

**DIGITALISATION AND CIRCULAR ECONOMY:
forestry and forestry based industry implications**

12th International Scientific Conference WoodEMA 2019

Varna, September, 11-13, 2019

▶ **DIGITISATION IN
FOREST INDUSTRY IN
BULGARIA - STATE AND
PERSPECTIVES**



**Radostina Popova
And
Daniela
Ventsislavova
Georgieva**



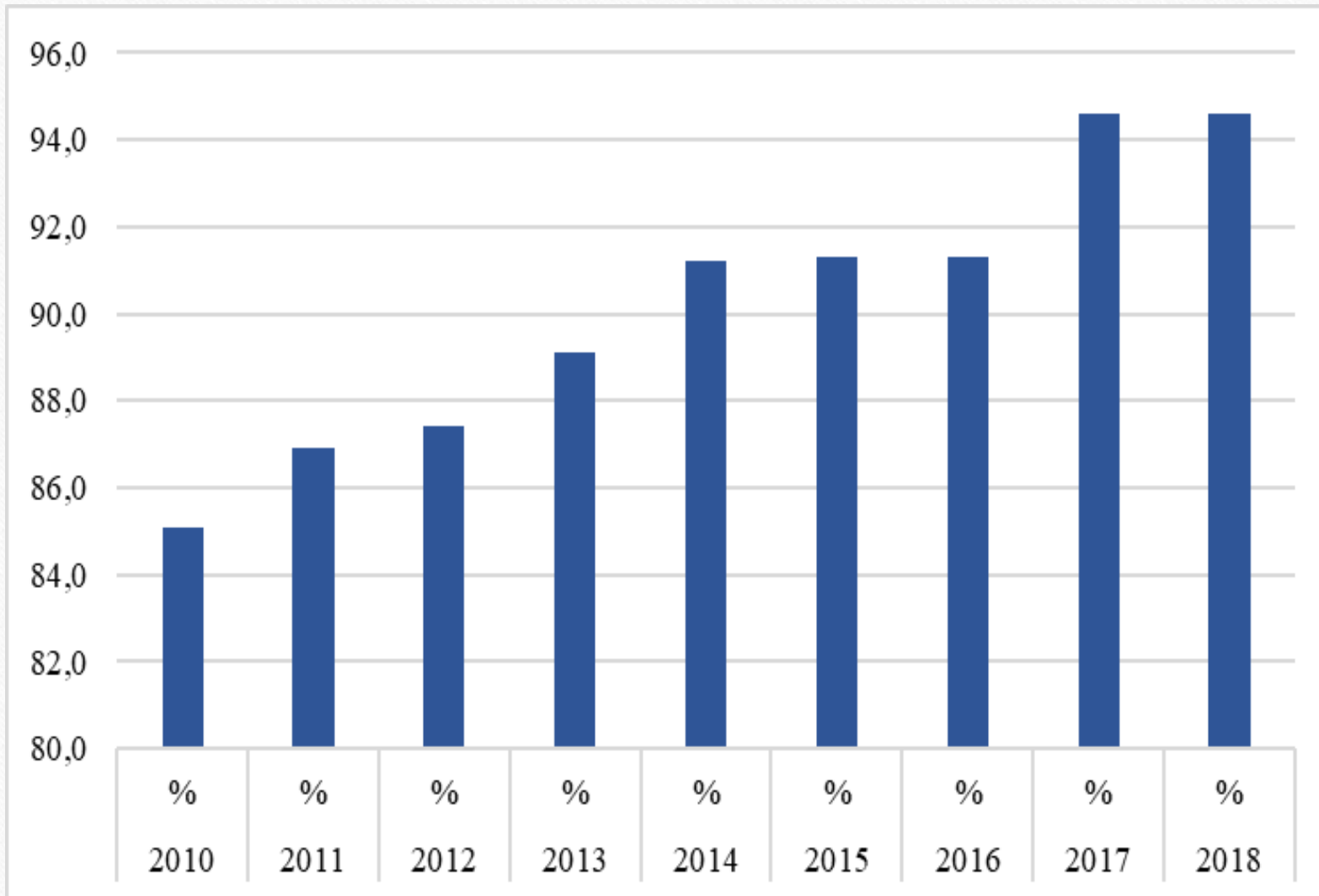
Agenda

1. Introduction
2. Current state of the "digital economy" in Bulgaria
3. Digitisation in the forestry based industry in Bulgaria
 - 3.1. Profile of the Forest industry in Bulgaria and state of the problem
 - 3.2. Good practices of furniture manufacturers, operating at the territory of Bulgaria
4. Conclusions

Introduction

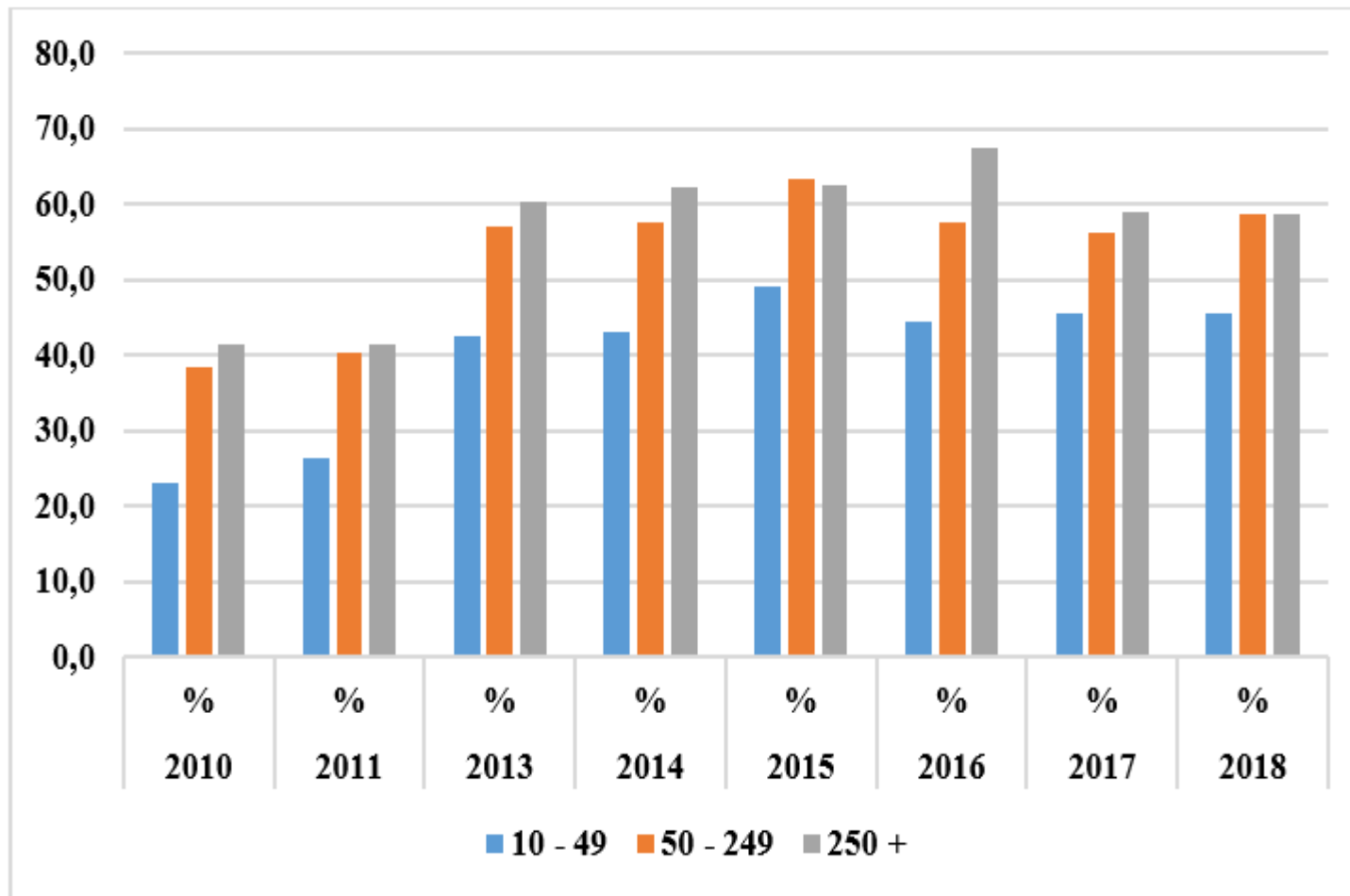
- A main goal - to outline the current state, trends and challenges ahead of the Bulgarian forestry enterprises, which comes from the implementation of digital tools and online business solutions.
- An object - the level of digitisation, based on the implementation and use of online-based applications and electronic catalogs; specialized information-communication and management systems and networks; office applications and warehouse management software.
- A subject - publications in the specialized literature, statistical data analysis and analysis of collected primary information from in-depth interviews with managers of large-scale forestry enterprises.

ENTERPRISES HAVING ACCESS TO THE INTERNET



92.1% of enterprises participating at the survey use computers and Internet. 61.8% of those which use Internet have fixed or broadband connection. Nearly 91.4% of the enterprises state that a major factor for using Internet in the organization is the need for online interaction with the government institutions.

ENTERPRISES SENDING AND/OR RECEIVING E-INVOICES



23.1% of the surveyed enterprises have a website and 17.1% offer possibility for online orders to their customers. 25.7% have business processes, which are automatically linked to those of their suppliers and customers. 37.1% of prepare and issue electronic invoices to their clients while 34.3% use social media.

Indicator	Name of enterprise					
	Mebel Still	Videnov	Kronoshpan	Kastamonu	Irelly	Ted Bed
Use of computers and Internet						
E-mail	✓	✓	✓	✓	✓	✓
Website	✓	✓	✓	✓		✓
Electronic catalog	✓	✓	✓	✓		✓
E-shop		✓				✓
Virtual tour with pricing option		✓				✓
Internet advertising		✓				✓
Internal processes						
Integrated systems ERP type	✓	✓	✓	✓		✓
Specialized systems CRM, SCM type			✓			✓
Computer systems, office packets and networks	✓	✓	✓			
Enterprise relationships with customers, suppliers and third parties						
Stock management systems		✓		✓		
Digital supply chain management and supplier relationships		✓				✓
Electronic forms of orders or other information systems between suppliers and enterprises		✓	✓		✓	
Unique and automated product identification throughout the supply chain		✓	✓	✓		✓

Table 1. Use of digital tools in the largest forest industry enterprises in Bulgaria

<i>E-skills of individuals/Year</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>
	%	%	%	%	%	%	%	%
Copying or moving a file or folder	.	40,6	41,3	.	50,6	43,9	38,5	44,3
Using word processing software	29,6	25,7	27,9
Using spreadsheet software	15,6	14,1	16,4
Using copy and paste tools within a document	.	33,8	35,1	.	45,8	.	.	.
Using basic arithmetic formulas in a spreadsheet	.	21,8	22,1	.	27,5	.	.	.
Transferring files between computer and other devices	.	22,2	25,6	.	32,7	42,1	36,3	44,4
Creating electronic presentations with presentation software (e.g. slides), including e.g. images, sound, video or charts	.	6,4	6,9	.	9,1	17,8	14,0	15,0
Using a search engine to find information	45,4	48,8	.	56,3	.	.	.	.
Sending e-mails with attached files	32,2	36,7	.	41,7	.	.	.	.
Uploading text, games, images, films or music to websites (e.g. to websites for social networking)	.	19,0	.	22,7	.	.	.	.

Conclusions

- The survey results of the level of digitisation of Forest sector enterprises in Bulgaria shows better performance than that on the national average, based on officially used assessment indicators in the EU.
- Entities efforts should be focused on: using the online furnishing and pricing options of enterprise sites; the optimization of supply chain and supplier relationships; the exploiting the potential of digital marketing and advertising.

Thank you for your attention!

Daniela Georgieva

E-mail: dgeorgieva@ibsedu.bg

Radostina Popova

E-mail: radost.k.popova@abv.bg

Any questions...

