

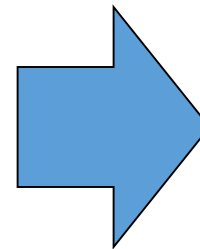


# **EFFECTS OF CURRICULUM AND LEARNING OUTCOMES WITHIN ALUMNI COMPETENCIES: CASE STUDY VOCATIONAL PROGRAM, UNIVERSITY OF INDONESIA**

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**Link and Match  
Higher education  
Curriculum and  
Industry**

**Quo Vadis?**

# Introduction

- ❑ Vocational Program in higher education is one of the stages of the activities carried out in order to determine the competence of the market needs.
- ❑ The curriculum can measure and track the performance of graduates in order to obtain a clear indicator of the profile of graduates of Vocational Program.
- ❑ This research showed graduate profile includes at least three things are necessary accreditation requirements between the type of work, periods to get a job, and first salary of graduates.



This research, uses a case study on Vocational Program , university of Indonesia to exemplify how student may respond to CURRICULUM AND LEARNING OUTCOMES WITHIN ALUMNI COMPETENCIES



## Literature Review

Harald Schomburg (2003: 11) defines Tracer Study is an approach that enables higher education institutions to obtain information about any possible shortfall in the education process and the learning process and can form the basis for planning the activities for improvements in the future.

. Vocational education and training (VET) in higher education is education designed to develop skills, abilities / skills, understanding, attitudes, work habits, and appreciation needed by workers to getting and adapting work field and make meaningful and productive jobs (Adhikary, PK, 2005). According to Pavlova (2009) tradition of vocational education is to prepare students for work

### **Method of collecting data**

Primary data collection, through questionnaires and in depth interviews (Delphi method) to a group of experts selected students.

### **Analysis**

Quantitative data will be analyzed using SPSS version 17 and LISREL 8.5 while the qualitative data will be made descriptive analysis that support quantitative explanation. using structural equation modeling (SEM). CFA analysis is a form of analysis. This relationship is reflected in the path coefficients (path coefficient) which actually is the standardized regression coefficient (Kerlinger, 2002: 99)

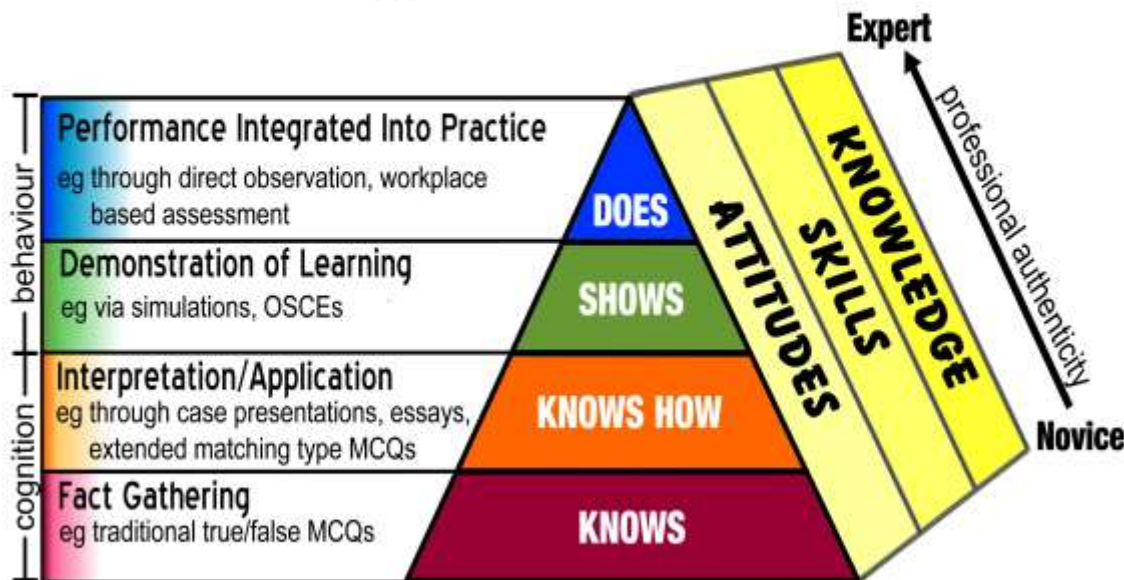
### **Location**

Factor analysis was performed to validate competences of curriculum question related type of work, job factors and first time salaries. Then, performed to examine differences in average for 200 Questionnaire with likert scale.

# Analysis and Discussion

## MILLER'S PRISM OF CLINICAL COMPETENCE (aka Miller's Pyramid)

it is only in the "does" triangle that the  
doctor truly performs



**Knows** : knows some knowledge

**Knows how**: knows how to apply that knowledge

**Shows**: shows how to apply that knowledge

**Does**: actually applies that knowledge in practise

Based on work by Miller GE, The Assessment of Clinical Skills/Competence/Performance; Acad. Med. 1990; 65(9): 63-67  
Adapted by Drs. R. Mehay & R. Burns, UK (Jan 2009)

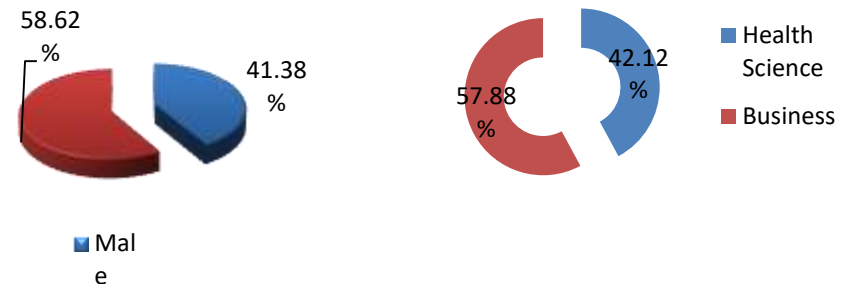


Link and Match, education,  
industry and Society

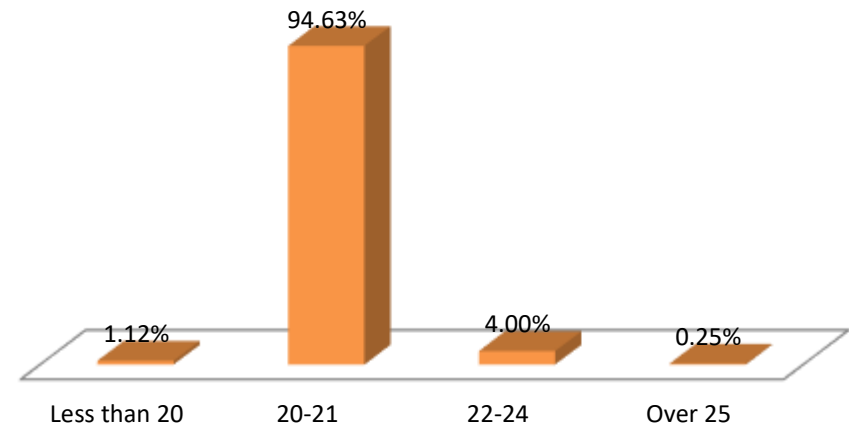
# Analysis and Discussion Cont.



Variable	Category	Percentage
Gender	Male	41.38%
	Female	58.62%
Age	Less than 20	1.12%
	20-21	94.63%
	22-24	4.00%
	Over 25	0.25%
Field of study	Health Science	42.12%
	Business	57.88%



**Age of Responden**





# Analysis and Discussion Cont.

Table for Period of waiting first Job

	Frequency	Percent
< 2months	145	42.6
3- 6 months	35	24.6
7-11 months	12	19.7
> 1 years	8	13.1
Total	200	100

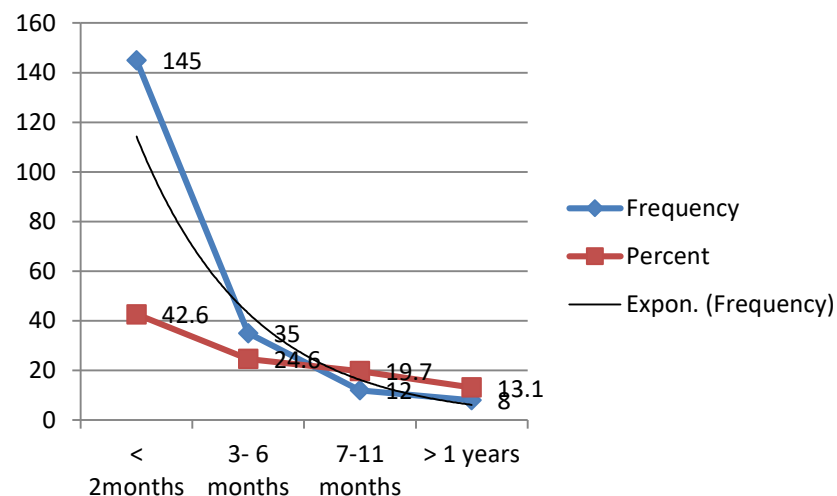
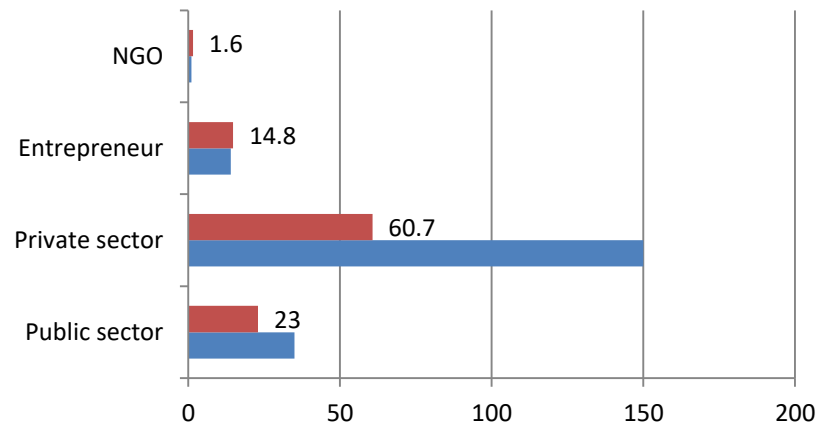


Table Field of Occupation

	Frequency	Valid Percent
Public sector	35	23.0
Private sector	150	60.7
Entrepreneur	14	14.8
NGO	1	1.6



## Table of Mean rank Feedback from student to needs of Special Skill on Curriculum

<b>Ranks</b>	
<b>Knowledge/Skill</b>	<b>Mean Rank</b>
English Communication Skills	1.50
Leadership	1.68
Empathy and Motivation	1.84
Computer skills	1.89
Entrepreneurship	1.98
Business Project	2.05
Innovation	2.11
Spiritual quotient	2.11
Creative thinking	2.54
Presentation skills	2.58
Public Administration	2.69
Management and Organization Skills	2.78
PDCA	2.90
Public Speaking	3.03
Interview technique	3.12
Human resources Capital	3.50



Using Spss, highest level

Important factors that should be considered in developing curriculum

1. Training and Class Establishment (BP)
2. Speakers or lecture (PEM)
3. Training or class Topic (TEMA)
4. Methods (CARA)
5. Entrepreneurship Value (WIRA)
6. Management Aspect (MAN)
7. Financial planning arrangement (PERK)

CR Formula :

$$\text{Construct reliability} = \frac{(\sum \text{standardized Loading})^2}{(\sum \text{standardized Loading})^2 + (\sum \text{measurement error})} \quad (1)$$

VE Formula :

$$\text{Variance extracted} = \frac{\sum \text{standardized Loading}^2}{\sum \text{standardized Loading}^2 + \sum \text{measurement error}} \quad (2)$$

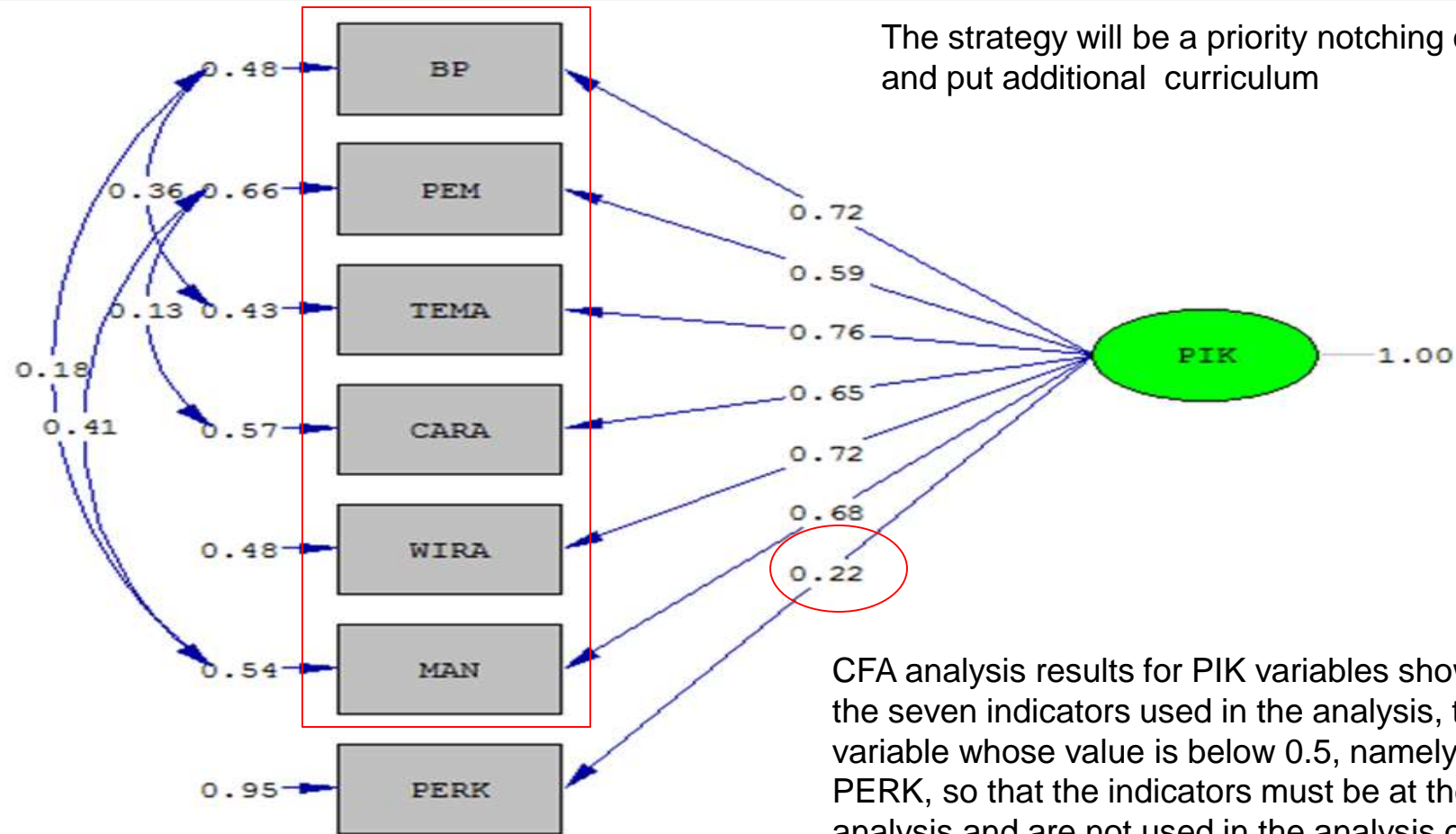


# Important factors according student

No	Variable	Coefficient Validity	Note	Coefficient Reliability	Note
1	BP01	.430	Valid	.573	Reliable
2	BP02	.379	Valid		
3	BP03	<b>.200</b>	<b>Invalid</b>		
4	BP04	.339	Valid		
5	PEM05	.423	Valid	.600	Reliable
6	PEM06	.408	Valid		
7	PEM07	.395	Valid		
8	TEMA08	.343	Valid		
9	TEMA09	.422	Valid	.535	Reliable
10	TEMA10	<b>.284</b>	<b>Invalid</b>		
11	CARA11	.569	Valid		
12	CARA12	.443	Valid		
13	CARA13	.571	Valid	.706	Reliable
14	WIRA14	.465	Valid		
15	WIRA15	.499	Valid		
16	WIRA16	.348	Valid		
17	MAN17	.301	Valid	.625	Reliable
18	MAN18	.377	Valid		
19	MAN19	.378	Valid		
20	PERK20	.356	Valid		
21	PERK21	.430	Valid	.554	Reliable
22	PERK22	.325	Valid		







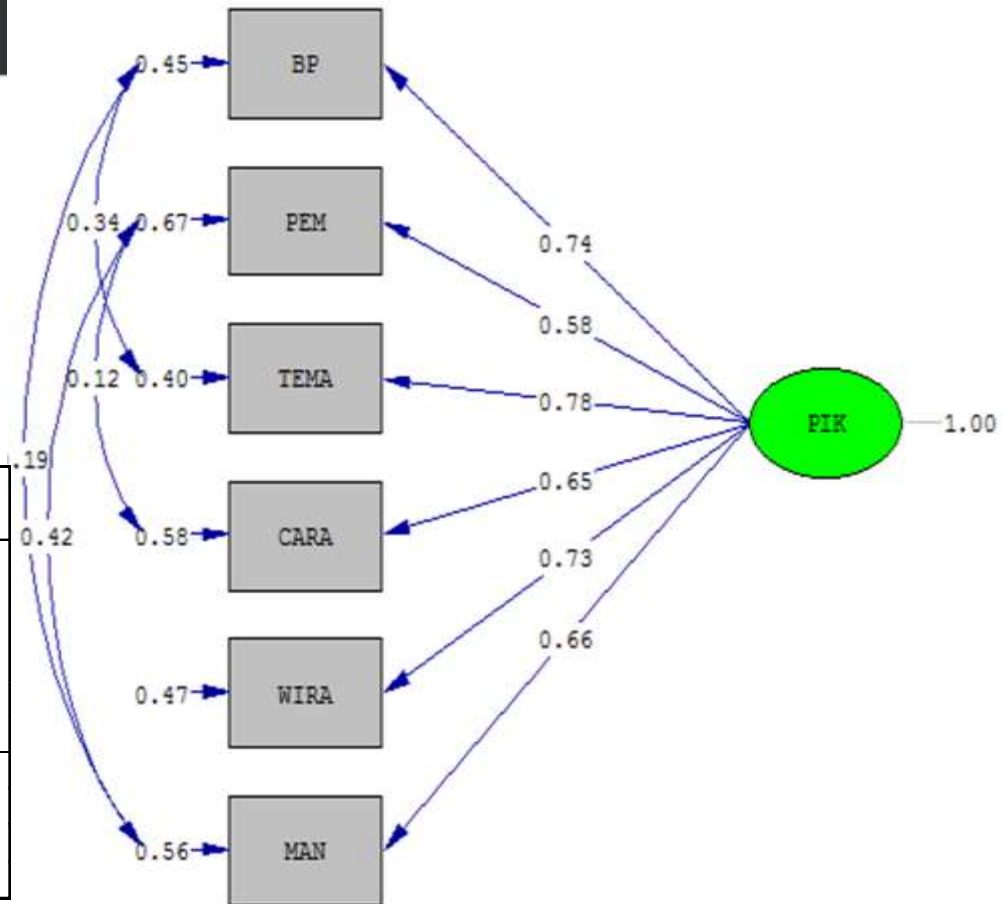
The strategy will be a priority notching class and put additional curriculum

CFA analysis results for PIK variables showed that of the seven indicators used in the analysis, there is a variable whose value is below 0.5, namely indicators PERK, so that the indicators must be at the drop of analysis and are not used in the analysis of the full model.

Important Subject to be considered in developing curriculum and learning outcomes

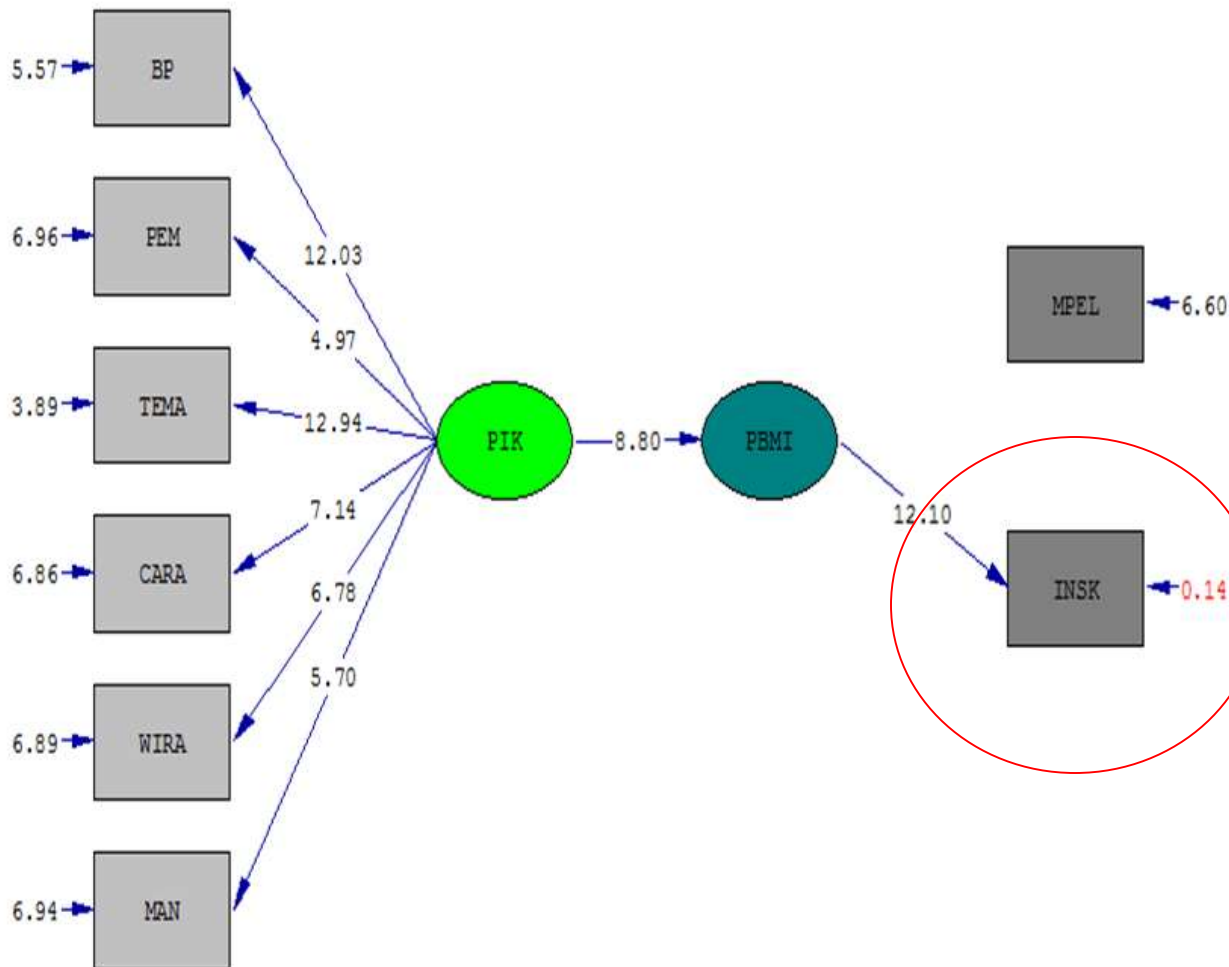
- Perception on class and Training Benefits (MPEL)
- Perception on curriculum (INSK)

No	Variable	Vallidity Coef.	Note	Reliability Coef	Note
23	MPEL23	.481	Valid	.723	Reliable
24	MPEL24	.548	Valid		
25	MPEL25	.443	Valid		
26	MPEL26	.404	Valid		
27	MPEL27	.430	Valid		
28	MPEL28	.442	Valid		
29	INSK29	.491	Valid	.581	Reliable
30	INSK30	.337	Valid		
31	INSK31	<b>.228</b>	<b>Invalid</b>		
32	INSK32	.351	Valid		



Source: Author data collection, 2015

While the PBMI variable, because it has two indicators it is not done the analysis CFA, where CFA analysis indicators are required to have at least three indicators but in this analysis we have 6 reason. 1. Training and Class Establishment (BP) 2. Speakers or lecture (PEM) 3. Training or class Topic (TEMA) 4. Methods (CARA) 5. Entrepreneurship Value (WIRA) 6. Management Aspect (MAN) 7. Financial planning arrangement (PERK)

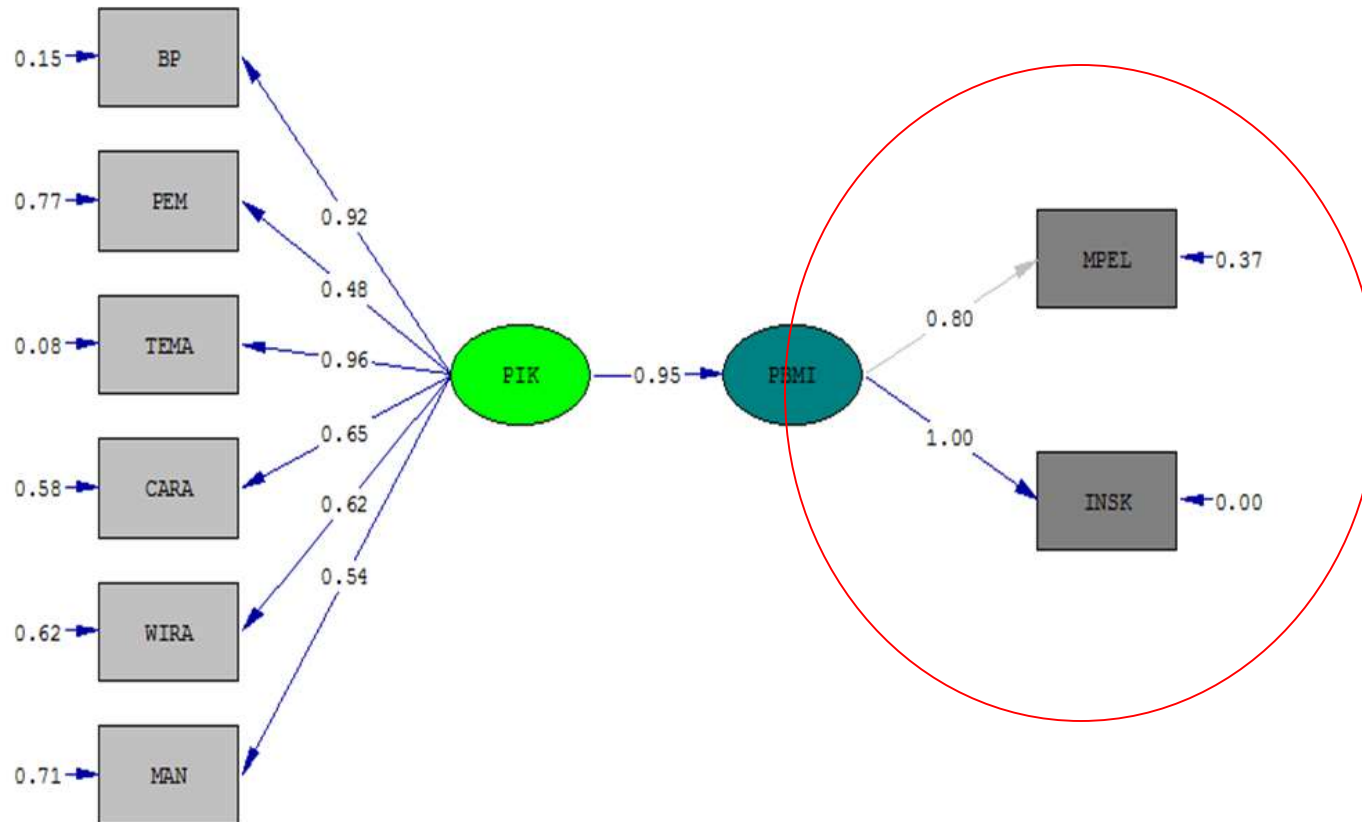


Full analysis of the results of the model indicate that the entire track has a value of  $t$  greater than 1.96 so declared significant, as are the lines between PIK against PBMI,  $t$  values obtained for 8.80 higher than 1.96 that stated significant statistics.

Great relationships formed is 0.95 or 95%



Great relationships formed is 0.95 or 95%, while the influence that occurred between PIK to PBMI amounted to 90.25%, which can be seen in the image below:





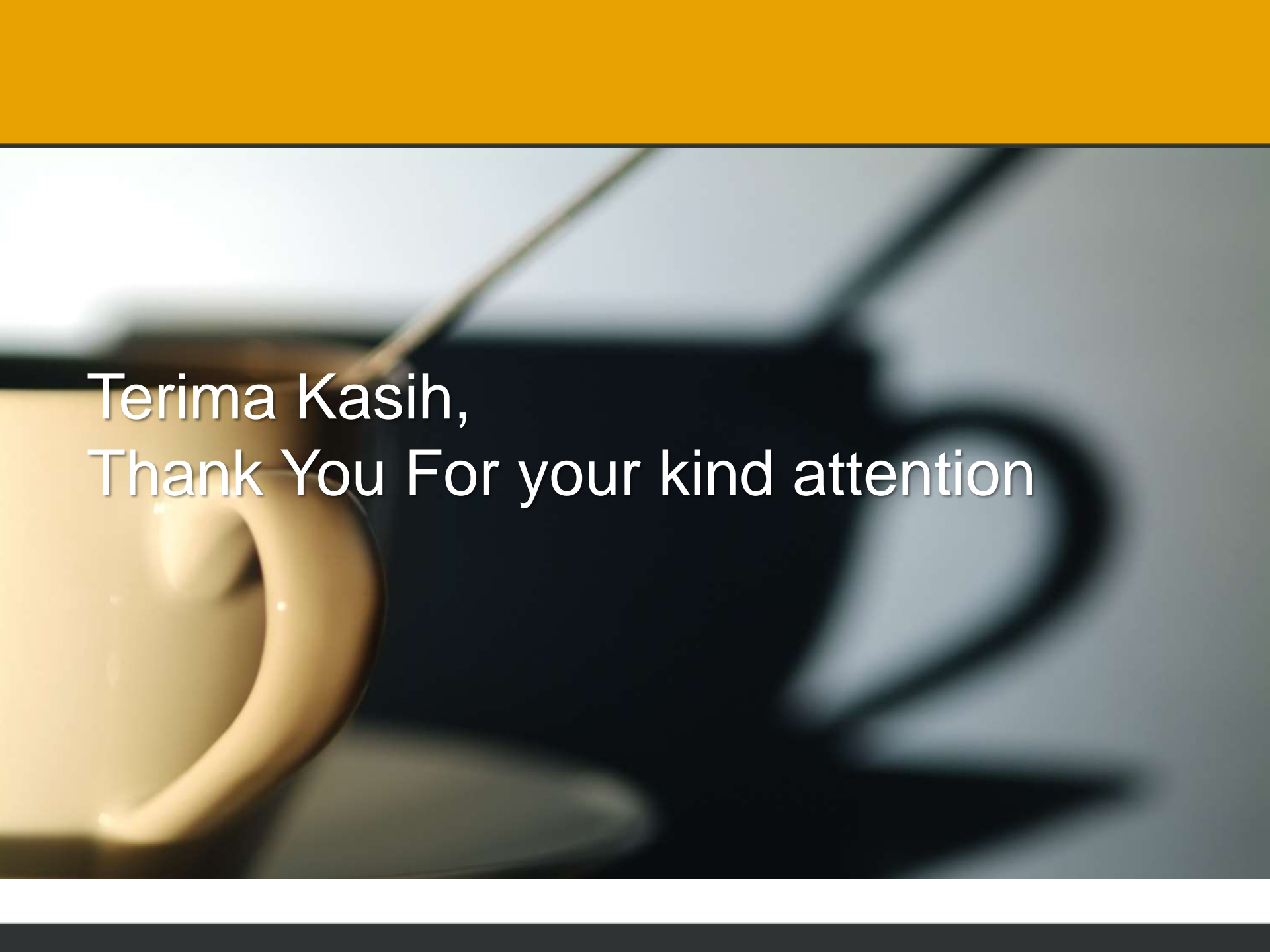
# Conclusion

- Model curriculum organized groups based on the assumption that some groups of work have relatively similar components as the basis for work higher employment and the source from former student (alumni)
- Competency-based curriculum model is done by an inventory of the competence of a job, position, or certain career by criteria adjusted in the learning process.
- Open curriculum model based reasoning that anything can be taught to all students, the learning process is individual, multi-entry and open exit, and more use of multi-media in learning process.
- Competency-based curriculum can be developed with a "field research "or with a" benchmark, adopt and adapt "as well as the combination of both. The "field research" done by conducting research in the field to collect primary data about the jobs that existed then formulated into draft competency standards, validated, tested, reviewed, socialized and set
- Research must doing in big sample and compare with panel data

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PLAN | INVEST | RETIRE

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Terima Kasih,  
Thank You For your kind attention