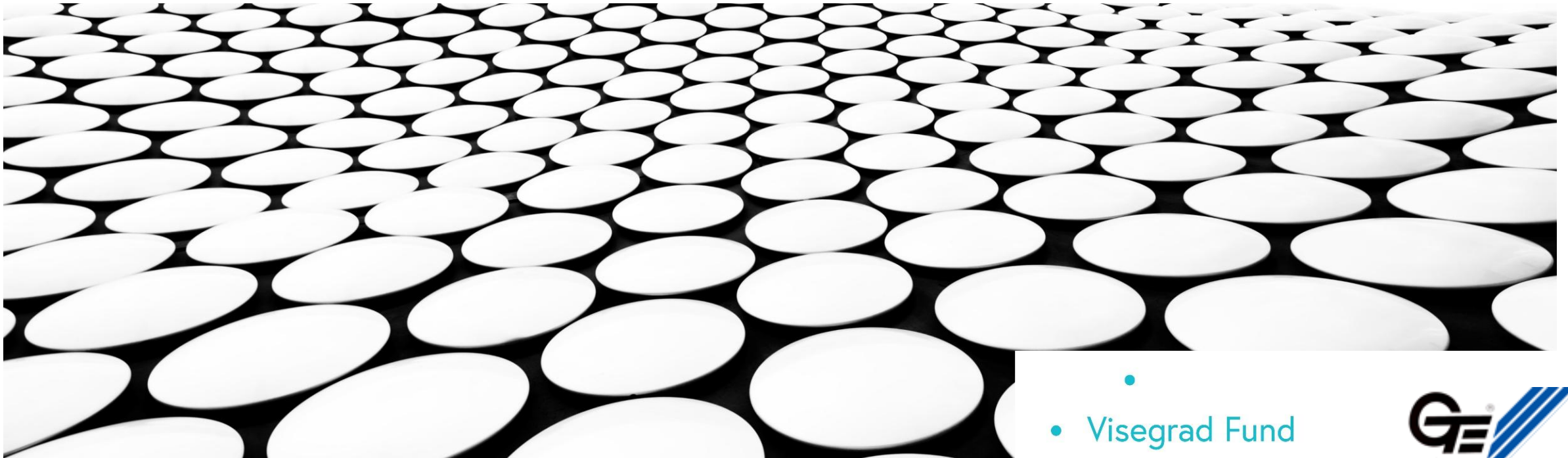


Improving Demand Forecasting Education in Turbulent Times and Beyond at Industrial Environment

János Mondovics - GTE



Visegrad Grant No. 22520049



FLASH SURVEY ON FORECAST QUALITY BASED ON A SMALL SAMPLE

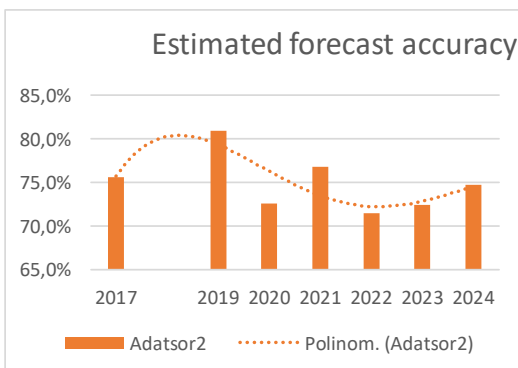
POLAND, HUNGARY, SLOVAKIA – 2025

Hungary

forecast accuracy	std. deviation
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Average	75,6%	13,9%
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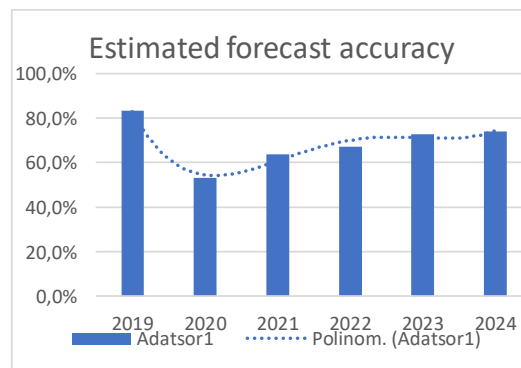
Above average	80,9%	10,9%
Below average	72,5%	16,3%
Average	76,8%	10,1%
Below average	71,5%	21,1%
Below average	72,4%	19,3%
Average	74,7%	18,6%



Poland

forecast accuracy	std. deviation
-------------------	----------------

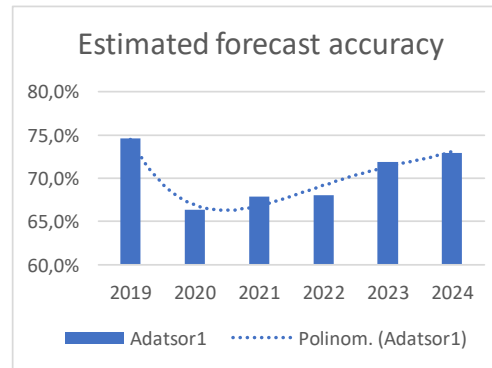
Good	83,1%	5,4%
Underperformer	53,1%	9,7%
Underperformer	63,6%	10,0%
Underperformer	67,1%	9,1%
Below average	72,6%	12,6%
Average	74,1%	12,3%



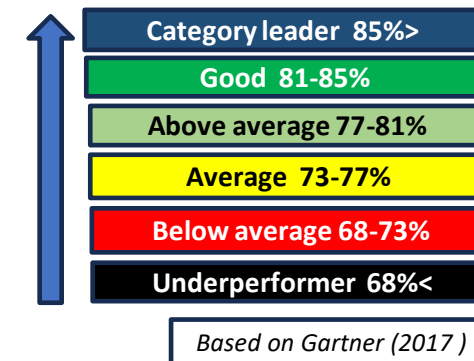
Slovakia

forecast accuracy	std. deviation
-------------------	----------------

Average	74,6%	8,8%
Underperformer	66,4%	8,7%
Underperformer	67,9%	9,2%
Below average	68,1%	11,3%
Below average	71,9%	8,7%
Below average	72,9%	9,4%



by 2017 ('year of peace')
by 2019 (the last 'year of peace')
by 2020 (the first pandemic year)
by 2021 (the second pandemic year)
by 2022 (the third pandemic year and the first year of war)
by 2023 (the second year of war)
by 2024 (the third year of war)



“Today’s economic environment is shaped by more-than-average factors that increase volatility and risk. There are unexpected turning points that can rapidly change what previously seemed to be a stable environment, making business conditions unstable. We can think of war situations, natural disasters, pandemics, and other events that can cause significant disruption. In the current situation, holders of capital and investors are paying increased attention to their savings and are carefully analysing their options. **Planning and impact assessment of expected processes** play a key role in establishing the long-term competitiveness of companies.”

(Dr. Ibolya Szentesi – Dr. Imre Túróczi – Dr. Róbert Tóth: Application of Sensitivity Analysis in Practice; Controller Info, 2023)

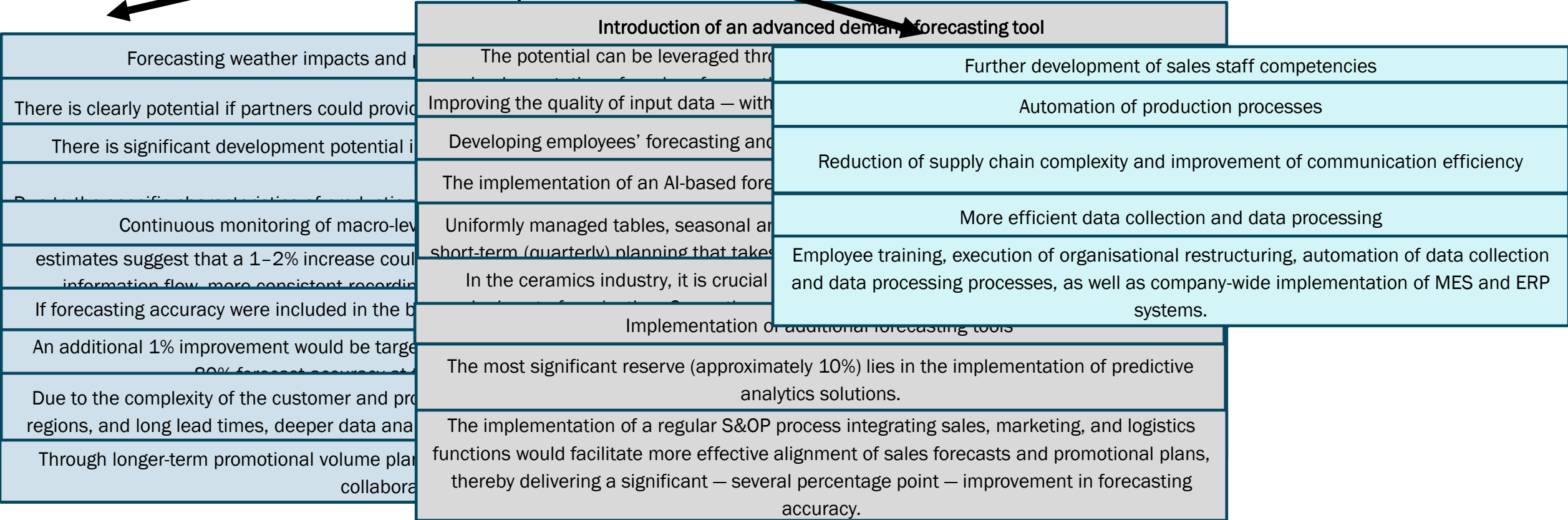
ASSESSMENT OF CHARACTERISTICS TYPICAL OF FORECASTING CULTURE

IN POLAND, HUNGARY, AND SLOVAKIA – 2025 (2)

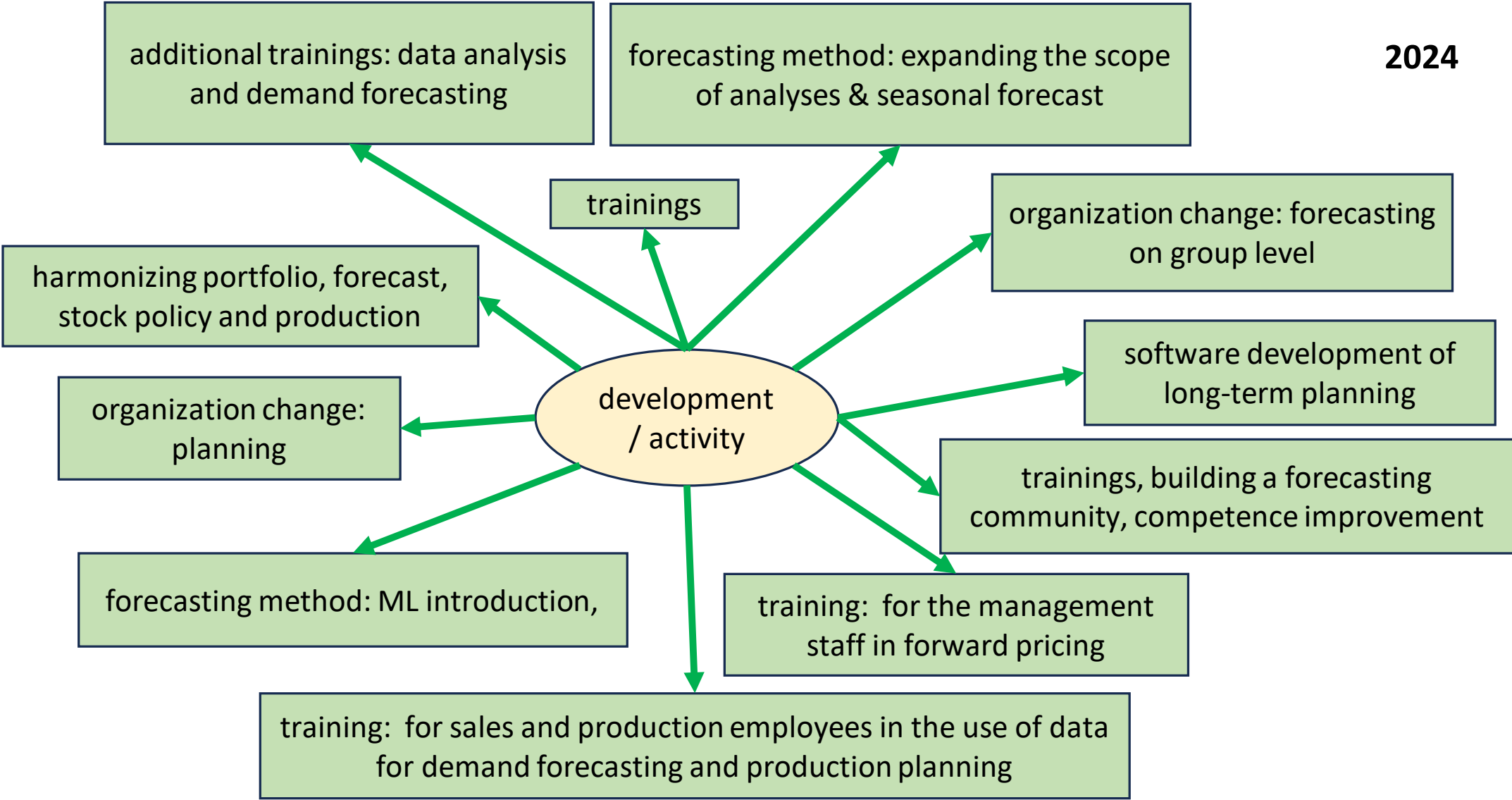
Improvement potential in forecasting practice

	HU	POL	SLO	average
Estimated potential improvement in forecast accuracy compared to the current performance in the sample (%)	7,67	5,87	9,41	7,65

Opportunities to exploit this potential from the respondents' perspective



DEVELOPMENT ACTIVITIES IMPLEMENTED BY RESPONDENTS IN INDIVIDUAL YEARS IN LINE WITH CHANGES IN EXTERNAL CONDITIONS (2019–2024)



MODUL MAP

work package 1.docx

Comprehensive Survey Report on Demand Forecasting Practices in V4 Countries



**Module 1 – Integrating Traditional and Advanced Forecasting Methods /
Systems Thinking in Forecasting**



Modul 2 - Support for Forecasting



Modul 3 - Advanced Forecasting Environment

Modul 1 - Integrating Traditional and Advanced Forecasting Methods / Systems

Thinking in Forecasting

Task 2 Modul 1 Chapter 1 ver 5.pptx ✓

Introduction to Forecasting: Concept, common challenges, and key lessons learned from the surveys; exploration of emerging trends, with particular emphasis on the growing importance of short-term forecasting.

Task 2 Modul 1 Chapter 2 ver 3.pptx ✓

Sources of Forecast Inaccuracy: Identifying the most common forecasting errors, including errors that generate additional costs and their consequences.

Task 2 Modul 1 Chapter 3 ver 5.pptx ✓

Preparatory Processes: Understanding the logic and structure of forecasting through basic analyses.

Task 2 Modul 1 Chapter 4 ver 4.pptx ✓

Forecasting Methods: Detailed insight into qualitative and quantitative techniques tailored to specific organizational objectives and market dynamics.

Modul 2 - Support for Forecasting

Task 3 Modul 2 Chapter 1 ver 5.pptx ✓

SCM Relationships and Inventory Management Implications: The interaction between SCM and inventory management, emphasizing the role of forecasting in reducing inventory risks and optimizing inventory levels.

Task 3 Modul 2 Chapter 2 ver 3.pptx

Forecasting and Evaluation Algorithms: Key algorithms and manual exercises, practical examples and tasks; evaluation of forecasts and their alignment with organizational objectives.

Task 3 Modul 2 Chapter 3 ver 2.pptx

Forecasting-Related Functions (BI and CRM): Business Intelligence (BI) and Customer Relationship Management (CRM) systems play a key role in modern forecasting: these tools provide insights into market trends and customer behavior, as well as strategies for analyzing and understanding changes in forecasts.

Task 3 Modul 2 Chapter 4 ver 4.pptx

The Role of the Demand Planner: The importance of the demand planner in the forecasting process; understanding forecasting as a collaborative, cross-functional task.

Task 3 Modul 2 Chapter 5 ver 3.pptx

Auditing and Improving Forecasting Culture: Evaluation of the organization's forecasting processes and culture, including the analysis of existing workflows and the identification of gaps.

Modul 3 - Advanced Forecasting Environment

Task 4 Modul 3 Chapter 1 ver 3.pptx

Software Solutions: The application of Excel, SPSS, and SAS for forecasting purposes, demonstrating their use in data analysis, information generation, and decision-making support.

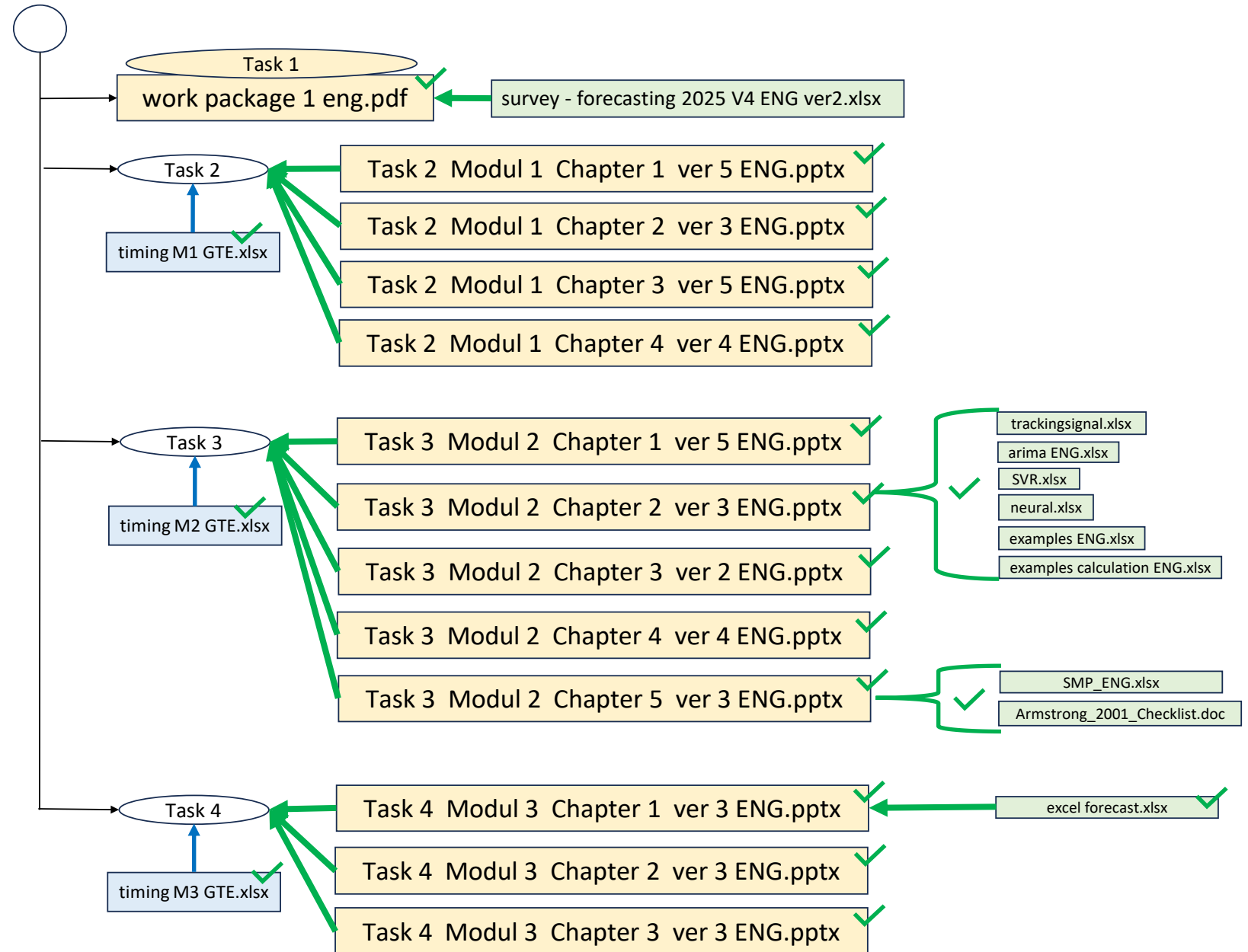
Task 4 Modul 3 Chapter 2 ver 3.pptx

Predictive Techniques for Loss Reduction: Methods for reducing costs and improving time utilization through more accurate forecasting; minimizing resource waste while maintaining operational efficiency.

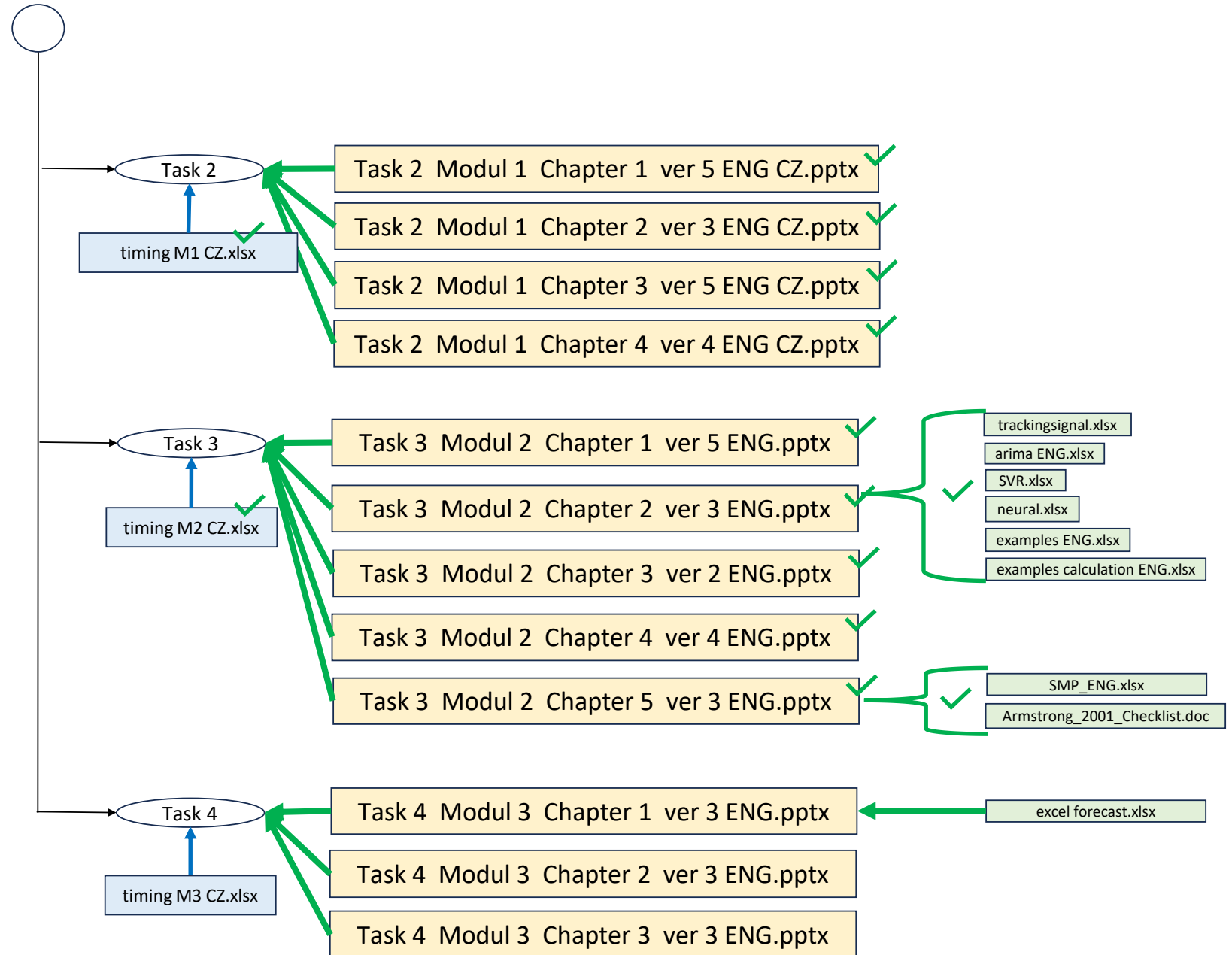
Task 4 Modul 3 Chapter 3 ver 3.pptx

Machine Learning in Forecasting: The module highlights the application of machine learning in short-term forecasting, with particular emphasis on its ability to recognize patterns, predict trends, and adapt to market changes; the strategic advantages of machine learning in modern forecasting practice.

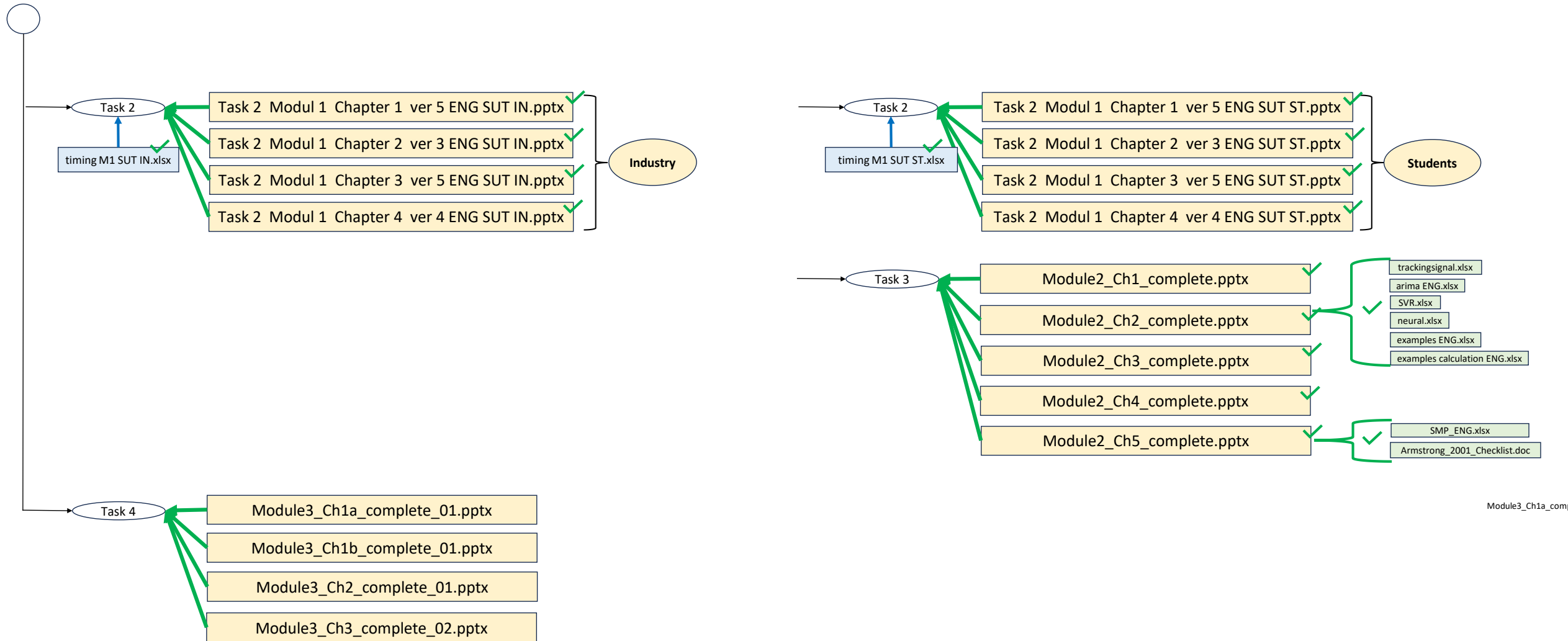
Map of the versions – GTE (master - Hungary)



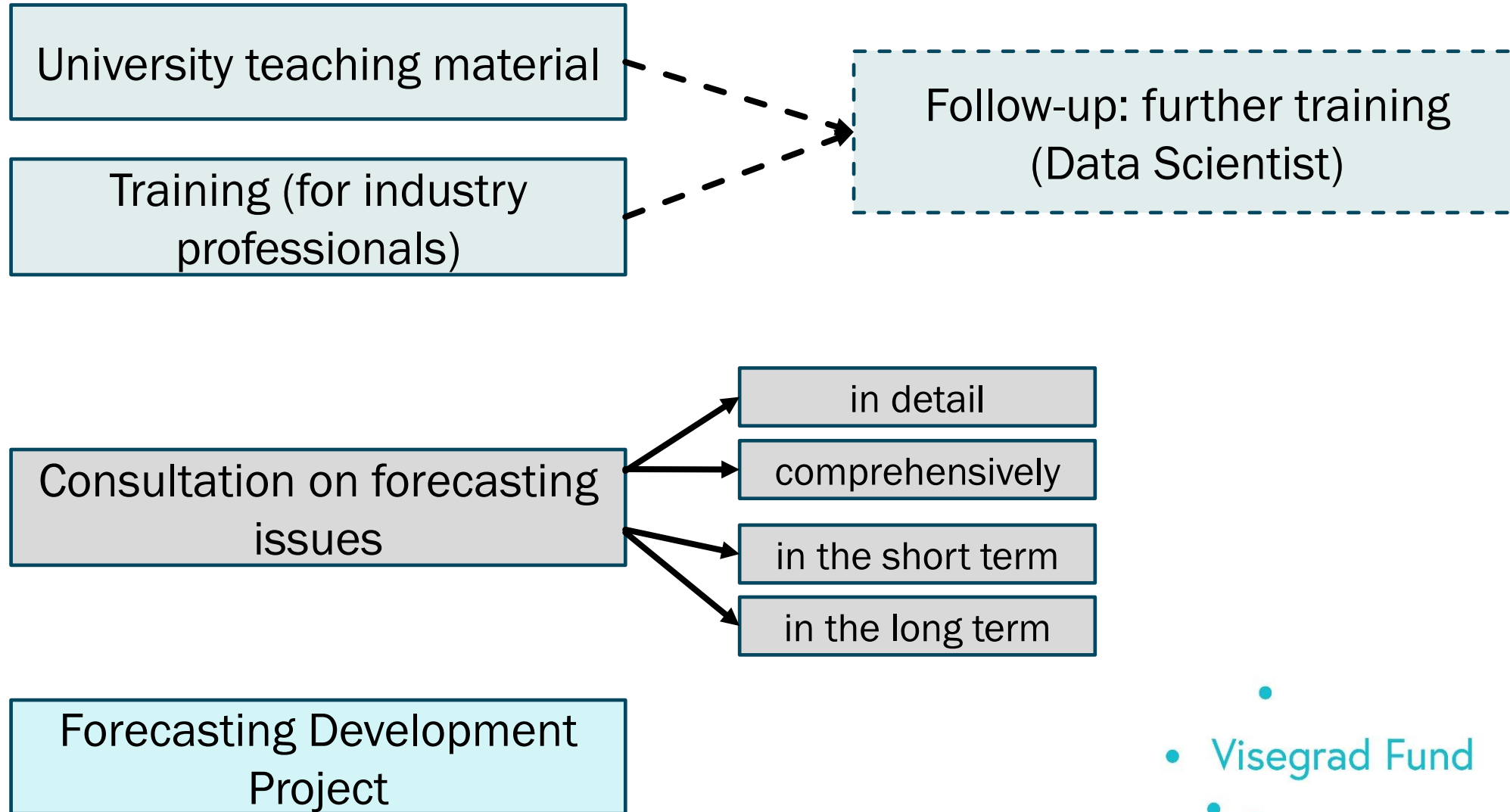
Map of the versions – Czestochowa (Poland)



Map of the versions – Trnava (Slovakia)



POTENTIAL PROJECT OUTPUTS



Visegrad Grant No. 22520049

