

# ActInPak

## **COST Action FP1405**

Active and intelligent fibre-based packaging – innovation and market introduction

## The perception of packaging innovations in Slovakia

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# Introduction



## The Department of Marketing, Trade and World Forestry:

- established in 1997 at The Faculty of Wood Science and Technology,
- research is focused to use eco-innovation aspects in packaging from the customers' perspective with a potential of wood based products usage,
- evaluation various areas that include eco-innovative aspects, and focus on the evaluation of the perception of innovation of main functions of packaging.



TECHNICAL UNIVERSITY IN ZVOLEN



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# Packaging industry in Slovakia

Smurfit Kappa - Packaging Štúrovo, inc. – one of the leaders in Slovakia:

- Smurfit Kappa has walked away with five of the most prestigious design awards from the internationally recognised Red Dot Award for Communication Design and for protective Wings' packaging solution,
- from over 17,000 entries from 46 different countries.



# Companies should:

- monitor changes in consumers taste when choosing their marketing and packaging,
- pay attention and connect it to the new technology of packaging.



# The aim:

- the perception of innovations of packaging functions by the Kano model in terms of the functions in Slovakia.



# Methodology

The principal method of the research for the perception of packaging innovations in terms of the functions is a method of the Kano model.

The responses are subsequently evaluated by two-factor analysis based on age categories. Based on the Kano model, the findings were included in the following categories according to how respondents perceived new packaging:

M – are obligatory requirements that customers consider as *normal and are automatically expected*.

O – are *one-dimensional requirements* that are represented by those product attributes that lead to fulfillment and satisfaction in the event of non-compliance to customers dissatisfaction

A – are *attractive requirements* that have a clear impact on customers satisfaction because it is a requirement that customers did not expect.

R – are *contradictory or reverse requirements*.

I – are requirements which do not have *any influence* on customers.

S – are *skeptical requirements*.

		Answer to the Dysfunctional Question				
		Like	Acceptable	No Feeling	Must-be	Do not like
Answer to the Functional Question	Like	S	A	I	A	O
	Acceptable	R	I	I	I	M
	No Feeling	R	I	I	I	M
	Must-be	R	R	R	R	M
	Do not like	R	R	R	R	S
	Other					

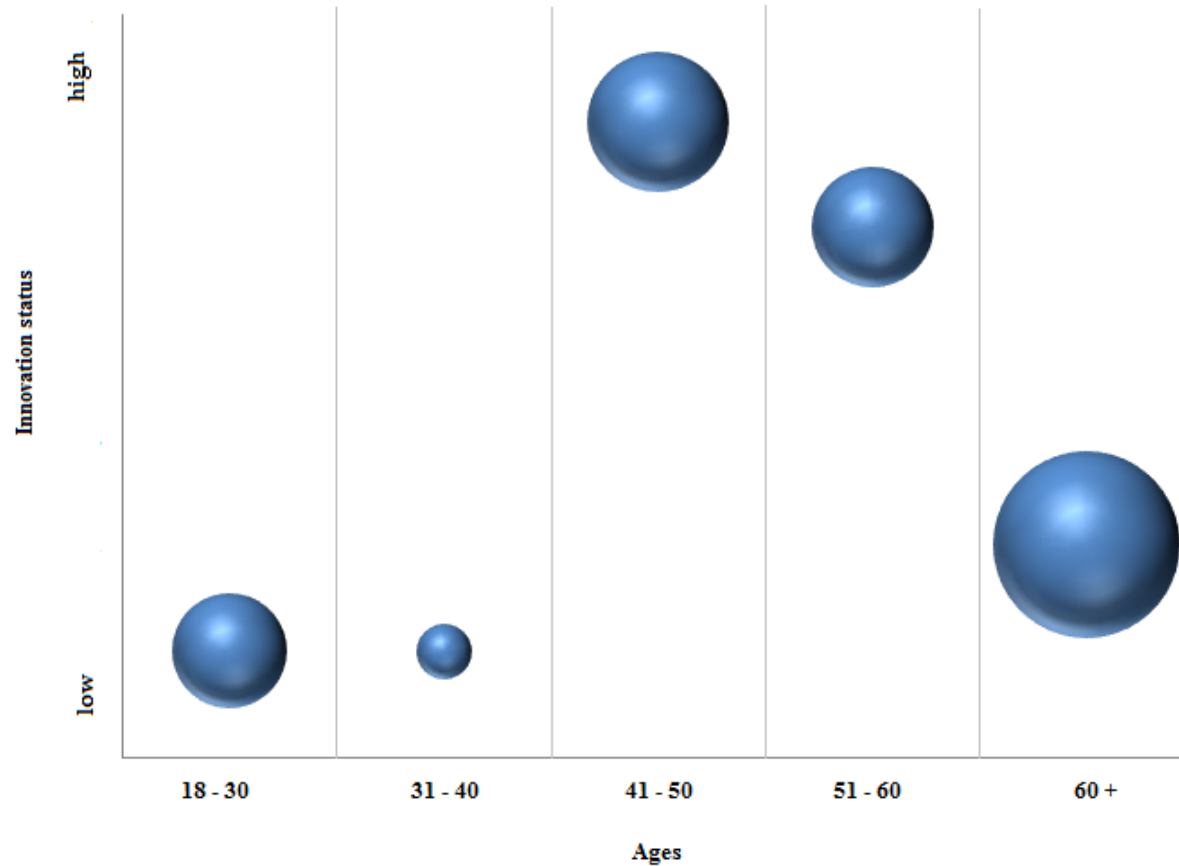
Legend:  
 O: One-dimensional Evaluation  
 A: Attractive Evaluation  
 M: Must-be Evaluation  
 I: Indifferent Evaluation  
 R: Reverse Evaluation  
 S: Skeptical (considered to reflect a mistake)

"Other" responses are ignored

# The calculation for the assembly nut typology

Ages	18-30		31-40		41-50		51-60		61+	
Handling function	I	0	R	-1	A	2	O	1	A	2
Protective function	I	0	O	1	O	1	O	1	I	0
Informative function	I	0	I	0	O	1	O	1	I	0
Economic function	I	0	I	0	I	0	O	1	I	0
Ecological function	O	1	O	1	A	2	O	1	I	0
Promotional function	I	0	I	0	I	0	I	0	I	0
Social function	I	0	I	0	I	0	I	0	I	0
Innovation status	1		1		6		5		2	
Handling function	48	0	48	-1	28	2	56	1	48	2
Protective function	52	0	36	1	44	1	32	1	44	0
Informative function	52	0	40	0	36	1	32	1	72	0
Economic function	52	0	48	0	48	0	56	1	25	0
Ecological function	32	1	36	1	40	2	24	1	64	0
Promotional function	60	0	36	0	44	0	56	0	52	0
Social function	68	0	64	0	64	0	48	0	44	0
Size impact	32 %		8 %		54%		40%		96%	

# Matrix of typology of perception of packaging innovations in terms of their functions by respondents





# Conclusion

- the differences in the perception of the innovation of packaging functions in various categories are significant,
- the majority of respondents agree that the packaging should be **ecological** and should meet the **informative** and **protective** functions.

## THE PERCEPTION OF RESPONDENTS OF PACKAGING INNOVATIONS IN SLOVAKIA

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**Abstract:** The paper deals with the evaluation of the perception of packaging innovations in terms of their functions through the Kano model. It focuses on the evaluation of the perception of innovation of all main seven functions of packaging, in particular on handling, protective, informative, economic, environmental, promotional and ecological packaging functions. The results indicate that the target groups interested in the new innovative packaging are mostly in age between 41 to 60 years. These groups have the highest requirements for new packaging. The innovations of handling functions of packaging have the most significant influence on the older generation. However, almost all ages categories positively recognize ecological innovations of packaging.

**Key words:** innovation, packaging, functions of packaging.

**J.E.L. CODES:** O31, O32

### Introduction

Companies should monitor changes in consumers taste when choosing their marketing and packaging. On the other side, companies must also focus on the attention to the new technology of packaging. In the past, there was a change in design about every 15 years, but now due to the market environment, it is much more often. Because of packaging, it is also possible to reveal the relationship of the companies with the environment and nature, for example by determining whether the companies use limited or recycled materials (Pajtinkova-Bartakova, Gubiniova, 2012; Supin, 2009; Palus, 2004). Therefore it is not only important to create packaging but also there is a responsibility of how it can be re-used, i.e. recycling.

By 2030, the European Commission also recommended to increasing the recycling of municipal waste at least to 70% and recycling of packaging waste to 80 %, whereas 90 % is reported for the paper, 80 % for plastics, and 90 % for wood,

# THANK YOU FOR ATTENTION.

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