APPROVED
First Vice-President
of the Kazakh-American
Free University
_____ Zh.Ye. Baikenov
«31» _____ 2026

ACT OF IMPLEMENTATION

of the results of the doctoral research on the topic
«Managing sustainability-related complexity in supply chains: A capability-based managerial framework for organizational response»

Kazakh-American Free University
Department of Business

Alexander Neske

Place of implementation: Kazakh-American Free University, Department of Business, Ust-Kamenogorsk, Republic of Kazakhstan.

Form of implementation: teaching material based on the results of the dissertation for the course «Logistics» in the educational programme 6B04101.

Date of implementation: 1 September 2026.

Object of implementation. Four results of the dissertation have been introduced into the educational process:

1) the taxonomy of Packed Business Capabilities across the four domains Strategy, People, Process and Technology;

2) the Organizational Response Model with its two routing conditions — perceptual convergence of requirements and prevalent cross-firm orchestration — and its four response types: Internal-first, Co-Developer, Selective Joiner and Collaborative-first;

3) the Capability Maturity Score, anchored to 30 GRI disclosures, with a three-level assessment of each disclosure: absent — described — evidenced;

4) the documented procedure of qualitative content analysis: the codebook and the rule that every finding is anchored to a specific page of the source.

Educational effect of the implementation. The teaching material introduces students to the analysis of how companies in the Republic of Kazakhstan organise their response to sustainability requirements. The analysis builds on the taxonomy of Packed Business Capabilities and on the Organizational Response Model with its routing conditions and response types.

Students apply the Capability Maturity Score to the published reports of companies operating in Kazakhstan: they score each disclosure as absent, described or evidenced, anchor every score to a page of the report and compare the domain profiles of the companies. The results of the dissertation for 20 reports of 11 Kazakhstani companies serve as the reference case, including the finding that the Process domain is the weakest domain in 15 of the 20 reports (mean 49.6 against 91.8 for the Strategy domain on a scale from 0 to 100).

The material links the company analysis to the national framework, namely the Environmental Code of the Republic of Kazakhstan, the Concept for the transition of the Republic of Kazakhstan to a Green Economy, the Strategy for achieving carbon neutrality until 2060, the ESG disclosure guidance of the Astana International Financial Centre and the ESG Data Platform of the Kazakhstan Stock Exchange.

The applied part of the dissertation is additionally used in the coursework: the recommendations for building organizational capabilities over the 90-day and 12-month horizons for each response

type, together with the definitions of the managerial indicators — time-to-mitigation (T2M), auditable tier coverage (ATC) and coordination cost per covered spend (CC/S). On this basis students formulate and justify their own recommendations for a specific company.

The use of the material develops the students' ability to assess the quality of corporate sustainability information, to argue on the basis of documented evidence and to formulate recommendations for Kazakhstani companies. The documented coding procedure serves as a methodological model for the students' systematic literature reviews and coding tables in their term papers and graduation theses.

Special notes: the teaching material is used in the educational process of the Department of Business of the Kazakh-American Free University.

Developer: Alexander Neske

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