Influence of emploies age on their attitudes toward innovation process in Serbian firms

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Stoner believes that there are rules that encourage innovation:

- Company have to create climate of accepting changes, employees need to believe that the changes is good for business and for them;
- Company have to encourage new ideas, create atmosphere of their welcome
- Company have to enable more mutual contacts
- Tolerate failure, many of new ideas will be impractical or usefull
- Give clear objectives and the freedom for their realization
- Give recognition - creative people need to be motivated

Luecke and Katz (2003)

"Innovation . . . is generally understood as the successful introduction of a new thing or method . . . Innovation is the embodiment, combination, or synthesis of knowledge in original, relevant, valued new products, processes, or services.

Amabile et al. (1996) propose:"

"All innovation begins with creative ideas . . . We define innovation as the successful implementation of creative ideas within an organization. In this view, creativity by individuals and teams is a starting point for innovation; the first is necessary but not sufficient condition for the second".

Davila et al. (2006), write:

"Innovation, like many business functions, is a management process that requires specific tools, rules, and discipline."

"The Innovation Equation"

Innovation = Creativity * Risk Taking

For the purposes of this study, we constructed a questionnaire which we baptised INNOVATIVE POTENTIALS QUESTIONNAIRE.

The questionnaire consists of twenty one items on which subjects respond on five degree Lickerts scale.

		number	percent
	25 years old	18	8,7
	between 26 and 35 years	59	28,6
	between 36 and 45 years	62	30,1
	between 46 and 55 years	50	24,3
	over 56 years	17	8,3
	Total	206	100,0

Item	attitudes strenght	number
I like others in the company to think about the innovations	2,90	206
Each innovation in my company should postpone until we're confident that will bring desired results	3,27	206
Innovation should be introduced quickly and decisively, without a lot of thinking about the consequences because there is no success without risk	2,53	206
It is necessary to think well before introducing any innovation in the company	3,94	206
The introduction of innovation is necessary for the company survival and development	4,23	206
It is better to not introduce any innovations, but the exhibit company to risk	2,64	206
Innovations are good in itself, regardless of their outcome	2,71	206
I like to review new ideas and new approaches	3,80	206
The introduction of innovation in my company is possible but it is very important to be clear way of introduction	4,01	206
My company did not need any innovation, it is important that people in it work well	2,34	206
My company can count on me to find innovations	3,66	206
In my company there are adequate experts for creating innovations	3,37	206
Management of my company is capable of introducing innovations	3,53	206
People in my company are afraid of innovation	3,10	206
I think that it is better that the company included in the standard of its employees than in innovations	2,85	206
Innovation regardless of the investment brings profit to company	3,04	206
Today it is not possible the survival of companies without innovations	3,78	206
It is essential that the company included research funds for introducing innovation	3,93	206
Company must have partners that helps introducing innovations	3,46	206
Only completly original innovation have sense	3,11	206
Innovation must radically change the way work in the company to be successful	3,01	206

1. Table shows us that **most strength** attitudes of our respondents are that the introduction of innovation necessary for development and survival of their companies but management have to establish a clear rules for their introduction.

2. On the other hand, the **lowest intensity attitude** is that the company did not need any innovation and that it is important that emploies in it work well, and that innovation should be introduced quickly and decisively without a lot of thinking about the consequences.

Table 3: KMO and Bartlett's Test

	Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,687
Bartlett's Sphericity	Test	of Approx. Chi-Square	1112,915
		df	210,000
		Sig.	,000

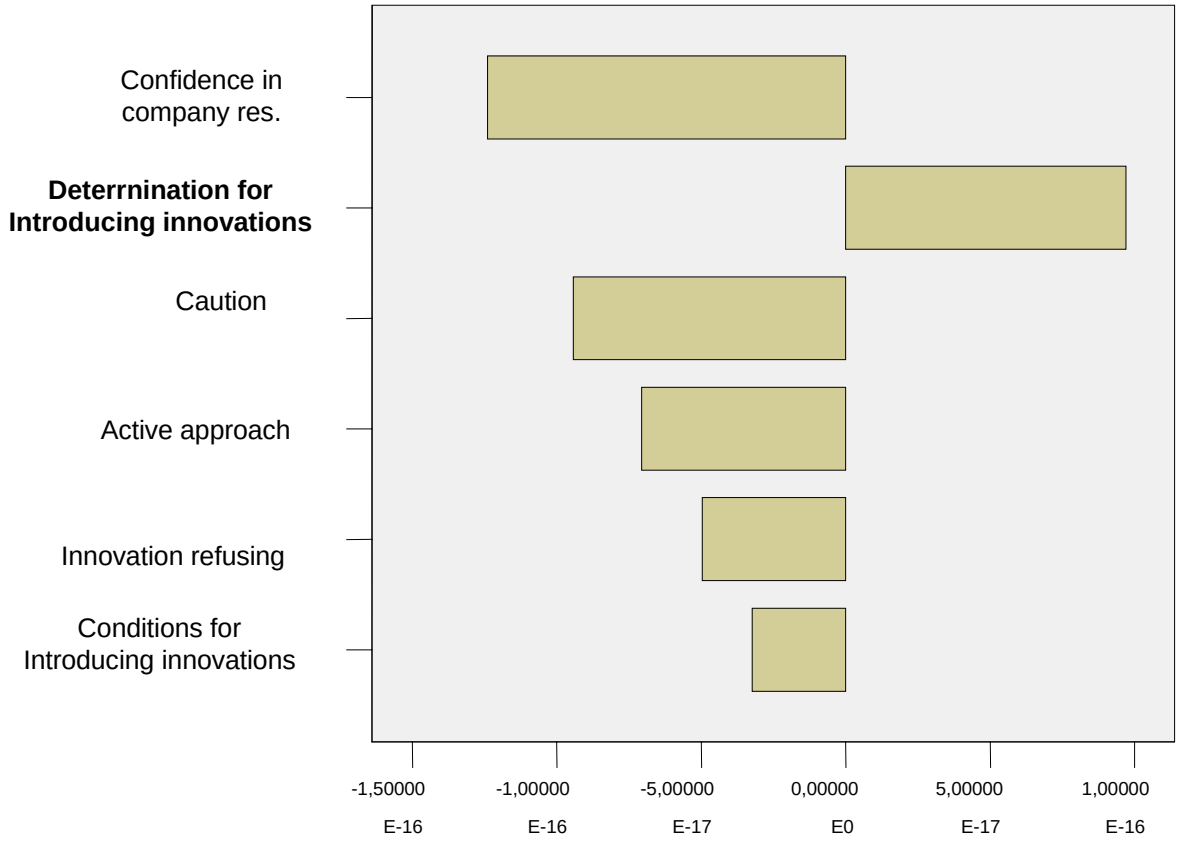
Our KMO value which is higher then 0,500 indicate that a factor analysis is useful and meaningfull tool for analyzing our data. Another indicator of the strength of the relationship among variables is Bartlett's test of sphericity. The observed significance level is .0000. It is concluded that the strength of the relationship among variables is strong and confirmed our decision to proceed a factor analysis on the collected data.

Extracted factors

1. CONDITIONS FOR INTRODUCING INNOVATIONS
2. INNOVATION REFUSING
3. ACTIVE APPROACH
4. CAUTION
5. DETERMINATION FOR INTRODUCING INNOVATIONS
6. CONFIDENCE IN COMPANY RESOURCES

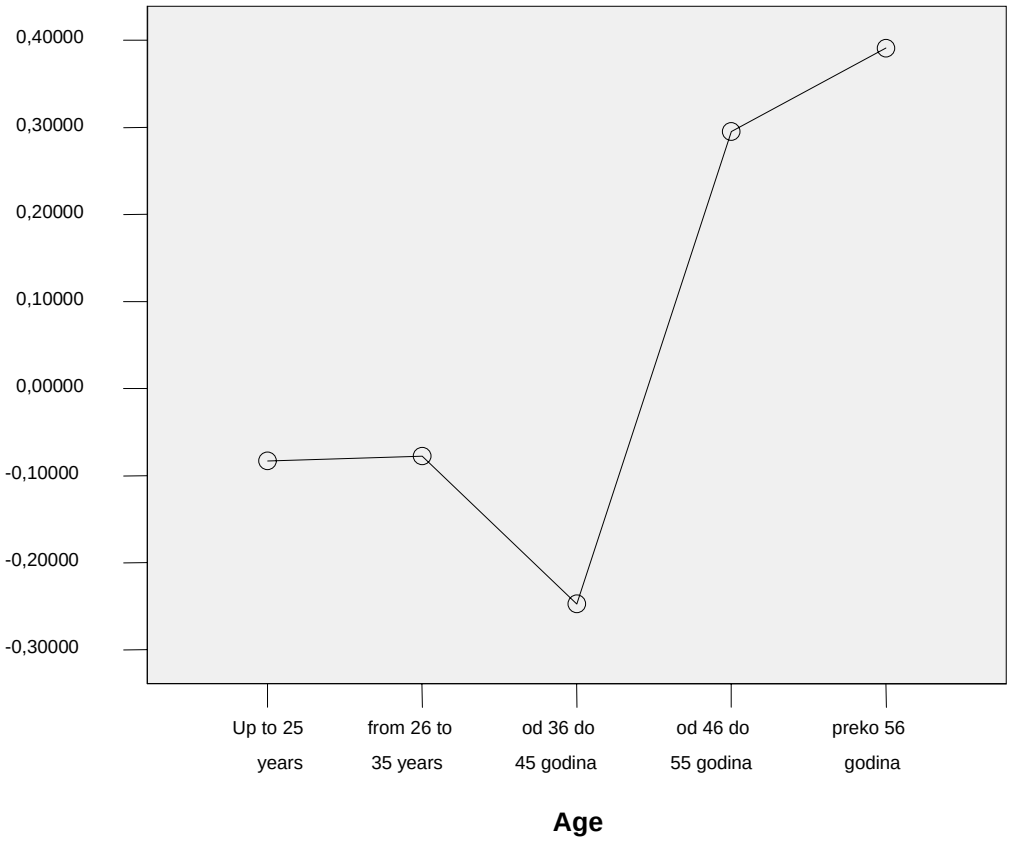
Factor scores

We can clearly see that our subjects have highest factor scores on factor DETERMINATION but the situation with other factors scores is not pink because they are lowest than absolutely factor scores average value. Factor scores on factor INNOVATION REFUSING is lower than average score, but we see that respondents have the lowest factor scores on factor CONFIDENCE IN COMPANIES RESOURCES for the implementation innovation. Also, they have low factor score on factor ACTIVE APPROACH towards participation in the innovative process or the creation of the innovation. All in all, this research shows us indirectly when we consider relations between factor scores that innovative climate in Serbian companies is not good and respondents consider their companies resources as largest obstacle for the innovation implementation.


Confidence in company res.
Deterrnination for Introducing innovations
Caution
Active approach
Innovation refusing
Conditions for Introducing innovations
-1,50000 E-16
-1,00000 E-16
-5,00000 E-17
0,00000 E0
5,00000 E-17
1,00000 E-16

Age influence

Performformed ANOVA on factor scores by independent variable age show us that age of respondents affect the factor score CONDITIONS FOR INTRODUCING INNOVATIONS (Table 5). Younger respondents have lower factor score on the factor than older respondents. It is interesting to note that respondents of 36 to 45 years have the lowest score and scores suddenly jumps in subjects over 46 years (Figure 3). Age of respondents does not affect on the scores of other factors.


0,40000
0,30000
0,20000
0,10000
0,00000
-0,10000
-0,20000
-0,30000
Up to 25 years
from 26 to 35 years
od 36 do 45 godina
od 46 do 55 godina
preko 56 godina
Age

Conclusions

1. The results clearly suggests to us that the latent structure from Serbian emploies attitudes toward innovations in their companies are very complex (six extracted factors) and they are predominantly emotional
2. Our finding suggest that some components of factor structure attitudes toward innovation in Serbia can be fitted in Innovation Equation on this way: Creativity is well described with our extracted factor ACTIVE APPROACH but Risk taking don't fit well with other extracted factors, only with DETERMINATION FOR INTRODUCING INNOVATIONS. Other extracted factors describes fear of innovation among Serbian emploies and shows us that fear mostly inhibit innovations.
3. Age influence on factor CONDITIONS show us that younger emploies in Serbia asking for changes in their companies but climate for them have to be immproved by proper managers actions. This managers proper actions will be araised from their proper understanding of the real nature of innovative process in the light of Amabilas definition of this process.
4. Also, it will be good if management in Serbian companies accept Davilas claims that innovation is a management process that requires discipline, rules and specific tools.