73              |
| A-12 | HIERARCHICAL PHRASE-BASED ENGLISH- INDONESIAN MACHINE TRANSLATION USING ADJ TECHNIQUE   | ASIC+504-100      |
|      | Teguh Bharata Adji  | A-79              |
| A-13 | INTRUSION DETECTION SYSTEM BASED SNORT USING HIERARCHICAL CLUSTERING  |                   |
|      | M. Zen Samsono Hadi, Entin M. K., Aries Pratiarso, Ellysabeth J. C  | A-85              |
| A-14 | CRITICAL PATH PROJECT DETERMINATION USING DEPTH FIRST SEARCH MODIFIED METHOD  |                   |
|      | Bilqis Amaliah, M.Rahmat Widyanto, Dika Swadani E, Vico Ade<br>Candra, Faizah Alkaff, M. Misbachul Huda   | A-91              |
| A-15 | COMPUTER RESOURCE SHARING FOR PARALLEL PROCESSING USING OPENMPI   |                   |
|      | Sujoko Sumaryono Freddy Kurnia Wijaya, Teguh Bharata Adji   | A-98              |
| A-16 | PARALLEL PROCESSING FOR INTEGRATION PROBLEM USING HIGH PERFORMANCE COMPUTING WITH OPENMPI : CASE STUDY ON THE NUMBER OF INTEGRATION INTERVAL    |                   |
|      | Teguh Bharata Adji, Muhammad Aditya Pradana, Sujoko Sumaryono   | A-107             |
| 4-17 | ANALYSIS EDERCT OF DOMO COMPRESSION   | nation Fine (7)28 |
| X-17 | ANALYSIS EFFECT OF PSNR, COMPRESSION RATIO,<br>LEVEL DECOMPOSITION IN DETERMINING THE<br>QUALITY AFTER IMAGE COMPRESSION BY WAVELET<br>FUNCTION |                   |
|      | Yulianti Paula Bria, Sugeng Winardi   | A-114             |

Proceeding ISSIT 2011, Page: vi

| A-18  | TECHNOLOGY DEVELOPMENT IN TOURISM INDUSTRY AND BUSINESS   |       |
|-------|---|-------|
|       | Lusia Eni Puspandari  | A-122 |
| A-19  | ANALYSIS OF THE MASTER PLAN IT AT PT. SARI<br>MELATI KENCANA JAKARTA<br>Priatno, Nandang Iriadi   | A-130 |
| A-20  | A STUDY ON THE IMPLEMENTATION OF ACADEMIC SMS THROUGH TECHNOLOGY ACCEPTANCE MODEL APPROACH  |       |
|       | (A Case Study at SMPN 99 Jakarta) Muhammad Arip, Lusiana  | A-140 |
|       | Trementation array Edistance  | ***   |
| A-21  | RECOMMENDER COMPUTER SYSTEM WITH PROGRAM OF STUDY METHODS ANALYTICAL HIERARCHY  |       |
|       | PROCESS (AHP) Linda Marlinda <sup>1)</sup> Dana Indra Sensuse   | A-149 |
| A-22  | TRAVELLER MOBILE APPLICATION DEVELOPMENT USING  |       |
|       | JAVA MICRO EDITION Ali Khumaidi   | A-162 |
| A-23  | FUZZY C-MEANS CLUSTERING-BASED SYSTEM FOR FINAL TASK SPECIALIZATION   | A-169 |
|       | Rahmadya Trias Handayanto, Herlawati  | A-10: |
| A-24  | IMPLEMENTATION OF A DATA BASE SYSTEM OF HIGHER EDUCATION WITH CHANGE MANAGEMENT APPROACH AT KOPERTIS IV JAWA BARAT AND BANTEN                     |       |
|       | Ade Rahmat Iskandar, Kridanto Surendro  | A-175 |
| A-25  | DIGITAL MEDIA AS INTERNET MARKETING AND COMMUNICATIONS IN INDONESIA TOURISM   |       |
|       | INTRODUCTION Ferry Prasetyo H, Irma Afrianti  | A-186 |
| A-26  | AN ENTREPRENEURS DEVELOPMENT AND  |       |
| 71.20 | IMPLEMENTATION OF IPTEKS FOR ENTREPRENEURSHIP (IbK) OF UNIVERSITY STUDENTS AT YOGYAKARTA UNIVERSITY OF TECHNOLOGY BASED ON INFORMATION TECHNOLOGY |       |
|       | Joko Sutopo, Tatit Hariyanti, Vera Desi Nurmalia, Sri Respati<br>Andamari   | A-194 |

Proceeding ISSIT 2011, Page: vii

A-27 INFORMATION

SYSTEM

IMPLEMENTATION OF NEW STUDENT RECEPTION THE

|                  | CONCEPT PROTOTYPING: STUDY CASES ON BINA SARANA INFORMATIKA Suhartono, Fajar Jatmika, Fathur Rohman  | A-200        |
|------------------|--|--------------|
| <b>B.</b><br>B-1 | Economy ANALYSIS OF EFFECT OF CAR, LDR AND STATUTORY RESERVES TO NET PROFIT BEFORE TAXES, IN PT BANK MANDIRI TBK Irma Setyawati, Doni Purnama Alamsyah   | B-1          |
| B-2              | MANAGEMENT OF SMALL AND MEDIUM ENTERPRISES MICRO, PROBLEMS AND SOLUTIONS Nur Komariah  | B-13         |
| B-3              | EFFECT OF CERTIFICATE OF BANK INDONESIA (SBI), VALUE EXCHANGE AND DOW JONES INDUSTRIAL AVERAGE (DJI) TO INDEX JOINT STOCK PRICE (CSPI) (Empirical study on the Indonesia Stock Exchange from 2003 to 2010 period) Suhartono, Slamet Heri Winarno | B-21         |
| B-4              | E-LEARNING-BASED TRAININGS FOR EXPENDITURE TREASURERS: A DREAM OR SOLUTION? Mila Mumpuni, Rahmawati  | B-31         |
| B-5              | ANALYSIS OF COMPETENCE AND INFLUENCE ON THE PERFORMANCE OF TEACHER OF EMOTIONAL INTELLIGENCE IN At SMA ISLAM AL-IZHAR PONDOK LABU Suryanto Sosrowidigdo, Agus Priadi, Yusuf  | B-36         |
| B-6              | ANALYSIS ON INTERPERSONAL COMMUNICATION AND WORK MOTIVATION TO THE WORK SPIRIT OF TEACHERS AT AL-IZHAR SENIOR HIGH SCHOOL PONDOK LABU – SOUTH JAKARTA  Irwin Ananta  | 9 MA         |
|                  | THE ROLE OF COMPETITIVE ADVANTAGE AS MEDIATING VARIABLE ON THE RELATIONSHIP BEETWEN ENTREPRENEURIAL ORIENTATION AND FIRM PERFORMANCE: STUDY IN SME Mulato Santosa  | B-49<br>B-63 |

Proceeding ISSIT 2011, Page: viii

AND

DESIGN

| B-8 | MANAGEMENT OF ISLAMIC MICROFINANCE INSTITUTIONS AS EMPOWERING MICRO ALTERNATIVE SOLUTIONS Ais Zakiyudin  | B-73             |
|-----|--|------------------|
| CI  | ourism   |                  |
| C-1 | BUILDING CUSTOMER VALUE TO INCREASE NUMBER OF TOURITS (Implementing Five Basic Concepts in Increasing Customer Value by Kotler)                            |                  |
|     | Didin Syarifuddin, Slamet Heri Winarno   | C-1              |
| C-2 | THE ANALYSIS OF TOURISM CRISIS MANAGEMENT TO<br>INCREASE FOREIGN TOURIST ARRIVAL   |                  |
|     | Tomy Andrianto, Any Ariani Noor, Deddy Sobarna Sutaji  | C-8              |
| C-3 | DEVELOPMENT MODEL OF AGRI-TOURISM BASED ON TOURISM QUALITY COMPONENTS THAT INFLUENCE TOURIST SATISFACTION AND LOYALTY (Case of Tourism Service in Bandung) | NEXT A PROPERTY. |
|     | A Gima Sugiama, Santosa Sanjaya  | C-17             |
| C-4 | THE IMPLEMENTATION OF TOURISM PROTECTION BASED ON ACT, UU-RI NO10.NO YEAR 2009 (Secure, Safe And comfortable Excellent Services for Tourists ) ODA         | C-29             |
|     |  |                  |
| C-5 | MUSLIM WORLD AND FEMINISM ISSUE Nurhadi  | C-37             |
| C-6 | EDOTEL MANAGEMENT IN PREPARATION FOR TOURISM PASTMASTER Ani Wijayanti  | C-40             |
|     |  |                  |
|     | Communication INCREASING TOURISM OF INDONESIA THROUGH  |                  |
| D-1 | PUBLICATIONS AND OUTDOOR ADVERTISING MEDIA Damayanti   | D-1              |
| D-2 | NEW MODEL OF HIERARCHY OF EFFECTS IN ADVERTISING   | PERON            |
|     | Bambang Sukma Wijaya   | D-5              |
| D-3 | MEDIA RELATIONS AS AN EFFORT TO REALIZE<br>THE POSITIF IMAGE OF TOURISM  |                  |
|     | Maya May Syarah  | D-16             |

Proceeding ISSIT 2011, Page: ix

# AN ENTREPRENEURS DEVELOPMENT AND IMPLEMENTATION OF IPTEKS FOR ENTREPRENEURSHIP (I,K) OF UNIVERSITY STUDENTS AT YOGYAKARTA UNIVERSITY OF TECHNOLOGY BASED ON INFORMATION TECHNOLOGY

Joko Sutopo 1), Tatit Hariyanti<sup>2)</sup>, Vera Desi Nurmalia<sup>3)</sup>, Sri Respati Andamari<sup>4)</sup>

DSains and Technology Faculty of Universitas Teknologi Yogyakarta
JI Ring Road Utara Sleman Yogyakarta 55284 Indonesia
Email: jksutopo@gmail.com

<sup>2)</sup> Faculty of Cultural Science of Universitas Teknologi Yogyakarta
Il Janturan Yogyakarta 55284 Indonesia
Email: tatithariyanti@yahoo.com

<sup>3)</sup>Faculty Economic of Universitas Teknologi Yogyakarta Jl Glagahsari 63 Yogyakarta 55284 Indonesia Email: vera\_nurmalia@yahoo.com

<sup>4)</sup>Psychology faculty of Universitas Teknologi Yogyakarta Jl Glagahsari 63 Yogyakarta 55284 Indonesia Email: sri\_respati\_andamari@yahoo.com

#### Abstract

Entrepreneurship is currently developed at varius institutions to support the advancement of extlence Indonesia. University Technology of Yogyakarta (UTY) in the framework of academic, research and community service to participate developing entrepreneurship programs. Need a model to foster entrepreneurial developme among students of UTY through science and technology model for entrepreneurship (IbK).

This Program implements a model of entrepreneurship to the prospective student entrepreneurs through the stages of socialization, provisioning entrepreneur, entrepreneursial motivation, business planning, business interships, product management, marketing strategy and development of information technology. Model program lbk at UTY combines business creativity, marketing strategy, product innovation, self management and information technology. Information technology developed include internet marketing strategies, website development, electronic transactions, building a social networking and informations technology management. With the capabilities of information technology for the students turned out to facilitate students in motivation and effort to try entrepreneurship

Keywords: entrepreneurship, technology, management, motivation

#### I. INTRODUCTION

Current challenges and globalization lead us into an increasingly stringent competition of seeking employment, career and business opportunities. Support to win the global competition itself is not something instant; its activity is a process in winning and preparing ourselves to excel in the competition. This challenge needs to be addressed by higher education institutions to anticipate the needs and competencies of human resources in achieving goals. For problems explained, Yogyakarta University of Technology (UTY) needs to prepare itself to face various challenges in the era of globalization both from teaching staffs, leaders and students.

Yogyakarta University of Technology, has four faculties consisting of various disciplines namely Faculty of Science and

Technology, Faculty Technology and Business, Faculty of Cultural of Science and the Faculty of Psychology with various departments such as Department of Informatics, Electrical Engineering, Industrial Engineering, Civil Engineering, Mechanical Architecture, Information Management, Information Systems, Computer Systems, Accounting, Management, English Literature, Japanese and Psychology. Yogyakarta University of Technology has three campus locations. The first campus is on Jl North Ring Road Jombor Sleman, the second on Jin Glagahsari No. 63 and the third campus on Jl Prof Dr Soepomo No. 21 Janturan Yogyakarta.

Due to different background of students (family, profession of parents, economic ability, communication and other skills), condition of entrepreneurship on campus UTY has not been condusive, yet in which there are still a lot of students having no motivation or even care about the conditions outside their environment, and less ability to see or read a variety creative and innovative opportunities that could be developed in order to improve their abilities and skills. The untapped potential of students that are of catching the opportunities, having creative thinking or activities time is still visible from their habit of just simply doing nothing and going home after a lecture course, cating, sleeping, gaming, watching television and other entertainment. It is very unfortunate that a great potential and ability to actualize themselves have not been empowered yet in the community and campus environment. To open their mind, their intellectual capabilities, it needs some facilities and ways so that their abilities and way of thinking could be development The actualized. entrepreneurial and business competencies that are implanted through a variety of academic and non academic activities provided in environments of UTY are expected to work the potential and creativity of students in achieving succeess in all their study, work and careers.

Yogyakarta University of Technology develops local competencies and skills provision to all students, where local competence is one of the mandatory requirements for students in completing their education in UTY. The local content consists of four courses of the Personality Ethic, Information Technology, Entrepreneurship and English communication skills.

The above four competencies expected to provide the ability for students of Yogyakarta University of Technology to be competitive in seeking employment or develop independence in their later business. In particular reason of the development of entrepreneurship, Yogyakarta University of Technology is developing entrepreneurial learning for all students who have not graduated to be given business motivation, the way to think globally, look for business opportunities, develop business management, create a viable business proposals as well as businesses to implement themselves so that there emerges a synergy between college activities, business and industry (DUDI).

The weakness of graduate student lies in the lack of character building to develop an independent business. There is still an enduring patterns of thinking amongst students or graduates of universities including the graduate students of UTY who still think of looking for employment or seeking for job and not to think of as a creator of employment opportunities.

The current global crisis which is engulfing many countries including our country where hundreds of thousands of workers in Indonesia threatened to termination of employment (FLE) results in an increasingly tight competition of employment opportunities In order to open and widen students' insight and perspective, UTY provides students with the provision of entrepreneurial skills and motivation to be able to find loopholes and opportunities during their study or after their graduation from Yogyakarta University of Technology.

The application of entrepreneurship courses to all students of Yogyakarta University of Technology since 2005, has been providing significant color for many students, from which there appears some students who have already started to actively develop their own potential, to pioneer a variety of independent business, and to actualize their own ability. Independent businesses pioneered by students of UTY vary ranging from thousands to millions of capital, such as accessories, mobile phone vouchers, culinary, beverages, electronics service, motorcycle service, and web design, software house and many other businesses.

Entrepreneurial activities can provide an injection of color and motivation for UTY students to always open their mind and creativity, give provision in building the foundation of a career during and after their

study at UTY. During their study they are encouraged to develop students 'cooperatives and to actualize variety of organizational needs and skills of students. Competition in the arena of business proposals is held to encourage students to implement their entrepreneurship. So in general with the development of entrepreneurship at the University of Technology campus in Yogyakarta from both academic and non academic is expected to change the pattern, namely:

a. Instead of being the job seekers College graduates become developers, creators and the creator of employment opportunities

b. Students and Alumni can think more creatively to develop themselves facing competition of work and business that are increasingly stringent c. Information technology, English communication and personality skill, based on good ethics will build confidence and strong leadership abilities.

Whole range of academic and structural Yogyakarta University of Technology always give encouragement and motivation for their students to be successful in achieving the ideal time of completing education in UTY timely and expected to get career foothold after graduating from college with a short waiting period. Institutionally, the development of entrepreneurship program is under a direct coordination with the leadership of UTY and faculty as well as research institutions and community service (LPPM) UTY.

#### II. RESEARCH METHODS

## 2.a. Steps of tenant recruitment of IbK participants' at UTY

To get 20 candidates for new entrepreneurs to be served in IbK program every year, the tenant recruitment patterns of IbK participants at the Yogyakarta University of Technology is conducted by selecting students business proposals and visiting programs. In general the criteria used in selection of proposals is the status of student affairs, ability and motivation of business, the feasibility of these businesses, the independence of the business and program management work the enterprise. In the early stages of recruitment the Yogyakarta University of Technology takes some students from several

departments who are developing or pioneering new business. They are asked to make proposals individually or in groups, Their business proposals are selected. The selection includes student administration, business proposal presentation in front of the service team of Isk Yogyakarta University of Technology, feasibility of business proposals and business visits for students who have developed the business.

## 2.b. The method applied in the lbK implementation

After the selection process of participants, the selected tenants who are either individual or in groups are served in the program I<sub>b</sub>K at UTY. All student participants will do some activities as outlined below:

### 1. The program of development business proposals analysis

Participants in this program are given a guidance of how to prepare a good business proposal starting from the situation analysis, opportunity analysis, production, marketing analysis, human resource analysis and feasibility analysis of each step in the work process business. From this training program participants are expected to understand the meaning of tenant businesses and the needs arising from the business. Business proposal at an early stage is not a barrier analysis or to make the lesser motivation but rather as giving the outlines of the guideline of the business, thus providing a focus for student referrals to adhere to the business targets set forth in the business proposal. This proposal is flexible according to the analysis of the situation facing the development of the business.

## 2. Motivation Development Training (AMT)

In this step all participants will be given a briefing of good tenant mentality, motivation, physical and spiritual bases in running their business. In this activity, participants will be trained for 3 days with the material: business motivation, business management, set goals focus on building the future as well as the ability to build teams and business communications.

### 3. Entrepreneurship training

This training will be given for 3 days with a focus on training of how to manage human resources, production and marketing capabilities, in addition to materials management are also given experience of a successful entrepreneur in his business.

4. Apprenticeship in Industrial

All participants are given the chance to knowledge get from appropriate practitioners with the field and experience through visiting programs apprenticeships. It is hoped that students and. running the business could have more extensive knowledge, so that three principles of Observe Imitate and Modify (Amati, Tirukan, Modifikasi) can be implemented in their business program.

## 5. Implementation of Independent Business Program

After experiencing the previous steps, the students are encourage to practice or realize the projects developed in accordance with the location, the product to be sold, the market potential that will be tilled and management business. From this point on UTY I<sub>b</sub>K program continues to provide guidance in determining the best measures of business success blazed by I<sub>b</sub>k participants' tenant.

## 6. Coaching and Evaluation Patterns for Tenant

As a new venture, support and direction from an expert or consultant is invaluable in providing input and advice for the progress of a business, I<sub>b</sub>K program at UTY thus provides supervision and evaluation of employment patterns for business processes.

7. Supervision for tenants
Supervision and coordination with the
participants of I<sub>b</sub>k program is very
necessary, especially those developing
business is still very new. Every Monday
morning, the meeting is conducted with
a special agenda to coordinate the
activities program. In the beginning of the
month and the end of the month the
meeting is also held to evaluate and
sharing

8. The pattern of Technological Aid

The current technology is a tool that can assist in accelerating the process of building business successfully. Moreover, information technology support is very fast, access to mass media is widely available and easily accessible communication becomes a necessity for independent businesses of the students. As an illustration the marketing of goods or services will be easier if it is assisted by internet marketing or e-commerce website. By the help of e-commerce information technology-based, products will be more easily and quickly spread to all corners of the world. This program will definitely help save aspects of distribution and labor in tackling marketing side.

In addition to aspects of information technology support, UTY IbK program will also provide aspects of information systems management and administration for the business of students, so that students who are opening a business will find it easy to do various cash flows checking of goods and money or in and out services quickly and easily. By the support of information technology facilities and infrastructure on the campus of Yogyakarta University of Technology, independent business performance of the students will easily be obtained. Besides e-commerce aspects, that is information system equipment, UTY IbK program will also assist the business to fix the aspect of system analysis, especially college students' access for computing and Internet connection. Consulting service room of UTY IbK program Internet-based computer services are provided online for 24 hours that could be used in accessing and e-commerce developing various promotion of products produced by UTY students.

9. Problem solving methods The pattern of implementation of this method of problem solving I<sub>b</sub>K is done by doing a SWOT analysis (Strengths, Weaknesses, Opportunities and Challenges) because SWOT analysis is commonly applied and proven much help in performing various analysis and troubleshooting. The concept applied in addressing the issue of building a business at an early stage, is analogized to someone who is learning to read or

Proceeding ISSIT 2011, Page: A-197

write in which all the issues are not regarded as obstacles in establishing the existence of business success but as a gap to open up opportunities ahead in achieving All business success. participants are given motivational life tenant that the initial step of a success is usually hard, but the next step will surely be continued and successful. Confidence and motivation are continually built in order to stimulate creativity and passion to keep moving and step ahead in building a successful business.

#### HI. RESULTS AND DISCUSSION

In accordance with the description outlined in the methods of program implementation in UTY IbK the proposer and developer team science and technology programs for entrepreneurship in the College of Yogyakarta University of Technology performs various activities that are divided into 3 phases, namely the preparation phase, implementation phase and evaluation phase

A. The preparation stage consists of:

1. Participants selection program.

This activity covers preparation of detailed concept and business proposal writing guide, socialization selection for students of business proposals, proposal acceptance pioneering business, Ibk participants proposal presentation and the determination of IbK program participants.

2. Training program on the preparation of proposals business pioneer

In this program Ibk participants will be given direction to create lines of business that are realized in the course of a business proposal that will be run in accordance with the wishes of the participants of IbK, based on business potential, market, human resources, economic potential and feasibility study of the business initiated. In addition IbK participants are given the knowledge to make proposals that can access financing institutions. 3. Program of development and motivation increasing

This program prepares Ibk participants to be ready mentally, spiritually and have mature thought in a pioneering business. The program is expected to provide a basis for the participants of IbK to be tough and capable businessman who will never give up in facing many difficulties in building a home business.

From this activity, it could provide a focus direction and the ideals to build a business foundation.

4. Business management training program This training program equips Ibk participants to have the capability in human resource management, production, marketing and financial management. Training is important as a preparatory stage to of apprenticeship and business implementation.

B.Implementation Phase in IbK program includes:

to Business

- 1. Internship program Partners Internship program to business partners is done to provide an overview of business which has been running, so that IbK participants can understand an illustration of how to run real business. UTY IbK program will provide help to be able to access business partners to be a partner of the business internship in accordance with business that are going to build. The concept executed in this partnership is not to create competition but creating a synergy and mutual sharing a variety of skills and management institutes that could be developed into business partners. In is hoped that Ibk participants also strongly feel the real work in running a business. For example IbK participants who will develop business in the field of electronics are recommend and helped to have an internship in the company engaged in the field of electronics.
- 2 Opening pioneer Business program. After the preparatory phase of the program is already done, pilot business planned by the Ibk participants which based on business proposals that have been made through various surveys and feasibility in accordance with the competence of human resources, financial capacity and management capabilities are started to implement.
- 3. Business Coaching During this implementation period, visits to the location of the monitoring businesses of students are conducted every week at the beginning of the month for 2 months continued by evaluation of the business and performance. The position of the program team IbK UTY is a partner who helps in realizing the students' aim in developing businesses that become the goals of students' mission and vision of the Yogyakarta University of Technology.

C. Phase evaluation and problem-solving

- 1. Evaluation and coordination program. IbK program participants and IbK program developers' team together perform various activities in the coordination of how far the business is running. This program is an evaluation of the process input and the output of the business system run by the participants of IbK. Every week and the beginning of the end of the month the evaluation and sharing are
- done. 2. Relevant training programs to support pioneering business businesses of participants of I<sub>b</sub>K Of all activities that have been implemented there may appear various constraints, technical and management issues needed to solve. To anticipate difficulties IbK UTY conducts training programs that are relevant to solve various problems of businesses such as workshop I<sub>b</sub>K pioneered marketing participants, workshop management, human workshop management resource

The number of tenants who participated in the I,K program each year Science and technology programs for entrepreneurship at the University of Technology are sustainable and done every year involving 20 participants Yogyakarta tenant to be educated, developed to implement and pioneering new business in each year.

## IV. CONCLUSIONS

Implementation of science and technology for students at UTY is a great facility to support community service in order to foster and promote programs for the entrepreneurial

spirit and ideas of academics at UTY. This program is a synergy and continuity of the process, planning and implementation between the academic, world of work and practitioners in the successful implementation of the Ibk program in UTY.

## V. ACKNOWLEDGEMENTS

Our special gratitude goes to DP2M Higher Education which has provided financial assistance in carrying out science and technology for Student Affairs Community Service (IBK) in Yogyakarta University of Technology 2011

#### REFERENCES

- [1] Dikti, "Higher Education Community Service Guide", Kemendiknas, Jakarta, 2010
- [2] Ebrahim, K., et.al. "Inverstigation on the Relationship of Government Entreprencur, University and Development, American Journal of Scientific Research, 2011
- [3] Gibb, Allan., Hannon, Paul., "Towards the Entrepreneurial University", "University of Durham, "enterprise@allangibb.com, www.ncge.org.uk
- [4] Kuntadi,Iwa., "Development Entrepreneur in University Universitas Pendidikan Indonesia ",UPI,2010