

## INFORMATION ON NEW CONCLUSIONS OF DOCTORAL DISSERTATION

*(Information will be posted on the Website)*

**Name of dissertation:** *A Study on the Factors Affecting Green Logistics in Vietnamese Industrial Enterprises*

**Major:** Business Administration - **Code No:** 9340101

**Name of PhD. Student:** PHAM Thuy An

**Advisors:**

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**Training Institution:** Electric Power University

### **Summary of new contributions of the Dissertation**

Based on the research findings, the dissertation identifies new contributions in three aspects: (i) novelty in methodological approach, (ii) novelty in research methods, and (iii) novelty in research findings and practical implications. These contributions help expand the understanding of the mechanism for implementing green logistics practices in industrial manufacturing enterprises in Vietnam.

#### **I. Novelty in methodological approach**

##### ***1. Developing an integrated approach to explain green logistics practices***

The dissertation develops an integrated analytical framework that combines external factors (customer pressure and regulatory/legal pressure) with internal factors (green intellectual capital and digital transformation) to explain the formation and implementation of green logistics practices (GLP). The novelty of this approach is that it does not examine each group of drivers separately, but places them within one unified model to provide a more comprehensive explanation of the drivers of GLP in industrial manufacturing enterprises in Vietnam.

##### ***2. Clarifying the role of GLP as a central implementation mechanism***

Instead of only identifying which factors affect GLP, the dissertation clarifies that GLP plays the role of a central implementation channel through which a firm's internal capabilities are transformed into operational performance and environmental performance. This approach shifts the focus from simply identifying relationships to explaining the impact mechanism in a more systematic way.

### ***3. Establishing the role of digital transformation as a supporting and strengthening condition***

The dissertation does not treat digital transformation (DX) as a technical factor that can automatically create environmental outcomes. Instead, it identifies DX as a supporting condition that helps enterprises convert green knowledge resources into specific green logistics practices. At the same time, DX also strengthens the extent to which green intellectual capital is translated into GLP, thereby reflecting the logic of the “dual transformation” process between greening and digitalization.

### ***4. Adding a combined perspective between the resource-based view and institutional theory***

Based on the empirical findings, the dissertation provides a conditional perspective on the interaction between “capability-based” mechanisms and “pressure-based” mechanisms in the implementation of green logistics. From this, the study suggests a possible linkage between the resource-based view (RBV) and institutional theory (IT) in green logistics research in emerging economies.

### ***5. Clarifying the prominent role of green relational capital in the structure of green intellectual capital***

Within the structure of green intellectual capital (GIC), the dissertation clarifies the prominent role of green relational capital (GRC) as an important capability base that helps enterprises strengthen connections with supply chain partners, thereby supporting the more effective implementation of GLP. This is a new point that makes the content of GIC more specific in the context of industrial manufacturing enterprises.

## **II. Novelty in research methods**

### ***1. Testing a complex PLS-SEM model within one unified analytical framework***

The dissertation tests a complex PLS-SEM model that simultaneously includes higher-order constructs, mediating relationships, moderating relationships, and moderated mediation relationships. This design makes it possible to examine impact relationships and transmission mechanisms at the same time within one research framework, instead of analyzing them separately.

### ***2. Conducting a robustness check with an extended model to classify the nature of the mediation mechanism***

A notable methodological contribution is that the dissertation conducts a robustness check through an extended model that adds direct effect paths. This approach allows for a clearer classification of the mediation role of GLP in line with modern SEM approaches, rather than only confirming the existence of indirect effects.

### ***3. Using bootstrapping and bias-corrected confidence intervals (BCa) to infer impact mechanisms***

The indirect effects, moderating effects, and moderated mediation effects are examined by using bootstrapping together with bias-corrected confidence

intervals (BCa). This approach is consistent with modern methodological recommendations in SEM analysis and helps increase the reliability of the interpretation of impact mechanisms.

#### ***4. Adapting and validating measurement scales for the context of industrial manufacturing enterprises in Vietnam***

The dissertation implements a process of translation, adaptation, and validation of the measurement scales for the core constructs in the context of industrial manufacturing enterprises in Vietnam. This helps ensure that the measurement instruments are appropriate for the specific research setting, rather than mechanically applying scales from other contexts.

#### ***5. Adding two new observed variables to better reflect the operational characteristics of the surveyed enterprises***

Through the process of reviewing and refining the measurement scales, the dissertation adds two new observed variables. As a result, the measurement instrument better reflects the actual characteristics of green logistics implementation in the surveyed enterprises. This is a meaningful contribution in terms of measurement and also provides a useful reference for future studies in similar contexts.

### **III. Novelty in research findings and practical implications**

#### ***1. Providing empirical evidence of the simultaneous impact of GLP on operational and environmental outcomes***

The dissertation provides empirical evidence that green logistics practices have positive effects on both operational performance (OP) and environmental performance (EP). This finding strengthens the argument that green logistics is not only a compliance-based response, but can also create operational value for enterprises when it is implemented appropriately.

#### ***2. Demonstrating that digital transformation does not automatically create environmental outcomes***

Through the robustness check, the dissertation shows that digital transformation does not directly and automatically generate environmental performance. Instead, its main effect comes through promoting the implementation of GLP. This is an important finding because it clarifies that the value of digitalization for green goals depends on how enterprises connect digitalization with specific management and operational practices.

#### ***3. Confirming the decisive role of internal capabilities in creating green and operational outcomes***

The research findings show that environmental and operational benefits depend greatly on the ability of enterprises to develop and transform internal capabilities, especially green intellectual capital and digital transformation, into specific green logistics practices. This finding helps clarify the managerial focus in implementing green logistics in industrial manufacturing enterprises.

***4. Suggesting practical implications based on the combination of enforcement requirements and supporting conditions***

From the empirical findings, the dissertation suggests that promoting green logistics effectively should not stop at increasing compliance pressure. It should be designed in a way that combines enforcement frameworks with supporting conditions so that enterprises can strengthen their capabilities, reduce transition costs, and expand the implementation of GLP in a more sustainable manner. This provides a valuable reference for business managers.

**Advisors**

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