Cultivating Resilience in a Volatile Market: A Case Study of DHL Global Forwarding's Strategic Adaptation during the Global Energy Crisis.

My Linh Hoang

156123155

Dissertation written under the supervision of Professor Ricardo Reis

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Abstract

This thesis explores the strategic responses of DHL Global Forwarding (DGF), a leading player in the freight forwarding industry, to the energy disruption between 2021 and 2023. During this period, the global freight transport sector faced significant challenges, including record-high freight rates, fluctuating trade volumes, and widespread port congestion. DGF, in turn, contended with reduced freight demand and pressures on service performance. Using a qualitative case study approach that integrates secondary data with insights from interviews with senior DGF executives, this research investigates how the company leveraged its core capabilities to navigate a rapidly evolving market landscape. By fostering a culture of ownership and collaboration, embracing digital technologies to enhance visibility and operational efficiency, and prioritizing sustainability, DGF improved its service quality, employee engagement and financial performance. The findings highlight the importance of long-term strategic planning and organizational simplification in cultivating agility and resilience during periods of disruption. Although focused on a single company, the dissertation offers valuable pedagogical insights and actionable lessons for strategic management in dynamic environments.

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Resumo

Esta tese explora as respostas estratégicas da DHL Global Forwarding (DGF), um dos principais atores do setor de agenciamento de cargas, à crise energética entre 2021 e 2023. Nesse período, o transporte mundial de cargas enfrentou desafios significativos, incluindo taxas de frete recordes, volumes de comércio voláteis e congestionamentos generalizados nos portos. A DGF, por sua vez, teve de lidar com a queda na demanda por fretes e pressões sobre a qualidade dos serviços. Empregando um estudo de caso qualitativo que integra dados secundários a entrevistas com executivos seniores da DGF, esta pesquisa investiga como a empresa aproveitou suas capacidades essenciais para atuar em um mercado em rápida transformação. Ao promover uma cultura de responsabilização e colaboração, adotar tecnologias digitais para aumentar a visibilidade e a eficiência operacional e priorizar a sustentabilidade, a DGF elevou a qualidade dos serviços, o engajamento dos funcionários e seu desempenho financeiro. Os resultados ressaltam a importância do planejamento estratégico de longo prazo e da simplificação organizacional para fomentar agilidade e resiliência em períodos de disrupção. Embora focada em uma única empresa, a dissertação oferece valiosos insights pedagógicos e lições práticas para a gestão estratégica em ambientes dinâmicos.

Título: Cultivando Resiliência em um Mercado Volátil: Um Estudo de Caso sobre a Adaptação Estratégica da DHL Global Forwarding durante a Crise Energética Global.
Autora: My Linh Hoang
Palavras-chave: Capacidades Dinâmicas, Adaptação Estratégica, Agenciamento de Cargas, Crise Energética, Sustentabilidade, Resiliência.

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List of Abbreviation

Abbreviation	Definition
1F1O	One File One Operator
bbl	Barrel (of crude oil)
BC	Business Customers
CAGR	Compound Annual Growth Rate
CFM	Certified Forwarding Manager
CIF	Certified International Forwarder
CSS	Customer Satisfaction Survey
DCs	Dynamic Capabilities
DEIB	Diversity, Equity, Inclusion, and Belonging
DGF	DHL Global Forwarding
EBIT	Earnings before Interest and Taxes
EC	European Commission
ECB	European Central Bank
EOS	Employee Opinion Survey
ESG	Environmental, Social and Governance
EU	European Union
FCL	Full Container Load
GDP	Gross Domestic Product
GP-to-EBIT	Gross Profit-to-Earnings before Interest and Taxes
GTOM	Global Target Operating Model
IATA	International Air Transport Association
IEA	International Energy Agency
IMF	International Monetary Fund
IT	Information Technology
KPIs	Key Performance Indicators
LCL	Less than Container Load
LNG	Liquefied Natural Gas
MWh	Megawatt-hour
NGO	Non-Government Organization
NPS	Net Promoter Score
NVOCC	Non-Vessel Operating Common Carrier
PESTLE	Political, Economic, Social, Technological, Legal, and Environmental
RBV	Resource-Based View
RFQ	Request for Quote
SAF	Sustainable Aviation Fuel
SME	Small-to-Medium Enterprises
SMF	Sustainable Marine Fuel
TBL	Triple Bottom Line
TEU	Twenty-foot Equivalent Unit
TMS	Transport Management System
TTF	Title Transfer Facility
US	United States
WTO	World Trade Organization

I. Introduction

Logistics is the lifeblood of the global economy, facilitating the movement of goods across regions and industries. For centuries, freight forwarders like DGF have played a critical role by coordinating complex international shipments, optimizing supply chain efficiency, and enabling global trade. While the sector is on a growth trajectory, driven by the rise of e-commerce and rapid technological advancements, it remains highly competitive and acutely sensitive to external shocks—particularly geopolitical tensions, protectionist policies and economic fluctuations that impact cross-border trade volumes and port activities (DSV, 2024). In the aftermath of the COVID-19 pandemic, the sector was immediately confronted with new challenges from the 2021–2023 energy crisis, including volatile fuel prices and fluctuating freight demand. In such a turbulent environment—where many factors lie beyond managerial control—organizational success increasingly depends on the ability to cultivate internal strengths that foster adaptability and resilience.

This thesis explores the adaptive business strategies employed by DGF to navigate the volatile market conditions during the energy disruptions. Beyond demonstrating resilience, DGF's story highlights that adaptability is not built overnight, but rather results from deliberate and sustained investment in three fundamental building blocks: people, processes, and technology. The case study also illustrates that sustainable growth in today's business landscape requires balancing financial performance, social responsibility, and environmental stewardship.

The paper begins by outlining the research methodologies employed, followed by a review of the relevant management literature that informs the case analysis. The core section presents the case study, describing the external disruptions, their impacts on the freight forwarding industry and DGF, and the company's strategic adaptations. The Teaching Notes provide guidance on educational objectives, teaching strategies, discussion questions, and suggested answers for effectively using the case to convey complex strategic management concepts. The paper concludes by acknowledging its limitations and offering suggestions for future research.

This dissertation is not merely an account of a company's response to a specific crisis. Rather, it offers broader insights into how organizations can strategically build the capabilities needed to navigate unpredictable market environments where change is not the exception but the norm.

I. Methodology

This dissertation adopts a qualitative research methodology to study DGF's strategic adaptation to freight rate volatility and declining trade volumes resulting from the 2021–2023 energy disruptions. Although the energy crisis primarily impacted Europe, DGF's business performance and strategic responses are analyzed at a global level. This approach reflects both the international scope of DGF's operations and the limitations in accessing region-specific data. A combination of primary and secondary data collection methods was employed to support the analysis.

1. **Primary Data:**

Three semi-structured interviews were conducted with senior management representatives to gain in-depth insights into DGF's operational processes and strategic adaptations. The interviews involved the Global Head of Carrier and Yield Management, the Global Head of Commercial Center – Ocean Freight, and the Global Vice President of Process Excellence. The interviews were conducted via video conferencing and lasted approximately 30 to 45 minutes. Questions focused on market foresights, strategic planning and decision-making, adaptation initiatives, and the outcomes of these efforts. Interview questions were sent to participants in advance, and following each session, a summary of the responses and key interpretations was shared with the interviewees for confirmation. To ensure confidentiality and protect participants' privacy, all interview data were anonymized.

2. **Secondary Data:**

- **Theoretical Concepts from Academic Literature**: Multiple peer-reviewed journal articles were reviewed to inform the conceptual framework of the case study. These articles provided theoretical insights into key management concepts, including Dynamic Capabilities, PESTLE Analysis and ESG frameworks.

- **External Sources for Contextual Information**: Key information regarding the broader macroeconomic environment, including the 2021–2023 energy crisis, geopolitical tensions, and their implications for global trade and the freight forwarding sector, was sourced from reliable market updates and industry reports. These sources included reputable organizations such as: Eurostat, World Trade Organization (WTO), European

Commission (EC), International Energy Agency (IEA), International Air Transport Association (IATA), Accenture, and McKinsey & Company.

- **Internal Company Documents**: To understand DGF's response to the disruptions, internal company documents were also analyzed. These included: annual reports, strategy brochures, market analysis, news articles and townhall meeting keynotes. Many executives' quotations cited in this paper are also taken from these sources.

To enhance the reliability of the analysis, information from various sources was systematically compared and verified. This process aimed to eliminate inconsistencies, minimize potential bias, and ensure that the conclusions drawn from the secondary data were well-supported by multiple sources.

II. Literature Review

1. Dynamic Capabilities

The concept of Dynamic Capabilities (DCs) have been central to strategic management theory since its introduction in the mid-1990s. The framework emerged as a response to the limitations of the resource-based view (RBV) developed by Jay Barney (1991). While RBV emphasized the importance of valuable, rare, inimitable, and non-substitutable (VRIN) resources for competitive advantage, it was criticized for its static nature. In high-velocity or hypercompetitive environments—characterized by frequent, discrete, and substantial shifts across competitive, technological, social, and regulatory landscapes (Bourgeois & Eisenhardt, 1988; D'Aveni, 1994)—achieving sustained competitive advantage becomes increasingly challenging. This calls for a managerial approach focused on developing sequential temporary advantages through effective adaptation to successive environmental disruptions (D'Aveni, 1994). To address this challenge, Teece, Pisano, and Shuen (1997) introduced the concept of DCs, explaining how firms can "*integrate, build and reconfigure internal and external competencies*" to navigate turbulent environments and maintain a competitive edge. DCs are heterogeneous across firms because they rest on a firm's organizational processes, shaped by its asset positions and evolutionary paths (Teece, Pisano, & Shuen, 1997). This view was subsequently challenged by Eisenhardt and Martin (2000), who argued that DCs include identifiable, best-practice routines that companies can learn and imitate.

Over time, the DCs framework has evolved, from an early focus on resource reconfigurability to broader strategic and market-oriented functions. Specifically, DCs include the capability to sense, seize, and reconfigure (Teece, 2007):

- **Sensing**: Involves a firm's ability to identify market and technological opportunities through ongoing monitoring both in its internal and external environment. This includes gathering and analyzing data from diverse sources such as research and development, scientific breakthroughs, suppliers, customers, and competitors. Effective sensing enables companies to recognize emerging trends and shifting customers' needs early, allowing them to stay competitive in rapidly changing markets.

- **Seizing**: Involves capitalizing on the opportunities identified through sensing. This requires firms to select suitable business models, technologies, and organizational structures that will enable them to exploit these opportunities. Seizing also entails

defining customer solutions, managing platform ecosystems, establishing governance mechanisms, and addressing decision-making biases. For firms to be successful, it is essential that they invest in scalable innovations while retaining the flexibility to adjust their strategies based on new information or changing conditions.

- **Reconfiguring**: Ensures that firms can continuously realign both tangible and intangible assets to maintain their competitive position. This involves processes such as decentralization, co-specialization, governance, and knowledge management, which allow firms to restructure their operations, integrate new capabilities, and mitigate risks. A company with strong reconfiguration abilities is likely to maintain innovation, optimize resource allocation, and adapt quickly to industry disruptions, thereby ensuring long-term success in dynamic environments.

Barreto (2010) conducted a comprehensive review of the existing literature on DCs, examining their nature, specific roles, contextual relevance, mechanisms of creation and development, underlying assumptions of heterogeneity, and associated outcomes and purposes. Through this analysis, he identified key challenges in the field and proposed a multidimensional construct of DCs: *"A dynamic capability is the firm's potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base."* Importantly, Barreto (2010) argues that both variance—the individual impact of each dimension and covariance—the interactions among them are critical in studying DCs. Consequently, research in this area should consider not only the isolated effects of each component but also their combined influence on a firm's adaptability and competitiveness.

2. PESTLE Analysis

Environmental scanning is a critical component of strategic management, allowing organizations to systematically monitor external factors that may impact their performance. The activity is especially useful during times of crisis as it assists companies to identify new threats and capitalize on arising opportunities. Historically, a common challenge in environmental scanning is that companies tend to focus primarily on their immediate industry and competitive environment, often overlooking broader macro-socioeconomic trends (Yüksel, 2012). As a result, systematic frameworks like PESTLE analysis are employed to examine macro-

environmental factors. The framework comprises six dimensions: political, economic, social, technological, legal, and environmental.

While the PESTLE framework offers a valuable overview of the macro-environment, its primary limitation is that it treats these factors as independent variables, whereas, in reality, they are often deeply intertwined and influence each other in complex ways (Yüksel, 2012). For example, technological advancements can induce social change, which may, in turn, affect political decisions and legislation. Therefore, by considering the interactions between these factors, organizations can gain a more nuanced and realistic understanding of the macro-environment. This allows them to navigate external complexities more effectively and devise more robust strategies.

3. Sustainability and ESGs

The concept of sustainable development, as defined by the Brundtland Commission (1987), refers to *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs."*

Historically, strategic management has been built on shareholder primacy (Friedman, 1970), with sustainability being largely considered a cost, often limited to regulatory compliance and corporate philanthropy (Porter & Kramer, 2006). However, given the increasing magnitude of social and environmental issues, businesses must either fundamentally transform their economic activities or risk causing irreversible damage to the planet's ecological systems (Hart, 1995). This necessitates a profound "paradigm shift" in strategic management, wherein sustainability and ESG considerations have transitioned from peripheral concerns to central components of corporate strategy systems (Hart, 1995).

Several theoretical frameworks have been employed to analyze the integration of sustainability and ESG aspects into strategic management. The Triple Bottom Line (TBL) framework, popularized by John Elkington in the 1990s, encourages businesses to go beyond financial metrics and consider their broader impact on society and the environment, represented by the three key pillars - *People*, *Planet* and *Profit*. Building upon the RBV, Hart (1995) introduced the Natural Resource-Based View (NRBV), a conceptual framework that positions environmentally oriented resources and capabilities as key drivers of sustainable competitive

advantage. This framework consists of three interconnected strategic pathways: *pollution prevention*, which aims to minimize waste and inefficiencies; *product stewardship*, which incorporates environmental considerations throughout the product lifecycle; and *sustainable development*, which prioritizes long-term ecological and economic sustainability. Aligned with this perspective, a growing body of research suggests that firms integrating sustainability into their strategic management practices derive multiple benefits, including enhanced brand equity (Torres et al., 2012), increased access to capital (Eccles & Krzus, 2010), and expanded innovation opportunities (Nidumolu et al., 2009).

Yet, the connection between a company's financial performance and sustainability remains unclear, and empirical research has provided mixing results. There are numerous studies documenting a positive association between sustainability practices and financial performance (e.g., El Ghoul et al., 2011; Flammer, 2021). These papers show that good ESG practices are associated with profitability and higher-performing stocks. However, other authors argue that sustainability initiatives are capital intensive and can divert resources from core business operations, potentially having a negative effect on profitability (Eccles & Krzus, 2010). Several factors can influence the relationship between financial performance and sustainability, including industry (Hart, 1995), company size (Porter & Kramer, 2006), and time horizon (Eccles & Krzus, 2010). Further research is needed to explore causal mechanisms, consider contextual factors, and develop better metrics for measuring sustainability performance (Eccles & Krzus, 2010).

III. Case Study

1. The 2021-2023 Energy Crisis

An energy crisis refers to a substantial disruption in the supply of energy resources within an economy, resulting in shortages and increased prices.

1.1. Behind the Soaring Energy Prices in Europe in 2021

Since 2020, the energy markets have experienced significant volatility. Lockdowns, travel restrictions, and reduced industrial output due to the COVID-19 pandemic led to a significant drop in the world's energy demand (IEA, 2020), driving the prices of many fuels to their lowest levels in decades. From 2010 to 2020, wholesale natural gas prices at the Dutch TTF hub—the benchmark for European markets—remained relatively stable at €20 per Megawatt-hour (MWh) before plummeting to €3.4–3.5/MWh in May 2020 (European Commission, 2024). Similarly, Brent crude—the price marker for approximately 80% of the world's crude oil—fell to $20 per barrel (bbl) in April 2020, its lowest level since 2002 (European Commission, 2024).

In 2021, the successful rollout of vaccination programs enabled the gradual easing of COVID-19 restrictions, which resulted in an exceptionally rapid economic recovery. Industrial production in the European Union (EU) grew by 8.5% compared to 2020 (Eurostat, 2024). Furthermore, as lockdown measures were lifted, both personal and commercial transportation grew substantially, leading to a surge in gasoline and diesel fuel consumption. By December 2021, increased gas demand, together with reduced natural gas exports from Russia, low renewable energy production due to unfavorable weather conditions, and the near-depletion of Gazprom-owned storage facilities, had tightened the European gas market (Energy Transitions Commission, 2022). The Dutch TTF hub prices reached €113/MWh, exceeding the previous peak since 2010 by more than 3.5 times (European Commission, 2024). During this period, the average electricity spot price in the EU also increased to €239/MWh from its typical two-digits figures observed since 2010, due to the combined effect of rising natural gas prices and higher carbon allowance costs introduced by the *Fit for 55* proposal (European Commission, 2024).

The situation escalated in February 2022 when Russia launched a full-scale military invasion of Ukraine. In response, the EU implemented multiple sanctions to weaken Russia's economic base, restrict its access to critical technologies and markets, and limit its military operational capabilities (Consilium, 2025). Moscow retaliated by halting gas exports to Europe,

immediately threatening the energy stability of the continent because of its heavy dependence on Russian natural gas. Before the conflict, Russia accounted for approximately 40% of EU's natural gas supply (IEA, 2022). By the end of 2022, Russian natural gas exports to the EU had dropped drastically by 80 billion cubic meters, a reduction of two-thirds compared to pre-war levels (IEA, 2023). The uncertainty about gas supply availability combined with the pressure to fill European gas storage facilities before winter caused wholesale gas prices to reach €230/MWh in August 2022, which induced electricity prices to soar to €367/MWh (Consilium, 2024). Oil prices also rose sharply to $133/bbl due to changes in international trade routes, triggered by the United States, several European nations, and Asian allies banning imports of Russian crude oil and refined petroleum products (European Commission, 2024).

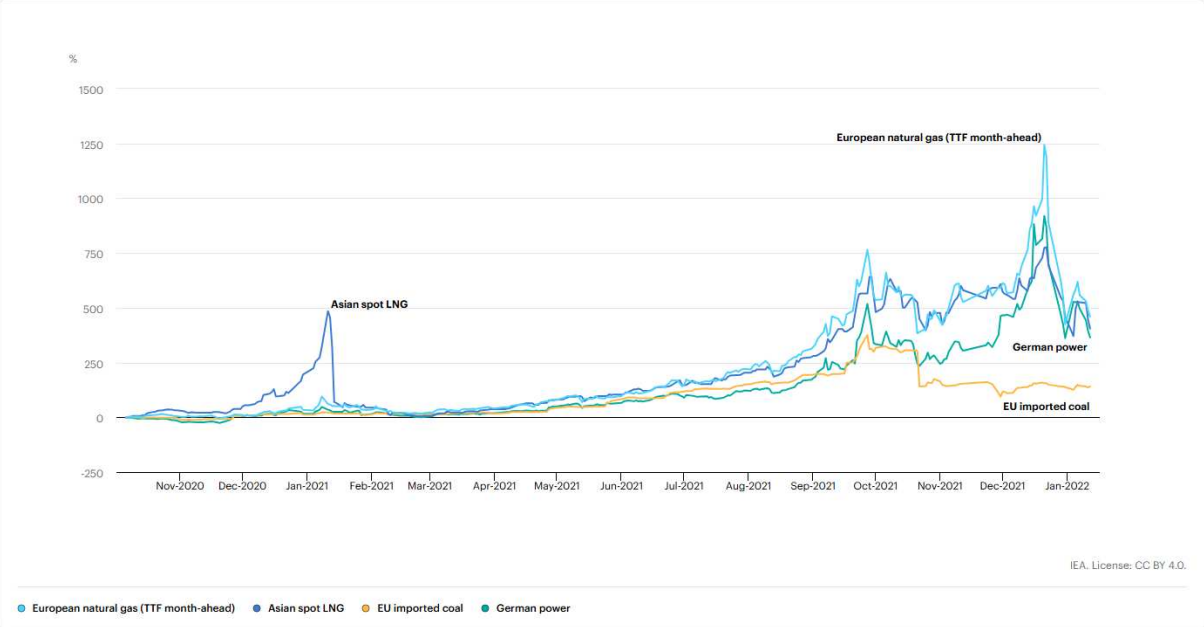

Figure 1 – Evolution of energy prices, Oct 2020 – Jan 2022 (IEA, 2022)

1.2. Economics Impacts

In 2021, the global economy demonstrated a solid recovery from the COVID-19 pandemic-induced downturn, with an annual GDP growth rate of 6.4%—9.3 percentage point increase from 2020 (World Bank Group, 2025). Real GDP in the EU experienced a 5.4% growth in 2021 after the 5.9% decline in the previous year (Eurostat, 2022).

The recovery was disrupted by Russia's invasion of Ukraine in early 2022, plunging the global energy market into chaos while intensifying inflation (IEA, 2022). The sudden increase in energy prices triggered economic chain reactions that drove up household expenses, as well as

production and consumer costs for goods and services (Consilium, 2024; IEA, 2025). This contributed to record-high inflation in the history of EU integration, with average inflation reaching 9.2%—far exceeding the European Central Bank's (ECB) annual inflation target of approximately 2% (European Economic and Social Committee, 2023; ECB, 2023). In response, the ECB tightened monetary policy by raising interest rates to moderate demand and anchor inflation expectations (ECB, 2023). Many governments also implemented fiscal programs including subsidies and price caps to protect consumers from rising commodity expenses (Sgaravatti et al., 2023). While these intervention measures helped control inflation, they could strain public finances, distort market operations and impede economic activities (IMF, 2013). Against this backdrop, the EU's annual GDP growth rate decreased for two consecutive years, from 5.4% in 2021 to 3.4% in 2022 and 0.5% in 2023 (Eurostat, 2024). Industrial production growth also decelerated sharply, rising by only 0.4% in 2022 compared to 8.5% in 2021, before reducing by 1.2% in 2023 (Eurostat, 2024).

1.3. The Way Forward

The disruption prompted the EU to accelerate its energy diversification efforts and implement long-term structural changes in energy policy. Prior to the crisis, the EU had already taken steps toward a more sustainable energy system. The *Fit for 55* package, introduced in July 2021, served as the primary climate policy framework for EU countries, targeting a 55% reduction in greenhouse gas emissions by 2030 and achieving climate neutrality by 2050 (Consilium, 2025). Launched in May 2022, the *REPowerEU Plan* sought to end the EU's dependence on Russian fossil fuels while further reinforcing the goals of *Fit for 55* through three core pillars (European Commission, 2025):

- Enhancing energy efficiency to reduce overall consumption.
- Diversifying energy supply sources to strengthen energy security.
- Accelerating the transition toward renewable energy to support long-term sustainability.

Specific targets have been set for various sectors, with transportation particularly under the spotlight due to its energy-intensive nature.

2. Freight Transport Market Landscape

2.1. Freight Forwarding Business Model

Freight transport is a critical function within supply chains that involves the physical movement of commodities, merchandise, and cargo across various transportation modes, including road, rail, air, sea, and pipelines (DHL Freight Connections, 2025). A freight forwarder is a company or agent that acts as an intermediary between shippers—businesses that require the transportation of goods—and carriers, such as airlines, trucking companies, and ocean shipping lines, which physically move the cargo (DSV, 2025). Essentially, freight forwarding is a brokerage service. Rather than owning transportation assets or directly handling cargo movement, freight forwarders leverage established relationships with carriers to arrange efficient and cost-effective transportation solutions for their customers.

Freight forwarders generate revenue primarily by capturing the difference between the rate negotiated with carriers and the rate charged to shippers. Research indicates that freight forwarders' gross profit margins generally improve during periods of declining freight rates, and vice versa (Buckby, 2017; Daher et al., 2022). However, Buckby (2017) also pointed out that this effect is relatively short-lived, as rate fluctuations are eventually passed on to customers in the next contract cycle. Therefore, the key operational performance metric for forwarders is the GP-to-EBIT conversion rate, which reflects how effectively they convert gross profit into operating profit through disciplined cost management and efficiency measures (Buckby, 2017).

2.2. Freight Forwarding Market Overview

The global freight forwarding market was valued at USD 208.61 billion in 2023 and is expected to grow at a CAGR of 4.1% from 2024 to 2033, reaching USD 311.77 billion by the end of the forecast period (The Brainy Insights, 2024). Despite this promising trajectory, the freight forwarding industry remains highly sensitive to macroeconomic conditions (Transport Intelligence, 2024). Geopolitical instability and protectionism policies can significantly disrupt global trade flows, leading to port congestion, delays, rerouting, and higher transportation expenses for freight forwarders (DSV, 2024). Moreover, the rise of reshoring and nearshoring—where companies relocate manufacturing closer to end markets—may reduce demand for long-haul international shipping (DSV, 2024). In recent years, sustainability has emerged as a key investment area for many freight forwarders, as businesses increasingly seek eco-friendly transportation options to lower carbon emissions and comply with global environmental regulations (DSV, 2024; Mordor Intelligence, 2025).

The freight forwarding industry is highly fragmented, with the top 20 freight forwarders collectively accounting for only 30–40% of the global market share (DSV, 2024). The remaining share is held by numerous regional and local freight forwarders that focus on specific trade lanes or industry verticals, resulting in a highly competitive pricing landscape. As of 2023, Kuehne + Nagel and DGF were the global market leaders, each holding a 5% market share based on 2022 revenue, followed by DSV at 4% and DB Schenker at 3% (DSV, 2024). These players maintain their leadership positions through extensive global networks, advanced logistics technology and diversified service offerings, enabling them to compete effectively against smaller regional firms (Mordor Intelligence, 2025).

2.3. Impacts of the Energy Disruption on Freight Transport

Unlike carriers that own and operate transport fleets, freight forwarders do not directly consume large amounts of energy in their core operations. As a result, they are often not immediately affected by energy shortages or fuel price volatility. Nevertheless, freight forwarders are more vulnerable to the broader macroeconomic consequences of an energy crisis—such as declining industrial production and reduced global trade volumes—which weaken freight demand. Geopolitical instability can also disrupt trade lanes, causing port congestion, delays, and rerouting. Table below summarizes the economic headwinds associated with the 2021–2023 energy crisis and their impacts on the freight transport market.

Year		2021	2022	2023
Global Trade		Following a 5.2% decline in world merchandise trade volume during the first year of the COVID-19 pandemic, **global trade rebounded sharply with a 9.7% increase** in 2021 (WTO, 2023).	Due to geopolitical and energy-related disruptions, **global trade volume grew at a slower rate of only 2.7% in 2022** (WTO, 2024).	As the economic effects following the crisis became more pronounced, **global merchandise trade volume contracted by 1.1%** (WTO, 2024).
Air Freight	**Volume**	**Air cargo volumes grew by 18.7% year-over-year**, exceeding the pre-crisis 2018 peak by 3.5%. (IATA, 2021).	**Global air trade demand growth deteriorated** throughout 2022, resulting in an overall **decline of 8.0%** for the year (IATA, 2023).	In line with the ongoing global trade slowdown, **industry-wide volume decreased by an additional 1.9% year-over-year in 2023** (IATA, 2024).
	Capacity	**Available cargo declined by 10.9%** compared to pre-pandemic levels in 2019, primarily due to the loss of belly cargo capacity on passenger aircraft amid lockdowns and travel restrictions (IATA, 2021). Capacity gradually recovered throughout the year as international passenger traffic improved.	Global **air cargo capacity increased** compared to the previous year as international travel resumed. With a decline in air cargo demand, the global demand-supply balance for air cargo returned to pre-COVID levels (Accenture, 2022).	**Industry-wide capacity in 2023 experienced robust growth of 11.1%**, primarily driven by the return of bellyhold capacity on international passenger flights (Accenture, 2024; IATA, 2024).

Ocean Freight	**Volume**	**Global container trade exceeded pre-pandemic levels**, with monthly trade volumes remaining stable at a record high of approximately 13 million TEU – **a 9.9% increase compared to 2020** (Accenture, 2021; Accenture, 2023).	Monthly container trade volumes remained largely **comparable to 2021 levels**; however, a **downward trend** became more evident toward the end of the year (Accenture, 2022). **Overall, trade volumes declined by 2.2% compared to 2021** (Accenture, 2023).	**Global container trade declined by 4.3%**, marking one of the most significant contractions in the past two decades (Accenture, 2024).
	Capacity	Vessel **capacity shortages**, **overstretched ports**—including those closed due to pandemic-related disruptions—and the **Suez Canal blockage** contributed to **significant congestion** (DHL, 2022).	**Available capacity increased** as pandemic-related restrictions were gradually lifted in ocean freight fleets (Accenture, 2022; DHL, 2023)	Global container **capacity grew by 5% year-on-year** (Accenture, 2024).
Road Freight		**Road freight transport in the EU improved in 2021**, with the second quarter marking the peak performance (Eurostat, 2025). However, a shortage of truck drivers, coupled with rising fuel prices, drove **road freight rates to record levels** (Transport Intelligence, 2022).	**Total EU road freight transport remained largely stable**, with a 2.5% increase in the first quarter compared to the previous year. However, slight declines were observed in the subsequent three quarters (-0.7%, -0.6%, and -1.6%, respectively), resulting in overall transport levels for 2022 being close to those of 2021 (Eurostat, 2025).	Road freight transport performance continued to **decline** throughout 2023, with total EU road freight transport in the last two quarters of the year falling to levels not observed since before the COVID-19 crisis (Eurostat, 2025).

Freight Rate Development

In 2021, the global freight transport market experienced a severe supply-demand imbalance, with demand significantly outpacing available capacity. Capacity shortages, together with a sharp rise in fuel prices, inflated freight transport costs across air, sea, and inland routes. As a result, freight rates surged to unprecedented levels, marking an all-time high (Dierker et al., 2022; Transport Intelligence, 2022). In 2022, geopolitical tensions further increased energy prices, creating unfavorable macroeconomic conditions. Global trade slowdown, combined with the gradual recovery of transport network capacity, led to a downward adjustment in freight rates across the air, ocean, and road freight sectors. These trends persisted into 2023. The combined effects of 2022 and 2023 contributed to a broader normalization of freight rates, as market dynamics shifted from extreme supply constraints toward a more balanced state.

If there is one word to describe the global trade and freight forwarding landscape between 2021 and 2023, it is "volatile." Operating within highly interconnected networks, freight forwarders' performance is inevitably influenced by macroeconomic conditions. Although these external factors lie beyond their direct control, companies that focus on strengthening internal capabilities are better equipped to navigate disruptions and sustain long-term success. Amid an energy crisis, geopolitical tensions, and economic headwinds, DGF stands out as a compelling example of how adaptive capabilities can enable a company to stay the course and deliver reliably under pressure.

3. DHL Global Forwarding

3.1. Company Overview

3.1.1. Business Model

DGF is one of the five key divisions of DHL Group, offering air, ocean, and overland freight forwarding services, including standardized transport, multimodal and sector-specific solutions, as well as customized industrial projects, custom clearance and value-added services. Unlike other divisions within DHL Group, DGF operates with a less capital-intensive business model, relying on its vast network and skilled workforce as its primary assets. With over 200 years of history, a presence in over 115 countries and a team of approximately 47,000 highly qualified employees, DGF is one of the top three global freight forwarding companies in a highly fragmented market (DHL, 2025).

Air and ocean freight are the two core business units, contributing over 60% of DGF's total revenue in 2024 (DHL, 2025).

i. Air Freight

DGF Air Freight specializes in the transportation of goods via air cargo. As of 2023, it ranked second globally in air freight volume, handling approximately 1.6 million export tons annually, with over half of this volume coming from the Technology, Engineering & Manufacturing, and Life Sciences & Healthcare sectors (DHL, 2025). DGF Air Freight offers an extensive product portfolio, from standard air freight services and multimodal transportation to sector-specific solutions—such as Pharma and Temperature-Controlled solutions designed to meet the stringent regulatory and handling requirements of the Life Sciences and Healthcare industry. The unit also provides customized chartered aircraft solutions to accommodate oversized cargo, urgent shipments, remote destinations, and capacity constraints on high-demand trade routes. These services are facilitated through StarBroker, a wholly owned subsidiary that operates as DGF's in-house air freight carrier. With long-term block space agreements, more than 40 weekly dedicated own-controlled flights, and global charter services, StarBroker ensures capacity on key trade routes—even in volatile markets with limited availability.

ii. Ocean Freight

DGF Ocean Freight arranges the transportation of goods via waterways, with ocean freight as the main leg and additional end-to-end services—such as trucking, rail, barge transport, and customs clearance—may also be provided. In 2023, it was the second-largest global provider in ocean freight volume, with the Engineering & Manufacturing, Consumer/Retail, and Automotive sectors representing a significant portion of the business (DHL, 2025). DGF provides its ocean freight services through its wholly owned Non-Vessel Operating Common Carrier (NVOCC), Danmar Lines. An NVOCC functions as a virtual carrier—operating similarly to a shipping line—without owning any vessels or containers. This structure enables DGF to offer customers flexible space allocation agreements, a comprehensive suite of logistics services, and a wide selection of sailing schedules—all through a single point of contact, while ensuring regulatory compliance.

DHL Freight – operating as a distinct brand within DGF – is an expert in land, intermodal, and rail transport across Europe.

In addition to its standard offerings, DGF provides GoGreen Plus solutions across all transport modes. These services enable customers to either compensate for or avoid carbon emissions associated with their shipments through the use of certified Sustainable Aviation Fuel (SAF) and Sustainable Marine Fuel (SMF) (DHL, 2025).

3.1.2. Company Culture

As part of the DHL Group, DGF operates under a shared purpose*: 'Connecting People, Improving Lives.'* For the freight forwarder, this means going beyond facilitating global trade and economic growth to making a meaningful impact on society and the environment. In 2022, DGF entered a pro bono logistics partnership in 2024 with the German NGO *kinderherzen*, transporting the world's first mobile heart clinic for infants to various countries (DHL, 2024). This initiative has enabled life-saving surgeries and therapies for infants affected by congenital heart disease. On the environmental front, DGF actively advances sustainability through its GoGreen Plus services. In partnership with Lindt & Sprüngli, the renowned Swiss chocolate manufacturer, the freight forwarder helped reduce transportation-related carbon emissions by approximately 514.86 metric tons of CO_2e within just three months (DHL, 2024). DGF's corporate culture is rooted in four fundamental values: Passion, Entrepreneurship, Excellence, and Teamwork, which reflect its collaborative and customer-centric approach in daily interactions with colleagues, customers, and business partners.

3.2. Before the Energy Disruption

3.2.1. Business Performance

According to the Global Head of Carrier and Yield Management, DGF operates within a highly volatile market with an extensive global network, making it inherently susceptible to disruptions occurring daily across various regions of the world. To navigate this reality, embedding resilience into its business DNA is not a 'nice-to-have' but a necessity for DGF. The energy crisis is just one of many external shocks the company must manage, further testing its adaptability and agility in an unpredictable market landscape.

Before the energy disruption hit, DGF was already experiencing the widespread impacts of the COVID-19 pandemic in 2020. As global economic output and trade volumes declined, the company saw a significant reduction in freight volumes. According to DHL Group's 2020 Annual Report (2021), air freight volumes decreased by 12.1%, while ocean freight volumes fell by 10.8% year-on-year. Despite these declines, overall revenue grew by 5.2% during the

reporting period, primarily driven by transport capacity shortages that led to price increases. The division's EBIT rose from €521 million to €590 million in the reporting year. Consequently, the GP-to-EBIT conversion rate improved by 2%. This increase was largely attributed to the benefits derived from a centralized procurement system for freight capacity, enhancements to the global infrastructure for air freight operations, and strict cost management measures (DHL, 2021). The company maintains its market leadership, ranking number one in air freight and second in both ocean freight and European road freight, based on volumes (DHL, 2022).

3.2.2. Strategy 2025 – SIMPLIFY

The year 2020 also marked a significant milestone for DGF with the launch of its Strategy 2025 - **SIMPLIFY**, which outlines the company's 2025 goals and the strategic pathways to achieve them. The overarching aspiration is to become the ***undisputed industry leader***, focusing on three bottom lines:

- **Employer of Choice - Best Team of Freight Forwarding Experts**: DGF aims to enhance its performance in key Employee Opinion Survey (EOS) metrics and maintain a high ratio of employees certified as forwarding experts. To achieve these goals, the company implemented strategic initiatives focused on:
    - **Talent Development:** The Certified International Forwarder (CIF) Program is regularly enhanced with specialized training modules in Air Freight, Ocean Freight, and Sales, ensuring that employees are well-equipped with functional knowledge and the latest industry best practices. Additionally, new management development programs, such as the Certified Forwarding Manager (CFM) and Leadership 2.0, focus on strengthening leadership capabilities, effective communication, and change management.
    - **Future Workforce:** Recognizing that today's workforce is increasingly motivated by purpose-driven employment, DGF actively engages in corporate social responsibility initiatives, including GoHelp, GoTeach, and GoTrade, to attract young talent and enhance employee engagement. Additionally, the company promotes diversity and inclusion by building teams that reflect a broad range of backgrounds, including gender, generations, cultural heritage, sexual identity, disabilities, education, and professional experiences.

- **Provider of Choice - Quality Leader and the Most Customer-Centric Freight Forwarder**: DGF strives to continuously improve customer satisfaction, as measured

by tools such as the Customer Satisfaction Survey (CSS) and Net Promoter Score (NPS). To deliver on its customer promises, the freight forwarder introduced targeted measures including:

- **Service Excellence & IT Renewal Roadmap**: DGF continuously upgrades or replaces IT systems to integrate industry-proven solutions. In 2020, the company launched *myDHLi*, a digital customer portal that offers simplified quoting, booking, tracking, analytics, and invoicing functionalities, thereby enhancing the customer experience.
- **Tailored Solutions for a Diverse Customer Base**: DGF drives its diversification strategy by targeting high-potential sectors such as Aid and Relief, Government, and Infrastructure, which have proven essential during times of crisis. The company tailors its logistics solutions to meet the specific needs of these industries; for example, it offers scalable temperature-controlled storage and transportation, with product specifications guided by clinical specialists to ensure regulatory compliance.

- **Investment of Choice - Most Profitable Freight Forwarder**: DGF is committed to meeting clearly defined financial targets, including a year-on-year improvement of 100-200 basis points in its GP-EBIT conversion rate. The long-term goal is to achieve a conversion rate of approximately 30% (up from 16% in 2020). To attain these targets, DGF focuses on:
  - **Profit Optimization:** DGF leverages its significant market presence to negotiate favorable rates with carriers. In parallel, the division is enhancing its hub and gateway infrastructure to improve volume consolidation, thereby reducing transportation costs paid to carriers. Ensuring transparency across stations, gateways, and hubs is also essential for identifying the most efficient routes and securing competitive pricing.
  - **Operational Efficiency**: DGF adopts advanced technological solutions to drive standardization and automation, thus narrowing the gap between global and country-specific processes. By implementing lean processes, the company not only reduces operational costs but also increases organizational agility, enabling it to respond more effectively to unpredictable market shifts.

A fundamental enabler of these strategic goals and initiatives is **DGF's Digitalization Journey**. Launched in 2015, the journey consists of three distinct phases. The first phase, Foundation, focuses on establishing the prerequisites for further digital transformation. This includes harmonizing global processes to create a common base across regions, as well as replacing outdated systems with modern applications. The second phase, Optimization, centers on automating manual processes, standardizing workflows to ensure consistency, and scaling both processes and IT solutions for improved efficiency. In the final phase, Advanced Technology and Analytics, cutting-edge technologies—such as the Internet of Things, robotic process automation, and machine learning models—are employed to enhance business intelligence, deliver innovative solutions, and provide competitive services that address evolving market demands. In 2020, DGF was in the initial phase of its digital transformation journey, achieving significant milestones. The company successfully deployed *CargoWise One*, an integrated Transport Management System (TMS), across more than 400 Ocean Freight and Air Freight stations. This system enables comprehensive logistics management, with advanced features such as a centralized hub for market rate comparison and capacity procurement. Additionally, DGF launched *myDHLi*, a fully integrated digital platform for freight forwarding customers.

Prior to the onset of the energy crisis, DGF had proactively implemented measures to enhance its resilience. The company's three bottom lines, along with their respective initiatives, work together to ensure operational continuity, market leadership, and financial strength in an unpredictable business environment:

- A skilled, engaged, and stable workforce (Employer of Choice) enhances the company's ability to adapt swiftly to disruptions.
- A strong customer-centric approach (Provider of Choice) fosters long-term customer loyalty and supports stable revenue streams amid market fluctuations.
- A disciplined financial strategy (Investment of Choice) secures the necessary resources to sustain operations and drive long-term growth, even during times of crisis.

3.3. Impacts of the Energy Disruption on DGF

DGF's proactive efforts to embed resilience into its business operations have proven effective. Despite disruptions in the freight transport market in 2021, the division maintained strong performance. Capacity shortages and port congestion strained supply; however, by leveraging its extensive global network and the newly implemented *CargoWise One* system for freight capacity procurement, DGF successfully secured the necessary transport volumes with carriers.

Rising energy prices led to higher freight rates. According to DHL Group's 2021 Annual Report (2022), the company's total transport costs increased from €24,173 million to €32,434 million, primarily driven by higher expenditures within the DGF division. However, as global merchandise trade rebounded and demand outpaced supply, many businesses were willing to pay a premium for freight services, allowing DGF to transfer these increased costs to customers. As a result, the division experienced year-on-year growth in both freight volumes and revenue:

- Air freight volumes increased by 25.7%.
- Ocean freight volumes for the year under review were up 8.7 %.
- European overland transport volumes grew by 7.8%.

Revenue within the division increased by 44.4%, reaching €22,833 million in the reporting year (DHL, 2022). The GP-to-EBIT conversion rate improved from 16% in 2020 to 28.3%, indicating effective cost control and operational management.

This positive trajectory continued into 2022, albeit at a more moderate pace, with signs of weakening toward the end of the year. Specifically, revenue within the division increased by 32.3% during the reporting period (DHL, 2023), and the GP-to-EBIT conversion rate improved significantly to 36.8%. DGF's sustained financial performance—despite fuel price volatility in 2022—can be attributed to its asset-light business model, which does not require substantial energy for core operations. It was only in 2023 when the economic effects of the energy crisis began to materialize more clearly, that DGF faced greater commercial pressures. Freight volume developments in 2023 include:

- A 12.1% year-on-year decline in air freight volumes, affecting all major trade lanes.
- A 6.2% decrease in ocean freight volumes, primarily driven by weakened demand on trade lanes from Asia and Europe to North America.
- A 9.2% reduction in volumes within the European overland transport segment.

As a result of these volume declines and the normalization of freight rates, 2023 revenue decreased by 36.1%, reaching €19,305 million (DHL, 2024). Although the GP-to-EBIT rate declined from the previous year, it remained above the 2021 levels, standing at 28.4%.

Market disruptions also placed considerable pressure on DGF's operational performance and its ability to consistently meet service commitments—particularly in instances where challenges were beyond the company's direct control, such as prolonged port delays. In 2021, the global customer satisfaction score, as measured through the annual survey, declined by 3.5

points to 72 out of 100. Customer loyalty similarly fell by 8 points to 14. Lower scores were observed in areas such as shipment status communication, order and booking processes, complaint resolution, and day-to-day contact support—highlighting customers' increased need for proactive and transparent communication during periods of market volatility.

To track progress toward its Employer of Choice goal, DGF conducts an annual survey to evaluate the employee experience across eight KPIs, which together drive the Employee Engagement score. This score, measured on a scale from 0 to 100, reflects employees' emotional commitment to the company, their motivation to contribute to its success, and their overall well-being at work. Despite periods of uncertainty, DGF consistently maintained high levels of Employee Engagement, with the score rising from 88 in 2021 to 89 in 2023.

Overall, with steady progress across financial, employee, and customer dimensions, DGF remained on track with its Strategy 2025. Key challenges that emerged were customer demand for enhanced visibility and support, as well as a decline in freight volumes and revenue due to the global trade slowdown in 2022/23. To achieve its 2025 goals, the freight forwarder has taken targeted actions, building on the foundation laid by its **SIMPLIFY** strategy.

4. DGF's Strategic Adaptation

4.1. It all starts with people

In DGF's 2030 Strategy Brochure, Tim Scharwath, CEO of DGF, began:

> *"As we look ahead to the next 5 years, there's one simple idea I often emphasize: keep it simple. This principle has been a powerful force in shaping our strategy and helping us stay focused on what drives success."*

DGF provides a compelling case study of how organizations can respond effectively to periods of uncertainty by simplifying operational approaches and maintaining a strong focus on foundational elements—namely, the people. Without owning any shipping containers or transportation fleets, freight forwarding remains a relationship-focused business in which employees are the most valuable asset. While advanced technologies can streamline certain processes, core operations continue to rely heavily on human expertise and industry-specific knowledge—capabilities that can only be cultivated and refined through hands-on experience. To foster employee growth and engagement, DGF emphasizes the importance of instilling a sense of ownership and empowering individuals to act with autonomy in their roles.

A key example of this approach is the **One File One Operator (1F1O)** model, which was introduced in 2022 in response to declining customer satisfaction scores and growing demand for day-to-day support. In the context of freight operations, a *file* refers to the complete set of data, documents, tasks, and activities associated with a specific customer shipment. Under the 1F1O model, a single operator assumes full ownership of a file throughout its entire lifecycle. This individual is responsible for both the operational execution and financial performance of the file, ensuring data accuracy, service quality, and profitability. Historically, operators were primarily occupied with repetitive, low-value tasks such as manual data entry and invoice processing. The 1F1O model repositions operators to take on a more entrepreneurial role within clearly defined processes and policies. While routine and administrative tasks can be automated or delegated to Shared Service Centers and specialized teams, the designated file owner remains the central point of contact for the customer and the primary coordinator of all related activities. This enhances accountability, improves transparency, and facilitates more meaningful, value-added interactions with customers, suppliers, and other stakeholders.

Building on the foundation of 1F1O, DGF launched the **Global Target Operating Model (GTOM)** program in 2023, which is structured around three core pillars:

- **People:** Establish globally consistent job profiles and clearly defined responsibilities. Job descriptions are integrated with learning and development pathways from the onboarding stage to ensure rapid and effective adaptation to the role.
- **Process:** Redesign and standardize workflows using a pragmatic and agile approach to eliminate non-value-adding activities. Global process standards are deployed at both regional and local levels to ensure consistent service quality, enable scalability, and facilitate further automation.
- **Systems:** Replace outdated systems with improved tools and ensure optimal use of existing digital solutions.

In DGF's 2030 Strategy Brochure, Suky Yeung, Executive Vice President of Global IT and Business Process Optimization at DGF, highlighted the strategic importance of GTOM (2024):

> *"Implementing the GTOM is a key step in executing our SIMPLIFY Strategy, enabling us to drive consistency, efficiency, and service quality across our network. By standardizing roles, responsibilities, as well as metrics and processes, GTOM will provide greater transparency and a unified approach in delivering our Service Promise.*

This streamlined model will help us become more lean and agile, allowing us to respond swiftly to market changes and customer needs, ultimately fueling our growth."

Together, GTOM and 1F1O foster a culture of continuous improvement, driving employee development, enhancing customer experience, and contributing to sustained business performance.

4.2. "We are a network, not a group of agents!"

In response to a downward trend in shipment volumes, Scharwath (2022) emphasized the need for strategic diversification: *"We need to diversify our customer base, maintain a full sales pipeline, and convert that into as much new business as possible."* To achieve this, DGF has identified two primary focus areas:

- **Expanding the Small and Medium-Sized Business Segment**: DGF aims to increase the share of small to medium-sized Business Customers (BC) to 65% by 2030. Casper Ellerbaek, Global Head of Ocean Freight (2024), highlighted the cultural strengths within the organization and the imperative to leverage them in this strategic pivot:

  "Our company boasts an exceptional culture that I aim to harness and build upon. While we are highly effective in managing large accounts, we must bridge the gap with smaller customers. My focus is on intensifying our efforts in the SME segment, fostering growth and meaningful partnerships."

- **Prioritizing High-Growth, Resilient Sectors:** Traditionally, high-volume sectors such as Engineering & Manufacturing and Consumer/Retail have constituted the majority of DGF's business. However, the COVID-19 pandemic and recent global energy disruptions have highlighted the strategic importance of industries like Life Sciences & Healthcare, New Energy, and Government & Defense. As a result, the company is expanding its focus to these resilient and high-growth sectors. Max Sauberschwarz, Global Head of Air Freight (2024), explained the dual benefits of this approach:

  "With this strategy, we can drive volume growth while also striving for a more diversified product mix with improved profitability."

To drive growth in these areas, DGF continues to place trust in its people—not only by encouraging individual accountability, but also by fostering collaboration across its global network. *"We are a network, not a group of agents. Driving profitable growth means reinforcing a 'Winning Together' mindset through collaboration between Product and Sales,"* as highlighted in DGF's 2025 Strategy Brochure (2020).

To translate this mindset into day-to-day execution, DGF has, since 2021, launched annual global sales campaigns designed to be both impactful and engaging. These initiatives incorporate gamification elements, with each year featuring a different theme and set of targets. Cross-functional, country-based teams—referred to as "leagues"—compete for recognition through the Leaderboard. The first campaign, '007 License to Hunt,' was launched in 2021, drawing inspiration from iconic James Bond films, with teams role-playing as agents on a mission to target and secure top-tier BC profiles. This was followed in 2022 by the *"DGF Sector Race,"* a Formula 1-inspired campaign designed to drive growth across six key sectors: Engineering & Manufacturing, Consumer, Life Sciences & Healthcare, New Energy, Chemicals, and Technology. Most recently, in 2024, the *"Cargo Quest"* campaign brought together joint Sales and Product teams from both Ocean and Air Freight to compete against other country teams by advancing through various "vessel levels." The primary objective was to increase BC volumes through a dedicated Field Sales approach. As Scharwath (2024) noted: *"Profitable growth in the SMEs segment is driven by our dedicated Field Sales teams, who closely understand and respond to the specific needs of these customers."*

4.3. Digitalization as a key enabler

Building upon the successful deployment of *CargoWise One* and *myDHLi* in 2020, DGF continued its Digitalization Journey between 2021 and 2023, placing strong emphasis on enhancing cross-functional collaboration and increasing information visibility for customers.

The following findings and analyses are primarily based on internal communications about product releases.

i. myDHLi:

Since its launch in 2020, *myDHLi*—DGF's one-stop digital customer portal for transport logistics—has continuously adapted to meet customers' evolving requirements. To mark its one-year anniversary, DGF hosted the first *myDHLi* Digital Summit on May 11, 2021 at the DHL Innovation Center in Troisdorf, Germany, where it announced new functionalities and platform enhancements. For example, the redesigned "Quote + Book" service incorporates insights from user behavior analysis and modern design principles to improve usability. A newly introduced "Save & Edit" function allows customers to save and resume their bookings within the offer validity period, with all previously entered data preserved—enhancing convenience and saving time. Additionally, the *myDHLi* Reports module now offers

comprehensive visibility into both historical and current shipment data for more detailed analytics. Built-in popular social media features, such as “Follow + Share,” simplify communication along the supply chain by enabling customers to exchange shipment information with their trading partners and stakeholders.

Amid global crises and disruptions during 2022 and 2023, resilience became the core focus of the platform’s development roadmap. As CEO Tim Scharwath noted:

> *“Our role as a logistics provider is to manage these uncertainties and complexities and help our customers maximize their performance, resilience, and sustainability in logistics. Our logistics and digital expertise are bundled in myDHLi and help over 16,000 customers navigate even through uncertain times.”*

To support this, the *myDHLi* Track function was enhanced with an "exceptions" filter within the shipment list, allowing users to monitor disruptions in transit and respond proactively. Customers can configure the platform to receive automatic daily digests—either individual or consolidated—that highlight key shipment milestones, including status updates and exceptions. Furthermore, *myDHLi* Reports can now be tailored to focus on exception-based data, enhancing operational risk management.

In terms of supply chain transparency, *myDHLi* now supports visibility across three critical dimensions: environmental impact, cost, and lead time. The new order visibility feature extends transparency from individual shipments to entire orders. Selected customers can now access insights spanning from the purchase order (PO) level to individual stock-keeping units (SKUs), significantly enhancing end-to-end supply chain oversight.

Most recently in 2024, riding the wave of advancements in artificial intelligence, *myDHLi* introduced a generative AI assistant. This AI-powered, 24/7 chatbot supports customers by providing real-time responses to inquiries regarding shipment statuses, contact information, and general assistance. A new Customer Support Center was also established, reinforcing the value of personal support alongside digital innovation.

ii. RFQ360 and IMPAT360

In addition to its customer-facing platform, DGF also focused on modernising its internal operating systems. In 2023, the division launched *RFQ360* and *IMPAT360*—advanced

collaboration tools designed to manage all Request for Quote (RFQ) and Implementation activities from end to end. The new tools yielded several key benefits:

- Enhanced transparency: The integration offers comprehensive visibility across the entire commercial lifecycle—from pre-selling and opportunity management to customer shipments—within a single global platform.
- Improved data quality: Cleaner RFQ pipeline data due to standardized inputs. Compared to the legacy system, users are no longer required to enter data multiple times, and the number of mandatory data fields has been substantially reduced.
- Strengthened cross-functional collaboration: All RFQ-related information is stored in a central repository, facilitating smoother coordination among teams such as Bid Management, Pricing, Product, and Implementation. By reducing time spent on manual data entry, teams can focus on developing win strategies and competitive targets, ultimately increasing the likelihood of successful RFQs. Additionally, a streamlined notification and handover process accelerates RFQ acceptance and qualification across various levels—country, regional, and global. The centralized data structure also enables the system to automatically generate Opportunity Win Plans, thereby improving pre-bid preparation time, particularly for recurring RFQs.

4.4. "Excellence. Simply delivered. Sustainably."

At DHL Group, customer centricity is a fundamental value embedded in every division and every employee. The Group's Customer Promise, *"Excellence. Simply Delivered,"* reflects its commitment to delivering high-quality service while simplifying the customer experience. Equally important, however, is doing so responsibly to help shape a more sustainable future for the logistics industry and the wider community. In recognition of this, the Customer Promise has been expanded to include "*Sustainably*," and is being actively implemented through a range of Environmental, Social, and Governance (ESG) initiatives.

i. Environmental

The recent disruptions in global energy markets have significantly accelerated the transition toward renewable energy sources as a means to reduce dependency on fossil fuels, and to decrease greenhouse gas emissions. Increasingly, customers are seeking business partners that can support them in complying with environmental regulations and achieving their sustainability objectives. As reported by DGF (2023): "*Whether in a tender process or in discussion with existing customers, a growing number of shippers are not only requesting a*

greater Greenhouse Gas Emissions transparency, but are also exploring sustainable solutions, even if they come at an additional cost."

Although DGF's environmental initiative, branded 'GoGreen,' was launched several years ago, growing external pressures have further reinforced the strategic importance of sustainability in maintaining competitive advantage. Since 2021, DGF has implemented a series of measures aligned with its long-term vision of achieving zero-emissions logistics by 2050.

- **Strategic Partnerships for Sustainable Fuel Procurement:** DGF has actively pursued partnerships with producers and carriers of SAF and SMF to ensure an adequate and economically viable supply. In 2022, the company entered into a 3-year agreement with Air France KLM Martinair Cargo (AFKLMP) for the procurement of 33 million liters of SAF—one of the largest purchases of its kind in the freight forwarding industry. That same year, DGF furthered its decarbonization efforts in ocean freight by partnering with Hapag-Lloyd, a global leader in liner shipping, to utilize advanced biofuels. In addition, DGF expanded its long-standing partnership with GoodShipping, a pioneer in insetting for marine fuel decarbonization, by acquiring approximately 60 million liters of SMF.

- **Book & Claim Systems for Emissions Accounting:** To allocate the environmental benefits of sustainable fuel use to its customers, DGF employs a "Book & Claim" system. This mechanism enables customers to select low-carbon shipping options when purchasing DGF services, after which the associated carbon emission reductions are credited to their accounts. Given the logistical challenges of physically tracing SAF from production to end use, this digital approach facilitates transparent and credible emissions tracking across value chains. By 2021, DGF had introduced SMF options under the GoGreen Plus product line for two key ocean freight services: Less than Container Load (LCL) at no additional cost, and Full Container Load (FCL) at a premium. As of 2022, air freight customers can also opt to offset their emissions across all trade lanes.

- **Carbon Transparency and Reporting:** DGF provides detailed carbon emissions reporting and performance tracking of GoGreen KPIs, down to the country level. Customers are given full visibility of their shipment-related emissions through the *myDHLi* platform, enabling data-driven decision-making for sustainable logistics.

- **Employee Training and Internal Capacity Building:** To embed sustainability into its corporate culture, DGF offers specialized training programs such as the Certified GoGreen Specialist curriculum. This initiative ensures that employees are well-equipped to consult customers on environmentally optimized logistics solutions and promote sustainable practices across the value chain.

Strategic Sustainability Goals for 2024 and Beyond

In 2024, DGF established "Green Logistics of Choice" as its fourth strategic bottom line, solidifying its commitment to environmental sustainability. The company has set ambitious targets, including:

- Achieving a minimum of 30% SAF and SMF blending by 2030.
- Increasing the share of sustainable fuels in heavy-duty trucking operations to over 30% by 2030.
- Expanding the use of DHL Group's electric vehicles for last-mile deliveries.
- Implementing carbon-neutral design standards in all new DHL infrastructure, with any remaining emissions subject to offsetting.
- Offering comprehensive end-to-end green logistics solutions, including clean fuel options and Book & Claim-based services.

ii. Social

During times of crisis, DHL Group's purpose — "*Connecting people. Improving lives."* — becomes more evident than ever, serving as a driving force for the organization. Since August 2021, DGF Temperature Management Solutions (TMS) has played a key role in distributing COVID-19 vaccines to over 170 countries and territories, including some of the world's most remote areas. To this day, vaccine assignment is ongoing, albeit at lower volumes, and DGF TMS continues to apply its life sciences and healthcare transportation expertise to provide world-class service for vaccine transport.

Following the outbreak of the Russia–Ukraine conflict in 2022, and as part of DHL Group's special *"Humanitarian Aid Ukraine"* campaign, DGF collaborated closely with other divisions to transport 60,000 care packages to Ukraine, supporting people in urgent need of food, medical products, household items, and hygiene supplies. Additionally, in line with its commitment to global wildlife conservation, the freight forwarder partnered with the non-profit organization

Warriors of Wildlife to rescue five lions and one tiger from Ukraine and safely relocate them to their new home in South Africa.

Beyond its humanitarian contributions, DGF successfully maintained high employee morale during times of uncertainty, as reflected in the improved Employee Engagement scores measured through the annual EOS. One of the key contributors to this achievement was DGF's Diversity, Equity, Inclusion, and Belonging (DEIB) initiatives, which celebrate individuals from diverse cultural backgrounds, gender identities, and abilities—including both physical disabilities and neurodiversity. Programs such as *"Shift Up a Gear"* and *"Women in Leadership"* have contributed to women holding 28.7% of management positions. Meanwhile, initiatives like *"Pride at DGFF"* support LGBTQ+ colleagues, and *"Ability at DGFF"* ensures that individuals with diverse abilities are fully integrated into the workforce and provided with equal opportunities for growth and success. Together, these efforts foster a safe, inclusive, and supportive workplace culture—an essential foundation for employee loyalty and workforce stability during challenging times.

iii. Governance

Effective risk management is a critical component of corporate governance, particularly during turbulence times. In the context of the ongoing energy crisis, DHL Group—and DGF in particular—has demonstrated responsible governance by systematically identifying and assessing risks related to fuel price volatility, geopolitical instability, and supply chain disruptions. Mitigation strategies have been implemented to minimize the potential impact of these risks on overall business performance. According to the DHL Group Annual Reports from 2021 to 2023, the organization acknowledged rising inflation and the weakening of global economic growth as posing a risk of medium significance to the Group's profitability. Nevertheless, the Group expressed confidence in its geographically diversified operations, believing that declines in certain trade lanes could be offset by growth in others.

Furthermore, the limited availability of natural gas during the 2021–2023 period has driven increased global demand for alternative and sustainable fuel sources. This trend has created additional challenges for DGF, particularly in sourcing sufficient SAF to achieve its target of SAF accounting for over 30% of its total air freight fuel consumption. According to DHL Group's annual reports, the potential shortage of SAF supply has been identified as a risk of

medium significance. A key strategy to address this challenge involves establishing strategic partnerships with SAF producers and carriers to secure a stable and cost-effective supply.

As part of its governance strategy, DGF also places strong emphasis on transparent and consistent communication with its stakeholders regarding the company's response to geopolitical developments and market fluctuations. The freight forwarder regularly publishes regional market updates across its key service areas: air freight, ocean freight, and road freight. These updates, issued monthly, provide valuable insights into current market trends, capacity changes, pricing developments, and potential disruptions, allowing stakeholders to make informed decisions and plan accordingly.

4.5. Moving Ahead

As a result of its strategic adaptation initiatives, DGF has achieved tangible improvements in both operational and commercial performance. Customer satisfaction scores increased steadily, from 72 in 2021 to 74 in 2022, reaching 79 in 2023. Particularly, positive feedback was recorded regarding response times and consistent customer support. In 2024, freight volumes grew in line with broader market trends. DGF registered a 1.8% increase in revenue while maintaining a stable gross profit-to-EBIT conversion rate of 28%.

Although the energy crisis has largely subsided, 2024 continued to be a challenging year for the global forwarding industry. The sector faced capacity constraints due to disruptions in the Red Sea and ongoing geopolitical tensions, particularly the conflicts in Ukraine and the Middle East (DHL, 2025). Looking ahead to 2025, the implementation of new protective tariff policies by the U.S. administration is expected to impact global trade flows. While challenges persist, with ongoing investment in internal capabilities, DGF remain resilient and optimistic about the future. With the launch of its new Strategy 2030 in 2024, the company is well-positioned to pursue sustainable growth and stays committed to its aspiration of becoming the ***undisputed industry leader*** by 2030.

IV. Teaching Notes

This section provides guidance to educators on how to effectively use the case study in classroom settings. It outlines teaching approach, discussion questions, and suggested answers. While the teaching notes serve as a roadmap for instructors, classroom discussions may lead to alternative approaches and insights, which should be embraced and integrated into the learning experience. It is important to note that, although the energy situation has stabilized, its economic consequences and policy implications may continue to evolve, potentially altering DGF's position and response strategy after the release of this case study. Instructors should stay informed of recent industry developments while facilitating these sessions, as such changes may impact the context of the case study.

1. Teaching Objectives and Teaching Audience

This case study provides students with analytical frameworks to understand and evaluate a company's adaptive strategy amidst industry-wide challenges. By assessing DGF's response to the energy disruptions, students will gain valuable insights into how businesses with a global footprint can navigate volatile markets and pursue sustainable growth from both financial and ESG perspectives. Students are encouraged to connect the case study to real-world applications, applying key management concepts such as Dynamic Capabilities, PESTLE Analysis, and the ESG Framework. This case study is particularly suited for Bachelor's and Master's students in Management, Business, and Economics disciplines.

2. Teaching Approach

It is recommended to adopt a discussion-based approach where students actively engage with the course material through presentations and follow-up discussions. In this student-centric classroom setting, the instructor takes the role of a facilitator, guiding conversations, stimulating critical thinking, and ensuring that key educational objectives are met, rather than simply delivering content in a formal, one-way communication style.

2.1. Before the session

The case study and relevant resources are provided in advance for students to review before the session. Class time is then dedicated to applying this knowledge through interactive activities. Students are divided into three groups, with each group assigned a discussion question focusing on a particular theoretical concept:

- **Question 1 – Dynamic Capabilities:** How did DGF leverage its dynamic capabilities to navigate the challenges presented by the energy disruption, and how did it balance people, processes, and technology components to drive impactful transformation?
- **Question 2 – PESTLE Analysis**: What external factors influenced DGF's business performance during the energy disruption? Identify the strategic implications for DGF.
- **Question 3 – ESG Framework**: How did DGF incorporate ESG considerations into its business strategy during the energy crisis? Given its extensive size and global network, what role does DGF play in advancing sustainability goals across its value chain?

Students are expected to prepare a 10-minute presentation to address their assigned discussion question, with flexibility in presentation format—whether using PowerPoint, role-play, or game-based learning platforms to conduct quizzes. This approach not only helps students understand and apply management concepts in real-world business contexts but also fosters the development of soft skills such as public speaking, critical thinking, creativity, and teamwork.

2.2. <u>During the session</u>

The session begins with the facilitator outlining the learning objectives and context for the case study. Each group then presents their analysis, followed by a brief Q&A session. At the end of the class, students are asked to evaluate their colleagues' presentations based on three criteria, with responses submitted anonymously.

- Professionalism: Refers to the level of preparation and clarity demonstrated during the presentation, including effective communication, a structured approach, and an academically appropriate tone.
- Creativity: Evaluates the originality and creative approaches used in presenting the material, such as engaging formats, visual aids, or interactive elements that enhance the learning experience.
- Educational: Assesses the effectiveness of the presentation in conveying key theoretical concepts and their relevant applications in the case study, ensuring the audience gains a thorough understanding of the topic.

2.3. <u>After the session</u>

The facilitator will provide a summary of the session, highlighting key takeaways and offering guidance on how the management concepts can be applied in future coursework or professional

contexts. Additional resources or reading materials may be provided to reinforce the learning experience. Students are encouraged to reflect on the presentations and the feedback received.

3. Analysis and Discussion

> **Question 1 – Dynamic Capabilities:** How did DGF leverage its dynamic capabilities to navigate the challenges presented by the energy disruption, and how did it balance people, processes, and technology components to drive impactful transformation?

Sensing: DGF demonstrates a well-structured sensing capability through a combination of customer feedback mechanisms, frontline engagement, and market intelligence practices. The company conducts an annual CSS to capture its customers' evolving expectations. To complement intelligence gathered from centralized and structured sources like the CSS, DGF leverages the Field Sales approach to collect firsthand and real-time feedback. Through close and direct interactions with customers, sales representatives can detect local insights, latent customer needs, and nuanced understandings of the external environment that may not be captured through surveys alone. Customers are also more likely to share strategic information with trusted field representatives, which can inform product development and service innovation. Market risks and opportunities are carefully assessed and communicated transparently with stakeholders via monthly updates and annual business reports.

Seizing: Market insights were effectively translated into coordinated, results-oriented initiatives, as exemplified by DGF's global sales campaigns—such as *007 License to Hunt*, *Sector Race*, and *Cargo Quest*. The company emphasized network-wide collaboration among Sales, Product teams, and station operators to target priority customer segments—namely medium-sized businesses and resilient sectors—and to promote high-margin products that drive profitable growth. In response to customers' increasing demand for transparency and support during periods of disruption, DGF also made significant enhancements to its digital customer portal, *myDHLi*. Additionally, recognizing the growing demand for eco-friendly logistics solutions, as well as the strategic risks posed by limited availability of SAF/SMF due to the ongoing energy crisis, DGF proactively established strategic partnerships to secure sustainable fuel sources. As a result, the company has further solidified its position as a leading sustainable freight forwarder, offering a comprehensive *GoGreen Plus* product portfolio to help customers reduce their carbon footprints while meeting regulatory requirements.

Reconfiguring: DGF's 1F1O model illustrates the company's capability to reconfigure its workforce and operating processes around agility, accountability, and customer centricity. By assigning end-to-end ownership of a file to a single operator, DGF repositions the operator's role from a task executor to an entrepreneur. Under this model, task allocation is strategically reconfigured: repetitive, low-value tasks (e.g., data entry, invoice processing) are automated or delegated to Global Service Centers, freeing up operators to focus on judgment-driven, customer-oriented responsibilities such as exception handling, service personalization, and profit optimization. Building on this foundation, DGF introduced the GTOM — a holistic restructuring across three key areas: people, processes and systems.

Question 2 – PESTLE Analysis: What external factors influenced DGF's business performance during the energy disruptions? Identify the strategic implications for DGF.

1. **Political:**

- In February 2022, Russia launched a full-scale military invasion of Ukraine. To show support for Ukraine, the EU and its allies imposed a series of sanctions aimed at weakening Russia's economic base. In retaliation, Russia significantly reduced its natural gas exports to Europe, threatening the continent's energy security due to its substantial reliance on Russian natural gas.
- In response to this crisis, the EU accelerated its energy diversification strategy by forming new strategic partnerships with alternative suppliers. These efforts led to new trade flows that altered both the volume and direction of freight movement.
- Implications for DGF:
    - Several trade routes could become politically sensitive and commercially unviable due to the conflict, potentially requiring DGF to reallocate volumes to alternative routes. Such adjustments might result in longer lead times, higher fuel consumption, and more complex capacity planning.
    - Shifting trade flows presents substantial opportunities in energy-sector logistics. The growing need to transport LNG infrastructure components for the expansion of LNG terminals and storage facilities could drive demand for complex logistics solutions. These projects are typically high-value and technically

complex—areas where DGF's specialized expertise in industrial projects may provide a competitive edge.

2. **Economic:**

- 2021 marked a strong post-COVID recovery. However, transport capacity remained constrained, resulting in a tight and competitive freight market.
- This momentum slowed in 2022–2023 as soaring energy prices triggered record-high inflation, particularly in the Eurozone. In response, the ECB implemented tighter monetary policy, contributing to a broader economic deceleration. By 2023, EU GDP growth had fallen to just 0.5%, and industrial production contracted. The global trade downturn, combined with increased cargo capacity, led to freight rate normalization.
- Implications for DGF:
    - The combination of strong volume growth and elevated freight rates in 2021 created a favorable commercial environment, presenting opportunities for DGF to increase its revenue and profit margins. While transportation costs could be passed on to customers in such a tight market, DGF needs to strike a balance between pricing and service quality to stay competitive and maintain strong customer relationships.
    - As demand softened, DGF faced downward pressure on both shipment volumes and yields. This shift required the company to enhance operational efficiency, enforce stronger cost discipline, and adopt more flexible capacity management. Additionally, closer collaboration with both upstream and downstream supply chain partners became critical to navigating the increasingly volatile and uncertain market landscape.

3. **Social:**

- The EU is facing a widespread shortage of heavy truck drivers, a situation that may worsen due to an aging workforce and the challenge of attracting younger workers. Additionally, the economic repercussions of the energy crisis have driven up the cost of living, prompting drivers to demand higher wages and improved working conditions.
- There has been heightened public and investor scrutiny on ESG standards, particularly in areas such as labor practices and carbon footprints.
- Implications for DGF:

- Given the shortage of truck drivers, DGF must enhance its appeal to potential hauliers. This can be achieved by offering more attractive compensation packages, which include economic perks and services such as fast payment, diesel discounts, and leasing deals. Building stronger partnerships with hauliers will be essential to ensure capacity stability and meet customer demand.
- DGF must align its operations with sustainability and social responsibility standards. This involves ensuring fair labor practices, enhancing its green solution portfolio, forming strategic partnerships with producers and carriers of sustainable fuels, and demonstrating transparency in governance. DGF should extend these standards across its entire network by carefully selecting carriers and targeting customers who are equally committed to ESG practices.

4. **Technological:**

- COVID-19 accelerated digital transformation in the logistics industry. Innovations such as integrated transport management systems, and automated booking and tracking platforms are driving operational efficiency. A critical consideration is ensuring that these systems are seamlessly integrated with both suppliers and customers to enable end-to-end visibility across the logistics ecosystem.
- Data has become a strategic asset in freight forwarding. Advanced analytics can optimize route planning, improve demand forecasting, reduce delays, and support more efficient shipment consolidation.
- With increased digitalization, the risk of cyberattacks has also grown. Freight forwarders handle sensitive data—including customer information, shipment details, and financial transactions—making robust cybersecurity measures a critical business priority.
- Implications for DGF:
  - Investments in digital infrastructure and automation are necessary to enhance transparency, improve service reliability, and reduce manual errors.
  - By leveraging advanced analytics, DGF can make data-informed decisions. For example, historical data can be used to develop competitive bid strategies, improve responses to RFQs, and increase the likelihood of winning contracts.
  - Robust cybersecurity measures and compliance with data protection regulations (e.g., GDPR) are essential.

5. **Legal:**

- Following the energy disruptions, the EU accelerated the implementation of its climate and energy policies under the *REPowerEU* initiative and the *Fit for 55* legislative packages. These programs were designed to reduce dependence on fossil fuels, increase investments in clean energy infrastructure and accelerate climate goals.
- The EU and other allies have implemented extensive trade sanctions against Russia to weaken its economic base and limit its ability to finance military activities.
- Implications for DGF: As a global freight forwarder operating across multiple jurisdictions, DGF must ensure full compliance with sanctions, trade restrictions, and export controls imposed by the EU and other allied nations. This requires enhanced due diligence, robust compliance mechanisms, and real-time monitoring of regulatory changes to mitigate legal risks and facilitate smooth customs clearance.

6. **Environmental:**

- The energy disruptions have highlighted the vulnerabilities associated with over-reliance on fossil fuels, particularly natural gas. As a result, many governments, including the EU, are intensifying efforts to transition toward renewable energy sources.
- In December 2022, the EU revised its climate goals under the *Fit for 55* package, aiming to reduce emissions by 55% by 2030, with sectors such as transportation being a key focus. As a result, more stringent carbon reporting requirements were implemented, while the price of EU carbon allowances also increased.
- Customers increasingly seek green logistics solutions to comply with environment regulations and meet sustainability objectives.
- Implications for DGF:
    - The expansion of clean energy infrastructure will generate demand for specialized logistics solutions—particularly for transporting components such as wind turbines, solar panels, and equipment for hydrogen production facilities. DGF's capabilities in project logistics and multimodal transport can position it as a strategic partner in these large-scale infrastructure developments.
    - DGF should minimize the environmental impact of its operations while ensuring that carbon emissions are reported in compliance with regulatory standards. In

parallel, the company should continue expanding its portfolio of green logistics solutions to meet evolving customer expectations.

Question 3 – ESG Framework: How did DGF incorporate ESG considerations into its business strategy during the energy crisis? Given its extensive size and global network, what role does DGF play in advancing sustainability goals across the logistics value chain?

Given its extensive global network, DGF's influence extends beyond economic outcomes to include social and ecological impacts. As such, the company has a natural responsibility not only to its shareholders and customers but also to the environment and the communities in which it operates. This sense of corporate citizenship is deeply embedded in DHL Group's purpose: *"Connecting People. Improving Lives."* For many years, the Group has brought this purpose to life through its strategic framework, which is centered around three bottom lines: *Employer of Choice, Provider of Choice,* and *Investment of Choice*. In 2024, the Group introduced a fourth bottom line—*Green Logistics of Choice*—reinforcing its long-standing commitment to environmental sustainability. This framework aligns closely with John Elkington's TBL model, which emphasizes the balance of People, Planet, and Profit. DHL Group strives for growth that is sustainable in two ways: first, it must be economically sustainable, meaning offering a competitive return on investment; second, it must be ecologically sustainable by remaining at the forefront of low-carbon logistics operations.

The four bottom lines are operationalized through a range of ESG programs and initiatives:

- **Environmental**: DGF continues to invest heavily in clean operations. This includes the development of an extensive portfolio of green logistics products; and active procurement of SAF and SMF to decarbonize air and ocean freight.
- **Social**: The company focuses on attracting and retaining top talent, while fostering an inclusive and diverse workplace for its employees worldwide. DGF is also actively involved in community initiatives, such as *Humanitarian Aid Ukraine* and its partnership with *Warriors of Wildlife*, to create positive impacts on society.
- **Governance**: DGF prioritizes integrity and transparency by maintaining open communication with stakeholders about market risks and its mitigation strategies, particularly during periods of geopolitical or economic uncertainty.

For DGF, sustainability should not be treated as a separate initiative but rather integrated into the daily mindset and actions of everyone across the business and its wider network. As one of the world's largest freight forwarders, the company is uniquely positioned to drive change not only internally, but also through its partnerships with customers and suppliers.

- **Employees**: DGF places strong emphasis on training. Programs such as the Certified GoGreen Specialist curriculum help build employee knowledge and consulting skills in sustainability topics. In addition, employees are encouraged to participate in community-focused volunteer initiatives like GoHelp, GoTeach, and GoTrade to support local development.
- **Customers**: DGF increasingly focuses on customer segments that are willing to invest in climate-friendly logistics solutions. The company offers tailored consultation to help customers select environmentally optimized logistics options and promote sustainable practices across their value chains.
- **Suppliers:** To ensure a reliable and economically viable supply of sustainable fuel, DGF has actively pursued long-term partnerships with leading producers and carriers of SAF and SMF, including Air France KLM Martinair Cargo, Hapag-Lloyd, and GoodShipping.

V. Limitations and Conclusion

While this dissertation offers valuable insights into DGF's strategic adaptation during the 2021–2023 energy crisis, several limitations should be acknowledged to contextualize the scope and applicability of the findings.

Firstly, the research focuses exclusively on DGF, without examining other freight forwarders or organizations within the broader logistics sector. Although this approach enables in-depth contextual analysis, it limits the generalizability of the findings. The strategies and outcomes discussed may not reflect those of companies with different sizes, market exposures, operating models, or resource configurations. Future studies could conduct comparative analyses across multiple firms to validate or challenge the insights presented here and explore a broader range of strategic responses within the industry.

Furthermore, the data for this dissertation were primarily drawn from secondary sources, including industry reports, macroeconomic analyses, and internal company documents, supplemented by three semi-structured interviews with senior DGF executives. While these interviews offered critical context and operational insight, the small sample size and reliance on managerial perspectives introduce potential bias. Without triangulation from other stakeholder groups—such as frontline employees, customers, suppliers, or policymakers—the interpretation of strategic intent and organizational effectiveness may reflect only a single dimension of the adaptation process. A more diverse and comprehensive dataset would strengthen the credibility and balance of the analysis.

Finally, the study captures a specific time frame: the peak of the energy crisis from 2021 to 2023. Although the most acute phase has passed, its economic and regulatory implications continue to unfold. Therefore, the findings should be interpreted within this temporal boundary. Future research could adopt a longitudinal approach to assess how logistics firms continue to adapt amid post-crisis challenges and evolving global uncertainties.

In conclusion, this thesis explores the impact of the 2021–2023 energy-induced disruption on the freight forwarding sector and provides an in-depth analysis of DGF's strategic responses. Rather than relying on short-term, reactive measures, DGF proactively embedded resilience into its organizational fabric. The company empowered employees to take ownership, fostered

collaboration across its global network, tailored solutions to diverse customer needs, leveraged digital technologies to drive operational efficiency, and emphasized ESG initiatives to align growth with sustainability goals. This holistic and forward-looking approach enabled DGF not only to navigate the immediate challenges of the energy crisis but also to build sustained competitive advantages in a volatile market environment. DGF's story highlights a fundamental principle of effective crisis management: **SIMPLIFY**. By focusing on core competencies, maintaining lean processes, and adopting a long-term perspective, organizations can respond with agility to uncertainty while laying the foundation for enduring success.

References

Academic References

1. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120. https://doi.org/10.1177/014920639101700108
2. Barreto, I. (2010). Dynamic capabilities: A review of past research and an agenda for the future. *Journal of Management, 36*(1), 256–280. https://doi.org/10.1177/0149206309350776
3. Bourgeois, L. J., & Eisenhardt, K. M. (1988). Strategic decision processes in high-velocity environments: The case of the hypercompetitive computer industry. *Management Science, 34*(3), 816–835. https://doi.org/10.1287/mnsc.34.3.816
4. D'Aveni, R. A. (1994). *Hypercompetition: Managing the dynamics of strategic maneuvering*. Free Press.
5. Eccles, R. G., & Krzus, M. P. (2010). The integrated reporting movement: Meaning, momentum, motives, and materiality. *Journal of Applied Corporate Finance, 22*(1), 13–17. https://doi.org/10.1111/j.1745-6622.2010.00243.x
6. Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10–11), 1105–1121. https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E
7. El Ghoul, S., Guedhami, O., Kwok, C. C. Y., & Mishra, D. (2011). Does corporate social responsibility affect the cost of capital? *Journal of Banking & Finance, 35*(9), 2388–2406. https://doi.org/10.1016/j.jbankfin.2011.03.015
8. Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. New Society Publishers.
9. Flammer, C. (2021). Corporate social responsibility and shareholder reaction: The environmental awareness of investors. *Academy of Management Review, 46*(1), 42–57. https://doi.org/10.5465/amr.2018.0174
10. Friedman, M. (1970). The social responsibility of business is to increase its profits. *The New York Times Magazine*, 122–124.
11. Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of Management Review, 20*(4), 986–1014. https://doi.org/10.5465/amr.1995.9512280034
12. Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard Business Review, 87*(9), 56–64.

13. Porter, M. E., & Kramer, M. R. (2006). Strategy & society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review, 84*(12), 78–92.
14. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319–1350. https://doi.org/10.1002/smj.640
15. Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509–533. https://doi.org/10.1002/(SICI)1097-0266(199707)18:7<509::AID-SMJ882>3.0.CO;2-Z
16. Torres, A., Bijmolt, T. H. A., Tribó, J. A., & Verhoef, P. C. (2012). Generating economic value from corporate social responsibility. *Journal of Marketing, 76*(6), 28–44. https://doi.org/10.1509/jm.11.0088
17. Brundtland Commission (1987). *Our common future*. Oxford University Press.
18. Yüksel, I. (2012). Developing a multi-criteria decision-making model for PESTLE analysis. *International Journal of Business and Social Science, 3*(14), 30–40.

Other References

1. Accenture. (2021). *Seabury Maritime Market Dynamics Q4 2020* [Unpublished report].
2. Accenture. (2022). *Seabury Air Cargo Market Dynamics Q4 2021* [Unpublished report].
3. Accenture. (2022). *Seabury Maritime Market Dynamics Q4 2021* [Unpublished report].
4. Accenture. (2023). *Seabury Maritime Market Dynamics Q4 2022* [Unpublished report].
5. Accenture. (2024). *Seabury Air Cargo Market Dynamics Q4 2023* [Unpublished report].
6. Accenture. (2024). *Seabury Maritime Market Dynamics Q4 2023* [Unpublished report].
7. Buckby, D. (2017). *The relationship between freight rate growth and forwarder margins*. Transport Intelligence Insights. https://ti-insight.com/free-brief-relationship-freight-rate-growth-forwarder-

margins/#:~:text=When%20carrier%20rates%20fall%2C%20forwarders,do%20not%20fall%20as%20quickly

8. Consilium. (2024). *The energy leap – How EU countries weathered a Russia-induced crisis and are reshaping energy supply*. European Union. https://www.consilium.europa.eu/en/energy-leap-how-eu-countries-russia-crisis-supply/
9. Consilium. (2025). *EU response to Russia's war of aggression against Ukraine*. European Union. https://www.consilium.europa.eu/en/topics/russia-s-war-against-ukraine/
10. Consilium. (2025). *Fit for 55*. European Union. https://www.consilium.europa.eu/en/policies/fit-for-55/#what
11. Consilium. (2025). *How the EU is greening energy*. European Union. https://www.consilium.europa.eu/en/policies/how-the-eu-is-greening-energy/
12. Consilium. (2025). *Where does the EU's gas come from?* European Union. https://www.consilium.europa.eu/en/infographics/where-does-the-eu-s-gas-come-from/
13. Daher, S., Hausmann, L., & Wölfel, T. (2022). *Freight forwarders' earnings amid carrier rate volatility*. McKinsey & Company. https://www.mckinsey.com/industries/logistics/our-insights/freight-forwarders-earnings-amid-carrier-rate-volatility#/
14. DGF. (2023). *DHL Global Forwarding records increasing demand for sustainable transport solutions* [Press release]. DHL Group. https://group.dhl.com/en/media-relations/press-releases/2023/dgf-records-increasing-demand-for-sustainable-transport-solutions.html
15. DGF. (2020). *SIMPLIFY – Our DGF Priorities 2020* [Unpublished internal strategy brochure].
16. DGF. (2022). *DGF's Digitalization Journey* [Unpublished internal strategy brochure].
17. DGF. (2024). *2030 Strategy* [Unpublished internal strategy brochure].
18. DGF. (2024). *Navigating the ocean of opportunities with Casper – DGF news* [Unpublished internal news article].
19. DGF. (2025). *Certified Freight Forwarder Training* [Unpublished internal video material].

20. DGF. (2025). *Leverage the flexibility of ocean freight LCL, strengthen your supply chain's resilience* [Unpublished internal brochure].
21. DGF. (2025). *Taking your freight to new heights* [Unpublished internal brochure].
22. DGF. (2025). *Global Target Operating Model* [Unpublished internal SharePoint site].
23. DGF. (2025). *One File One Operator* [Unpublished internal SharePoint site].
24. DHL. (2021). *2020 annual report*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/annual-reports/DPDHL-2020-Annual-Report.pdf
25. DHL. (2022). *2021 annual report*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/annual-reports/DPDHL-2021-Annual-Report.pdf
26. DHL. (2023). *2022 annual report*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/annual-reports/DPDHL-2022-Annual-Report.pdf
27. DHL. (2024). *2023 annual report*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/annual-reports/DHL-Group-2023-Annual-Report.pdf
28. DHL. (2025). *2024 annual report*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/annual-reports/DHL-Group-2024-Annual-Report.pdf
29. DHL. (2020). *myDHLi: DHL Global Forwarding launches innovative one-stop customer portal for digital logistics* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2020/mydhli-dhl-global-forwarding-launches-innovative-one-stop-customer-portal-for-digital-logistics.html
30. DHL. (2022). *Another step towards sustainable air freight: DHL purchases 33 million liters of sustainable aviation fuel from Air France KLM Martinair Cargo* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2022/dhl-purchases-33-million-liters-of-sustainable-aviation-fuel-from-air-france-klm-martinair-cargo.html
31. DHL. (2022). *DHL Global Forwarding and GoodShipping accelerate sustainable shipping via insetting with 60 million liters of Sustainable Marine Fuel* [Press release]. https://group.dhl.com/content/dam/deutschepostdhl/en/media-relations/press-releases/2022/pr-dgf-goodshipping-20221102.pdf

32. DHL. (2022). *DHL Global Forwarding and Hapag-Lloyd set an example for sustainable ocean transport by using advanced biofuel* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2022/dhl-global-forwarding-and-hapag-lloyd-set-an-example-for-sustainable-ocean-transport-by-using-advanced-biofuel.html
33. DHL. (2022). *DHL Global Forwarding goes wild* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2022/dhl-global-forwarding-goes-wild.html
34. DHL. (2023). *More than 60,000 care packages shipped to Ukraine* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2023/dhl-more-than-60000-care-packages-shipped-to-ukraine.html
35. DHL. (2024). *DHL Global Forwarding and Lindt & Sprüngli sweeten the deal for the usage of waste- and residues-based maritime fuel for ocean freight* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2024/dgf-and-lindt-spruengli-sweeten-the-deal-for-usage-of-waste-and-residues-based-maritime-fuel.html
36. DHL. (2024). *DHL Global Forwarding supports NGO kinderherzen to deliver world's first mobile heart clinic to El Salvador* [Press release]. https://group.dhl.com/en/media-relations/press-releases/2024/dhl-global-forwarding-supports-kinderherzen-to-deliver-mobile-heart-clinic.html
37. DHL. (2022). *Investor relations – Business profile March 2022*. https://group.dhl.com/content/dam/deutschepostdhl/de/media-center/investors/documents/business-profiles/DPDHL-Business-Profile-2022.pdf
38. DHL. (2025). *2025 business profile – Investor relations – March 2025*. https://group.dhl.com/content/dam/deutschepostdhl/en/media-center/investors/documents/business-profiles/DHL-Group-2025-Business-Profile.pdf
39. DHL. (2025). *DHL Global Forwarding – Products and solutions – Air freight*. Retrieved May 14, 2025, from https://www.dhl.com/gb-en/home/global-forwarding/products-and-solutions/air-freight.html
40. DHL. (2025). *DHL Global Forwarding – Products and solutions – GoGreen Solutions*. Retrieved May 14, 2025, from https://www.dhl.com/gb-en/home/global-forwarding/products-and-solutions/gogreen-solutions.html
41. DHL Freight Connections. (2025). *Logistics dictionary*. Retrieved May 12, 2025, from https://dhl-freight-connections.com/en/logistics-dictionary/freight-forwarding/

42. Dierker, D., Greenberg, E., Saxon, S., & Tiruneh, T. (2022). *Navigating the current disruption in containerized logistics*. McKinsey & Company. https://www.mckinsey.com/industries/logistics/our-insights/navigating-the-current-disruption-in-containerized-logistics
43. DSV. (2025). *What is freight forwarding? – FAQ*. Retrieved May 12, 2025, from https://www.dsv.com/en/support/faq/what-is-freight-forwarding
44. DSV. (2024). *2023 annual report*. https://investor.dsv.com/events/event-details/2023-annual-report
45. European Central Bank. (2023). *Monetary policy decisions*. European Union. https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.mp230504~cdfd11a697.en.html
46. Energy Transitions Commission. (2022). *Building energy security through accelerated energy transition*. https://www.energy-transitions.org/wp-content/uploads/2022/05/The-drivers-of-the-winter-2021-2022-gas-crisis.pdf
47. European Commission. (2025). *REPowerEU: Affordable, secure and sustainable energy for Europe*. European Union. Retrieved May 11, 2025, from https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en#next-steps
48. European Commission: Directorate-General for Energy, E3M, Enerdata, Ludwig Bölkow SystemTechnik, Oeko, Trinomics B.V., Smith, M., Jagtenberg, H., Lam, L., Torres, P., Gorner, M., Ansarin, M., Van Nuffel, L., Abbas, A., Badouard, T., Carsalade, O. d., Casteleyn, M., Rousselot, M., Payan, E., ... Altmann, M. (2024). *Study on energy prices and costs: Evaluating impacts on households and industry: 2023 edition*. Publications Office of the European Union. https://data.europa.eu/doi/10.2833/782494
49. European Economic and Social Committee. (2023). *Impact of the energy crisis on the European economy*. European Union. https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/impact-energy-crisis-european-economy
50. Eurostat. (2022). *EU's GDP up by 5.4% in 2021 but still below 2019 level*. European Union. https://ec.europa.eu/eurostat/en/web/products-eurostat-news/-/ddn-20220629-2
51. Eurostat. (2024). *Industrial production statistics*. European Union. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Industrial_production_statistics

52. Eurostat. (2024). *National accounts and GDP – Statistics explained*. European Union. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=National_accounts_and_GDP
53. Eurostat. (2025). *Road freight transport statistics – Statistics explained*. European Union. Retrieved May 12, 2025, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Road_freight_transport_statistics#:~:text=Highlights,for%20308%20billion%20tonne%2Dkilometres
54. Freightos. (2025). *Freightos Terminal – FBX*. Retrieved May 19, 2025, from https://app.terminal.freightos.com/fbx
55. IATA. (2021). *Air cargo market analysis – December 2021*. https://www.iata.org/en/iata-repository/publications/economic-reports/air-freight-monthly-analysis---december-2021/
56. IATA. (2023). *Annual review 2023*. https://www.iata.org/contentassets/c81222d96c9a4e0bb4ff6ced0126f0bb/annual-review-2023.pdf
57. IATA. (2024). *Annual review 2024*. https://www.iata.org/contentassets/c81222d96c9a4e0bb4ff6ced0126f0bb/iata-annual-review-2024.pdf
58. IEA. (2020). *Global energy review 2020*. https://www.iea.org/reports/global-energy-review-2020
59. IEA. (2022). *A 10-point plan to reduce the European Union's reliance on Russian natural gas*. https://www.iea.org/reports/a-10-point-plan-to-reduce-the-european-unions-reliance-on-russian-natural-gas
60. IEA. (2022). *Evolution of energy prices, Oct 2020–Jan 2022*. https://www.iea.org/data-and-statistics/charts/evolution-of-energy-prices-oct-2020-jan-2022
61. IEA. (2022). *The global energy crisis – World energy outlook 2022*. https://www.iea.org/reports/world-energy-outlook-2022/the-global-energy-crisis
62. IEA. (2023). *Analyzing the impacts of Russia's invasion of Ukraine on energy markets and energy security*. https://www.iea.org/topics/russias-war-on-ukraine
63. IEA. (2025). *Global energy crisis*. Retrieved May 11, 2025, from https://www.iea.org/topics/global-energy-crisis

64. IMF. (2013). *Energy subsidy reform – Lessons and implications* (Policy Paper No. PP/13/71). https://www.imf.org/en/Publications/Policy-Papers/Issues/2016/12/31/Energy-Subsidy-Reform-Lessons-and-Implications-PP4741
65. Mordor Intelligence. (2025). *Freight forwarding market size – Industry analysis & growth outlook (2025–2030)*. Retrieved May 12, 2025, from https://www.mordorintelligence.com/industry-reports/freight-forwarding-market
66. Sgaravatti, G., Tagliapietra, S., Trasi, C., & Zachmann, G. (2023). *National fiscal policy responses to the energy crisis*. Bruegel. https://www.bruegel.org/dataset/national-policies-shield-consumers-rising-energy-prices
67. The Brainy Insights. (2024). *Freight forwarding market report 2024–2033*. https://www.thebrainyinsights.com/report/freight-forwarding-market-13348
68. Transport Intelligence. (2022). *Q4 2021 Ti, Upply & IRU European road freight rate development benchmark*. https://ti-insight.com/whitepapers/q4-2021-ti-upply-iru-european-road-freight-rate-development-benchmark/
69. Transport Intelligence. (2024). *Global freight forwarding market size & forecasting 2023–2028*. https://ti-insight.com/wp-content/uploads/2024/07/GFF-Market-Size-Forecasting-2023-2028-WP.pdf
70. TAC Index. (2022). *TAC Freight Dashboard*. Retrieved May 19, 2025, from https://dashboard.tacindex.com/dashboard
71. World Bank Group. (2025). *GDP growth (annual %)*. Retrieved May 11, 2025, from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG
72. WTO. (2023). *World trade statistical review 2022 – Chapter III: World trade and economic growth, 2021–22*. https://www.wto.org/english/res_e/booksp_e/wtsr_2022_c3_e.pdf
73. WTO. (2024). *World trade statistical review 2023 – Chapter III: World trade and economic growth, 2022–23*. https://www.wto.org/english/res_e/booksp_e/wtsr_2023_ch3_e.pdf
74. WTO. (2024). *World trade statistics 2023 – Key insights and trends*. https://www.wto.org/english/res_e/statis_e/statistics2023_e.htm

Appendix

1. Fuel Price Development

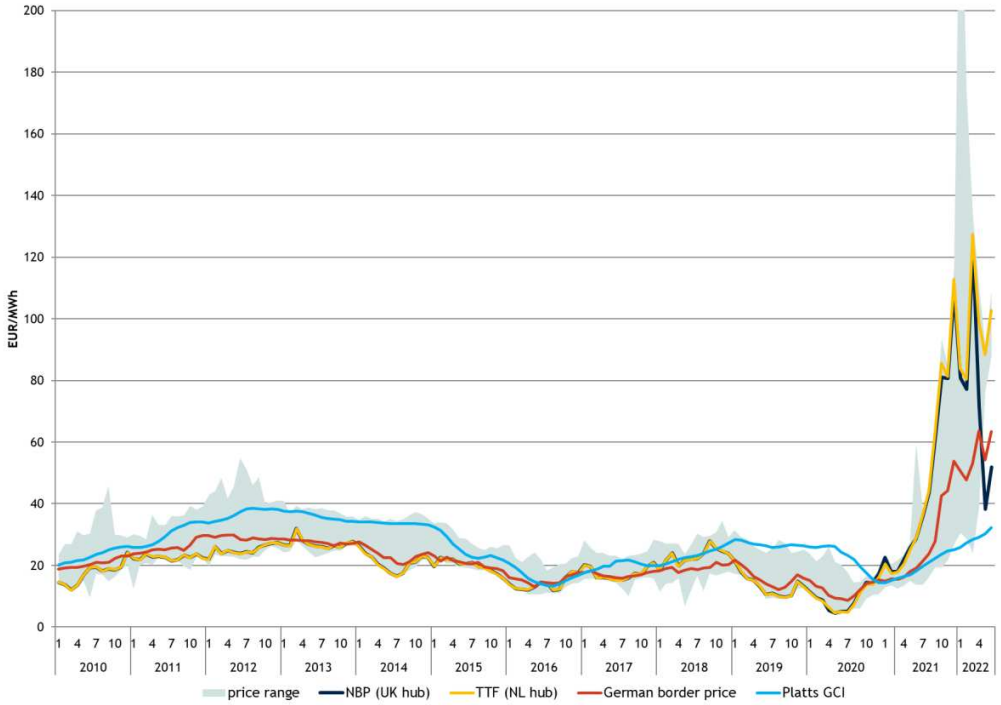

Figure 2 – Selected wholesale gas prices in Europe, nominal prices (European Commission, 2024).

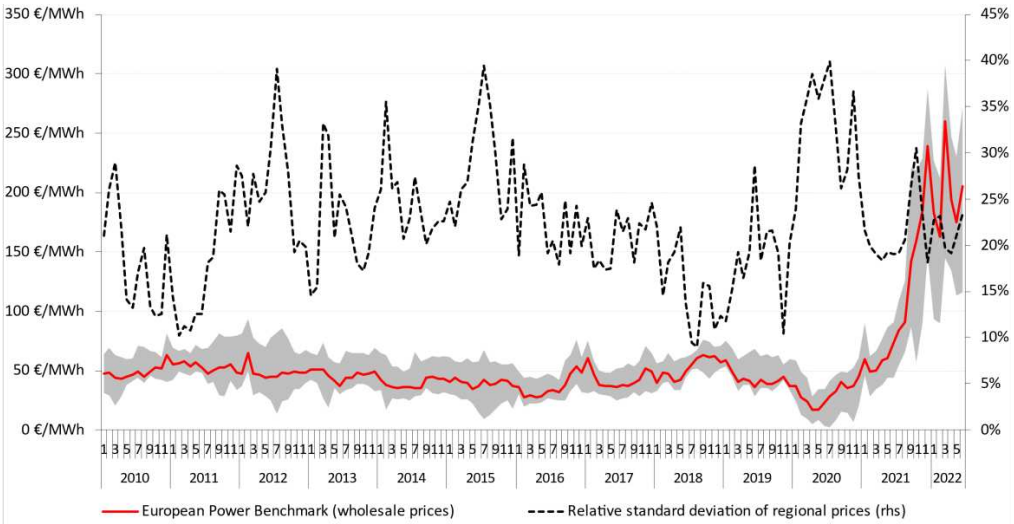

Figure 3 – Evolution of monthly average wholesale day-ahead baseload electricity prices in Europe, showing the European Power Benchmark and the range of minimum and maximum prices across the main EU markets (European Commission, 2024).

Figure 4 – The Brent crude oil price from 2008 to October 2022, indicated by the Daily Europe Brent Spot Price FOB in $USD per barrel (European Commission, 2024).

2. Economic Growth

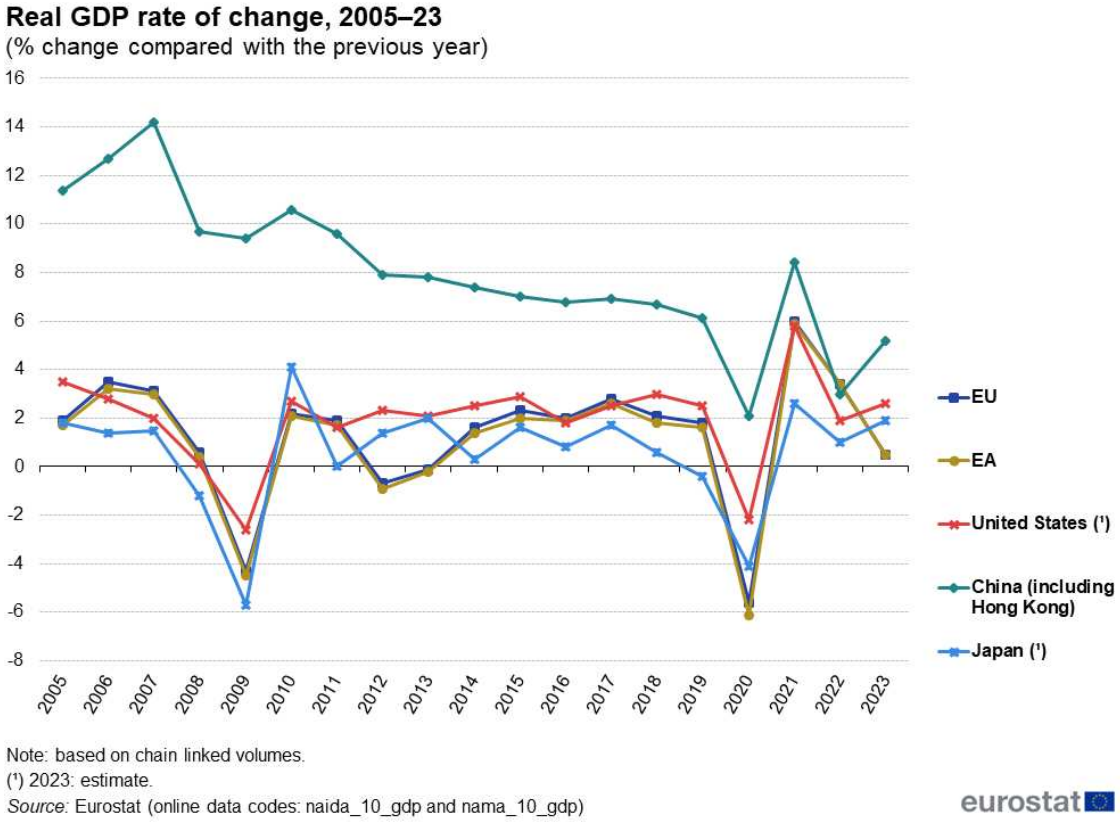

Figure 5 – Real GDP rate of change, 2005-23 (Eurostat. 2024).

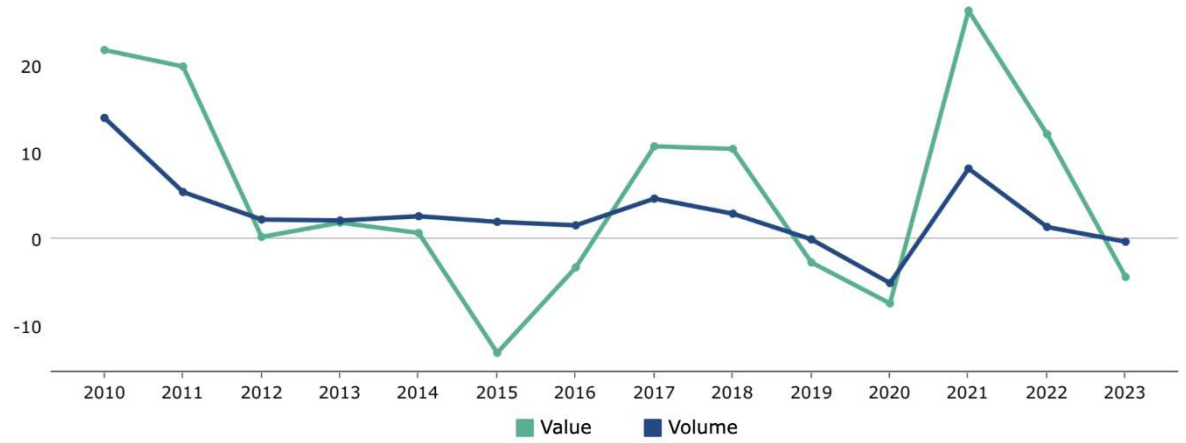

Figure 6 – Growth in global merchandise trade value and volume – Exports Annual Change (%) (WTO, 2023).

3. Freight Forwarding Market Statistics

3.1. Freight Capacity and Demand Development

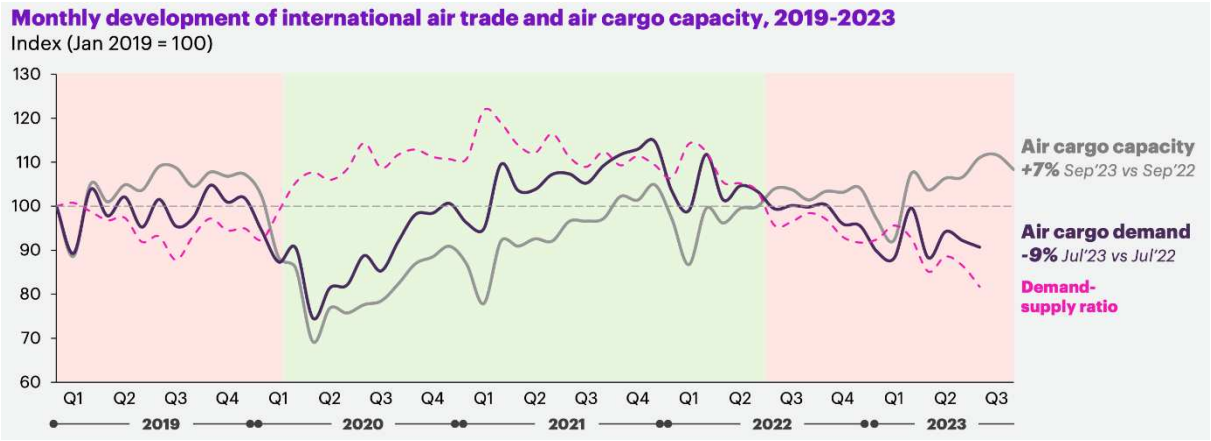

Figure 7 – Monthly development of international air trade and air cargo capacity, 2019 – 2023. Growth in air cargo capacity continues to diverge from demand, further lowering the demand-supply balance (Accenture, 2023).

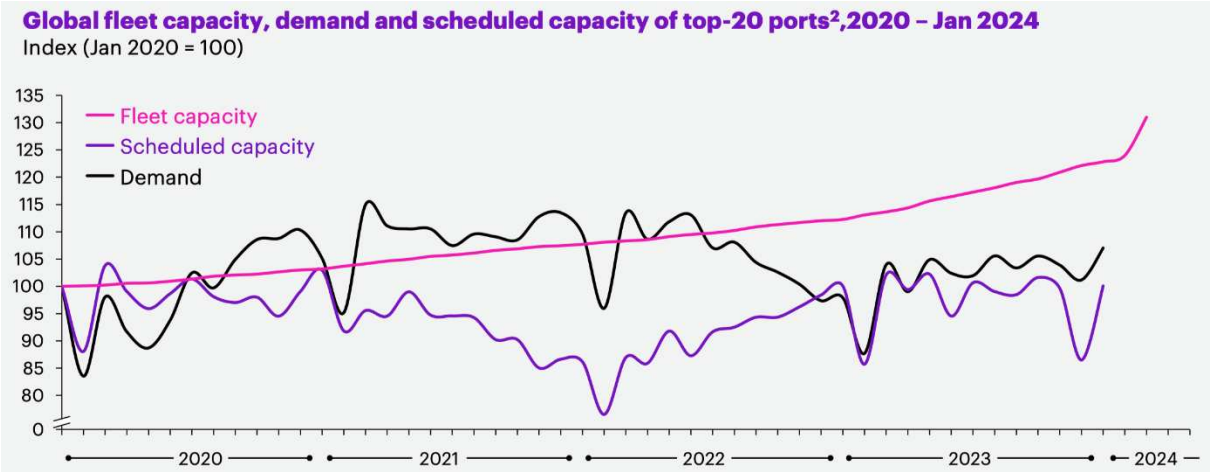

Figure 8 – Global ocean freight fleet capacity, demand and scheduled capacity of top-20 ports, 2020 – Jan 2024 (Accenture, 2023).

3.2. Freight Rate Development

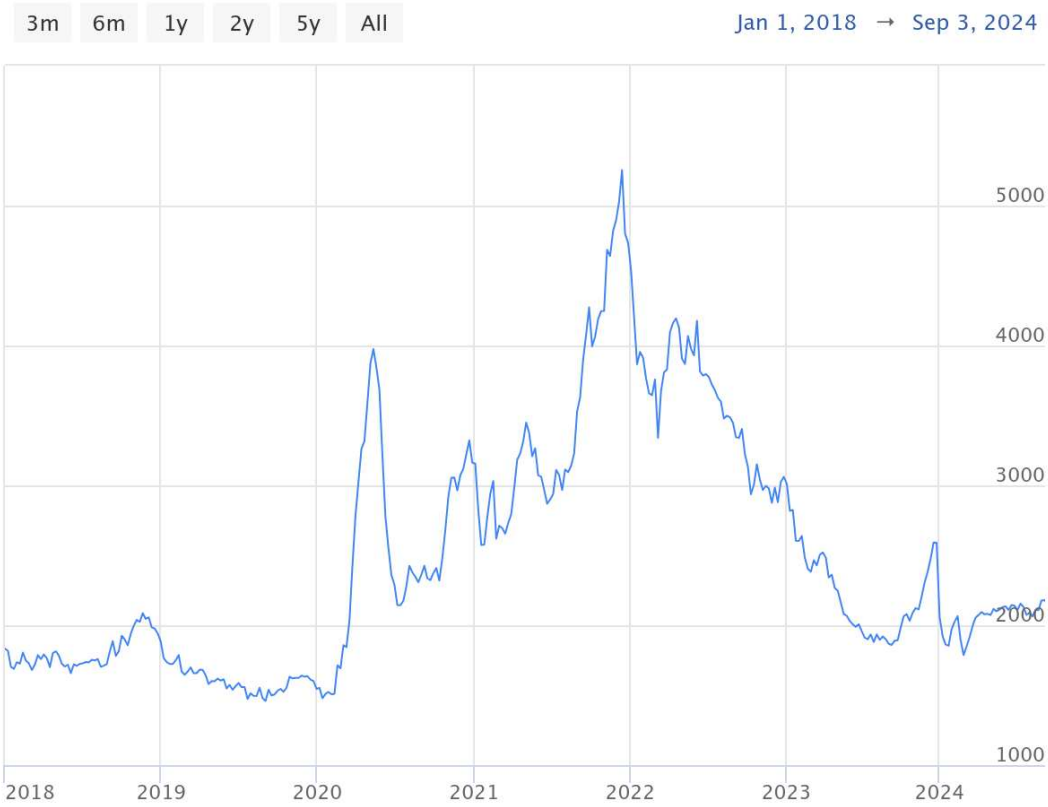

Figure 9 – Baltic Airfreight Index (BAI) - Global from January 2018 to September 2024 (TAC Index, 2025). BAI is a weekly benchmark that tracks the spot-market rates airlines charge to move general cargo by air on major global trade lanes.

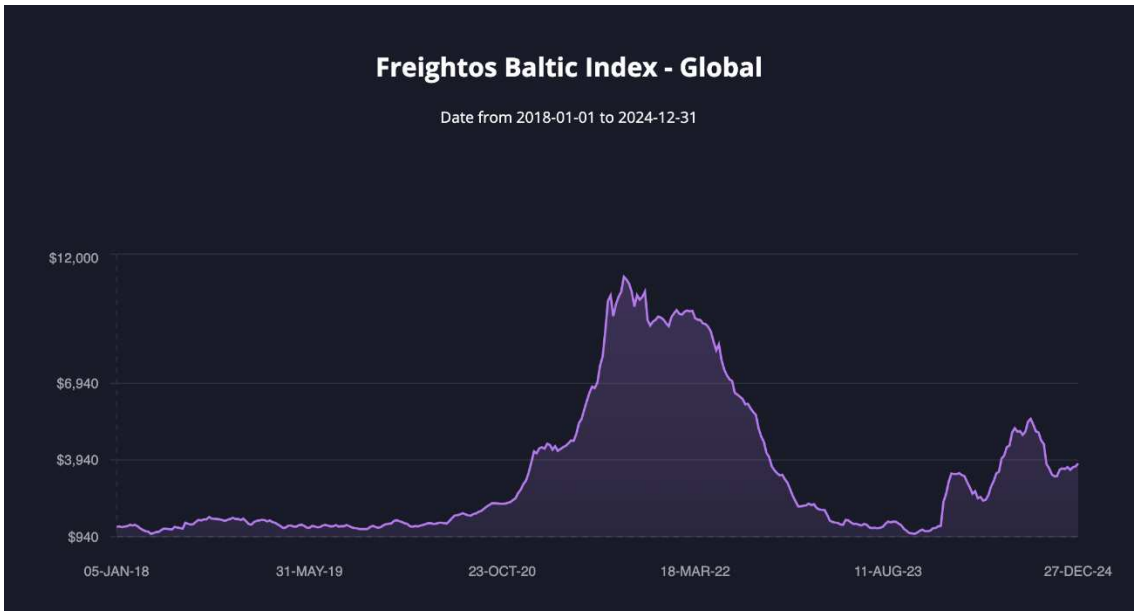

Figure 10 – Freightos Baltic Index (FBX) – Global from January 2018 to December 2024 (Freightos, 2025). FBX is a set of daily container-freight rate benchmarks jointly produced by Freightos (a digital freight-booking platform) and the Baltic Exchange (a respected shipping-market data provider).

4. DHL Global Forwarding Strategy

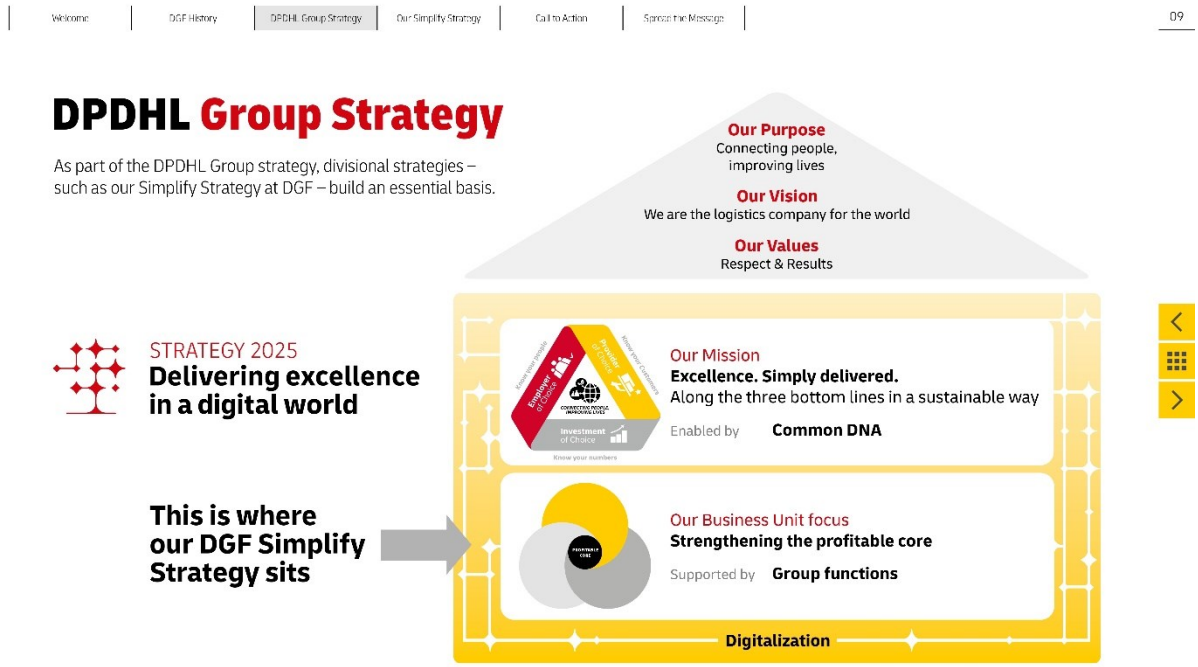

Figure 11 – DHL Group (previously DPDHL Group) 2025 Strategy (DHL, 2020)

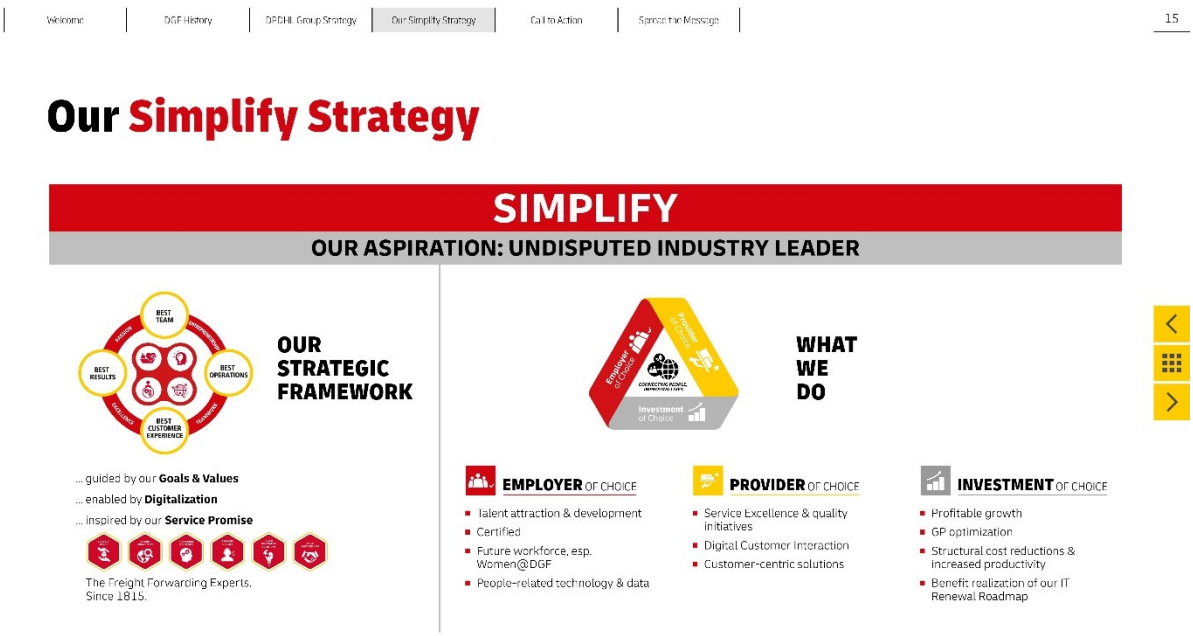

Figure 12 – DHL Global Forwarding 2025 Strategy (DGF, 2020)

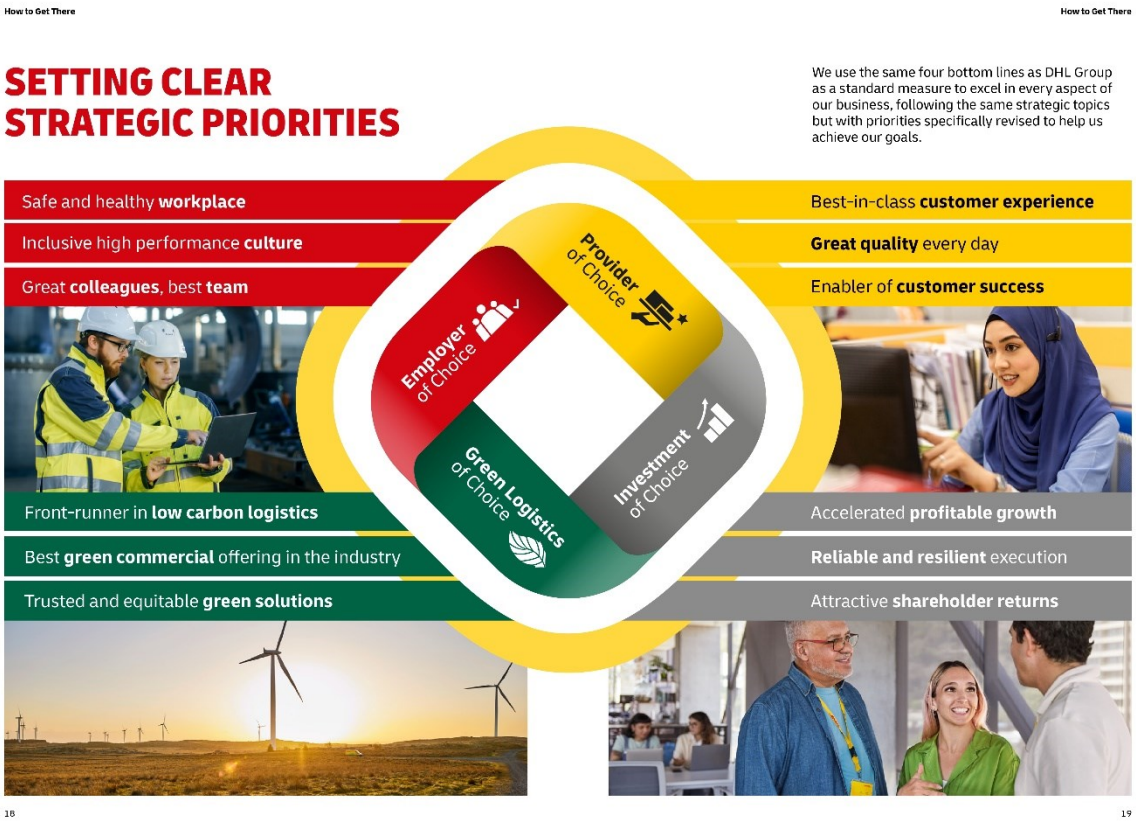

Figure 13 – DHL Global Forwarding 2030 Strategy (DGF, 2024)

Figure 14 – DHL Global Forwarding's Digital Journey (DGF, 2022)

5. Interview Scripts

Date	Interviewee	Duration
13th March 2025	Global Head of Carrier and Yield Management	45 minutes

Question Guide:

1. Can you walk through DGF's freight procurement process? Is there a centralized platform for capacity procurement?
2. How has DGF's carrier strategy evolved over time in response to market changes?
3. What are the key carrier selection criteria?
4. How have rising fuel costs influenced freight carrier rates (selling rate)? How have increased transport costs affected DGF's profitability and pricing strategy?
5. How does DGF leverage its scale, customer portfolio, and brand reputation during carrier rate negotiations?
6. Which of DGF's trade lanes or routes were the most impacted by the energy crisis and subsequent economic downturn? How did you adapt to this situation.

7. With reduced freight volumes due to the economic downturn, do you face any challenge in fulfilling carrier volume commitments?
8. How does DGF adapt its carrier strategy, volume allocation and yield management tactics to swiftly respond to macroeconomic and freight market volatility?
9. How does sustainability factor into carrier selection and long-term strategic partnerships?

Date	Interviewee	Duration
20th March 2025	Global Head of Commercial Center – Ocean Freight	30 minutes

Question Guide:

1. How do you manage the pricing and quotation process? Do you use a centralized platform for this?
2. Does your team implement a dynamic pricing strategy to adjust to market volatility? If so, how do you ensure it remains responsive to fluctuating fuel prices, carrier rates, capacity constraints, and geopolitical risks?
3. How do you strike a balance between maintaining profitability and offering competitive rates, especially when customers are facing higher logistics costs?
4. Have you introduced any flexible pricing models (e.g., volume-based discounts, surcharge adjustments, bundled services) to accommodate customer needs while safeguarding margins?
5. How do your pricing strategies compare to those of competitors in the current economic climate? Have you observed any major shifts in industry pricing trends?
6. How do you factor in fuel price volatility and geopolitical uncertainties when setting long-term pricing contracts?
7. Do you leverage AI, market analytics, or predictive modeling to optimize pricing strategies in real-time?

Date	Interviewee	Duration
07th April 2025	Global Vice President of Process Excellence	45 minutes

Question Guide:

1. Given DGF's exposure to market volatility and external disruptions, what role does your department play in enhancing resilience, ensuring service reliability, and contributing to strict cost management?
2. In 2020, DGF introduced *CargoWise 1*, which is a central procurement system for freight capacity—can you elaborate on how this system works and its impact on cost control and operational efficiency?
3. What initiatives have been implemented to improve operational efficiency and enhance business agility in response to market fluctuations and evolving customer needs? Can you share more about the *Global Target Operating Model (GTOM)* program and how it supports these efforts?
4. How were things before the launch of *GTOM*? Given DGF's global footprint, were there noteworthy regional differences in operating procedures and efficiency?
5. Regional operations often face unique conditions—regulatory requirements, workforce profiles, and strategic priorities vary. How do you enforce a global standard while still preserving the flexibility each region needs?
6. Can you share more about the *One File One Operator (1F1O)* model. How are *1F1O* and *GTOM* related to and complement each other?
7. What changes have you noticed from the introduction of these models, from the operations, employee engagement, and service quality perspectives.
8. Have you encountered any major challenges in rolling out *1F1O* and *GTOM*? How do you plan to address them going forward to keep the implementation on track and ultimately ensure its success?