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Designing the corporate experience of green transition: A systems approach to the
interplay of modern key elements.

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“We’re on the leeward side, the sun never reaches us.”

To the five thousand and counting, amazing folks I had the privilege of experiencing life with in 2018, who inspired me to leave. To the leeward side of life!

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ABSTRACT

Regulatory and environmental compliance are, as individual areas, well-researched in terms of the impairments that hinder their implementation in practice at corporate work desks. Against the canvas of the polycrises, both of these areas, in combination with each other and related concerns make up for the contemporary industrial concerns since there has been a debilitating impact in the form of consumer, organizational and economic vulnerability in the EU. This impact, have been elevated in the light of enforcements of extreme value, inviting widespread criticism towards the industry ethics and this phenomenon highlights the need for a systemic viewpoint at the overlapping problem areas and observation of causal relationships between them, to then understand how it is not an arbitrary concoction of individual problems, but an interconnected loop of many of them, that affects compliance function across various stages during the pipeline and has obvious visibility across customer service and managerial experience, which, in research are often dismissed as poor customer service, myopia and decision fatigue but have several deeper underlying connotations stemming from their interconnection with other issues.

Keywords:

Compliance, ESG regulations, customer experience, interdisciplinarity.

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ABBREVIATIONS (if applicable)

AML: Anti money Laundering

CCO: Chief Compliance Officer

CSR: Corporate Social Responsibility

COVID-19: Coronavirus disease of 2019

ECB: European Central Bank

ECJ: European Court of Justice

EMAS: Eco Management & Audit Scheme

EMS: Environment Management System

ESG: Environmental, Social and Governance.

EU: European Union

FSA: Financial Services Act

FTE: Full-Time Equivalents

GDPR: General Data Protection Regulation

G-SIB(s): Global Systemically Important Banks

G-SIFI/SIF(s): Global Systemically Important Financial Institutions

ISO: International Standardization Organisation

KYC: Know Your Customer

OECD: Organization for Economic Cooperation & Development

SME (s): Small & Medium- sized Enterprises

SSM: Single Supervisory Mechanism

TBD: To Be Determined

UK: United Kingdom

VUCA: Volatility, Uncertainty, Complexity & Ambiguity.

WBG: World Bank Group

UNO: United Nations Organizations

1 Introduction

Dramatic incidents of excessive greed, accounting failures or conflicts of interest, including those of Enron, Parmalat, WorldCom, Citigroup, Arthur Andersen and more have raised the question of adequate internal controls. In the last 20 years accountability, transparency, risk management and compliance with laws and regulations have become highlighted issues. (Benedek, 2012, p. 135)

The European financial industry has been grappling with a multitude of challenges in recent years, and many of them have been observed to stem from regulatory and environmental compliance failures. These failures have had a profound detrimental impact on the industry, causing a spill onto the global economy, leading to several large-value enforcements and underscoring a dire need for a complete overhaul (Gully-Hart, 2005). One of the key pain points of these enforcements has been the exponential increase in financial risks resulting from environmental exposures of companies (Repetto, 2005). Despite having several laws and regulations making disclosure of material environmental information mandatory, many companies have failed to comply, leaving investors and regulators and the general public unaware about the true environmental risks they face. This lack of transparency has led to mistrust, causing increased scrutiny and a need for established accountability, as policymakers and stakeholders demand rigorous oversight (Piila et al., 2022).

In addition, the European Union and member countries have pledged to spend 580 Billion euros of public funds in the financing of climate action for the years 2021 until 2027, which is considered the biggest grant of public funds for climate action so far (2024). Whenever public funds are utilized for a transition of a large scale, there is an even greater responsibility to protect the interests of the ultimate stakeholders, which is the taxpayers. With green transition, this responsibility is coupled with environmental protection and climate action goals. Touted as an exemplary tool for corporates to lead the dialogue and action in sustainable finance through a series of interconnected activities, processes, regulations and legislations, technology and other facilitators, corporate green transition can be a major contributor to the bioeconomy (Bracco et al., 2018). The process of transition, however, has not been up to the expectations on several parameters (Gottinger et al., 2020) and it has been thought that due to their societal and environmental influence, corporates must lead by example (In et al., 2022). This puts the onus of the transition process on the entity, who is themselves in transition of the current scope and scale for the first time and since it is still early stages, there is several grey areas that have not been addressed. It is important for the corporate's transition process be smooth not just for the fear of

setting a bad example of the industry or to counter beginner's inertia, but to avoid material, financial, environmental losses since the path to sustainable future needs collective efforts and knowledge (White, 2020). The outbreak of multiple chronologically-parallel contingencies in combination with the compliance and environmental regulatory crisis, like the COVID-19 pandemic, several geopolitical conflicts, socio-economic, and humanitarian crises have triggered various phenomena which are tests of the endurance and malleability of the financial services industry (Jagtap et al., 2022).

The animate element that drives this transition at the corporate grassroots is the human elements, the personnel who perform the compliance function every single day at their work desks and the consumers at the receiving end of this metamorphosis. And the ultimate corporate experience of green transition as well as regulatory compliance boils down to the experiences of these human elements, during and being serviced by frontline financial services personnel respectively. The nexus between financial regulation and the momentum towards a green, sustainable economy is a complex and multi-faceted concern (Brühl, 2021) which rests on behavioural pillars because of the involvement of the human elements and thus, their experiences are of prime importance for the successful completion of this transition.

1.1 Literature Review

The industrial inclination towards green transition is a fairly recent phenomenon around the world (Earnhart, 2017; Jones & Lubinski, 2013), triggered into momentum by the Paris agreement goals (Enrico, 2019). Initially, the appetite was driven by the inherent need to avoid environmental losses and open up a new avenue for revenue generation (Snell & Schmitt, 2012), branding and public image advantages and visibility (2017), among other tangible perks. Drawing parallel from corporate social responsibility incidents which tarnished the brand image, green transition has had a competitive advantage honed by the preferences of the increasingly conscious consumer (Cherian & Jacob, 2012). Political facilitation of the transition through incentives, regulations, mandates and legislations has been a major driver of the tempo in the favourable direction (Kudlak, 2017). Apart from these, social and fossil fuel divestment movements have created a societal obligation for entities as well (Cojoianu et al., 2023).

In order to bring about the said green transition, there is a plethora of transition strategies, pathways, roadmaps and other orientation frameworks in place (Ionescu, 2021; Martinez, 2014). Many of these rely on an industry and activity specific multi-pronged approach in place, with focus on areas like technology, economy, culture and organizational forms of the greening process, among others (Loorbach et al., 2010). Corporations hereby become an important element of the mix not just because of their sheer influence on their respective industries but also since they are the biggest drivers of renewable energy demand and their energy procurement can potentially sculpt the energy industry for the future (O'Shaughnessy et al., 2021). Interestingly, this is a vital cue in corporate entities creating a demand for green products and services and thereby shaping the future of transition, establishing them as the most important consumer of the green transition process. In terms of the role of the corporate entity, this is a paradigm shift from their placement in the transition process; once green transition is viewed as a service intended for consumption by a corporate, the entity transcends from being an important stakeholder to the most important end-user. The viewpoint of the green transition process as a service is galvanized by the fact that it has an intangible outcome (Johns, 1999), which is alignment of the corporate entity with societal and environmental goals, as per the Paris agreement and United Nation's Sustainable goals, has a component of compensation or value transfer in exchange for the intangible output which is a cleaner and safer planet, and beneficial outcomes which can be encapsulated (O'Sullivan et al., 2002) ultimately accomplishing the expectations of the society.

At every stage of green transition, goals and priorities are likely to be different. In the contemporary parlance, green growth has surpassed the potentiality of sacrificing economic

growth for environmental and societal benefit (Vazquez-Brust et al., 2014) and into the heightened debate around mutually acceptable and beneficial pathways to achievement of environmental goals. An important example of this is the oil and gas industry which inevitably had to diversify or faced extinction (Haltunen et al., 2023), thereby underscoring five key elements of the modern green transition mix, which are, financing the transition (Fatica & Panzica, 2021; Kemp-Benedict, 2018; Tuhkanen & Vulturius, 2022), regulatory and legal compliance (S. Hu & Wu, 2022; Zhang et al., 2024), greenwashing (Coen et al., 2022; Rogge & Dütschke, 2018), corporate behavior (O'Shaughnessy et al., 2021; Yang & Chi, 2023) and green revenue (Hafezalkotob, 2015; Raza et al., 2018). While these aspects have been individually researched, there is room for extensive exploration of these due to the fact that green transition is a relatively new focus area (Sengers et al., 2019).

Interestingly, the origins of several financial concepts and theories, much like transition finance, has found to be in behavioural studies, like the significance of public sentiment for the stock markets (Ma et al., 2023; Phuoc Luong & Thi Thu Ha, 2011), or the necessitousness of theories of deterrence and criminology to regulatory compliance (Makkai & Braithwaite, 1991). The approach to behavioural finance in the industry is largely driven by market and demand orientations (Shleifer, 2000). Because of this limited purview, the humanitarian connotations of behaviour are seldom explored and this results in a stunted dialogue around the subject, further causing ideological lacunae and hindering the legal and regulatory framework.

Under the regulatory umbrella, the approach towards compliance of transition relies on persistent and radical efforts towards mitigating climate change via policymaking (Bashir et al., 2024). This pace and scale however, has to be intuitively matched by the regulated entities, corporates in this case, for the climate change resolutions to be achieved within the given time frames (Newell, 2020). While there is a strong thrust in the direction, channelized by governmental and institutional incentives for corporates willing to match the enthusiasm from authorities, there are practical difficulties which impair the momentum, primarily the implications transition policies can have on stakeholder profits and revenue maximization paradigms, which are central to the sustainability of business operations of corporates and crucial to their survival (Pollman, 2019a). One of the academic solutions to this has been to treat climate change similar to the treatment of risk from a compliance perspective, since this prevents two of the grave challenges that contribute to decision-fatigue around the subject, which is the nature of climate change action to be made mandatory and it to supersede the profit-maximization objective of corporates (Kuo & Means, 2021; Pollman, 2019a). However, this conundrum is a

lot more intricate than it seems and has layers of underlying complexities that need to be outlaid. The combined impact of interaction of these key elements on the corporate entity undergoing its green transition process has not been researched, in the light of end-user experience, which is the personnel who are responsible for the implementation of policies at organizational grassroots, since, as established earlier, the process of green transition is a service aimed at corporate entities as consumers, and this is the research gap intended to be covered in this work.

1.2 Regulatory Framework

One of the points of origin of European regulatory compliance pertaining to the financial industry is believed to be the Financial Services Act 1986, a regulation the UK government laid out, which is a statutory system of regulations that governs adherence to rules and legislations (Edwards & Wolfe, 2005). As per definition, regulatory compliance is eponymous, it is often defined as conformation to regulator or authority instructed rules, regulations or norms by employees and other organizational personnel as a form of internalized law enforcement (Miller, 2014). This definition quickly ascends into another, which defines regulatory compliance as a bridge between profitability and revenue maximization against the backdrop of monetary and financial losses, reputational loss and marred visibility or the fear of enforcement and sanctions (Taylor, 2005). The concept delves into the realms of human behaviour as it defines what is compliant and aligned with regulatory goals, and what is non-compliant and can fetch sanctions from regulatory authorities, paving the way for its stark resemblance with criminal law by this very nature (Sowden et al., 2018). This abstract spillage into the depths of human behaviour causes for the compliance function to diverge from its origins of law and deterrence into deontology, or the branch of knowledge that explores ethical concepts such as obligation and permissibility (Adams, 1994). There are also underlying connotations of denigration derived from conformity as a foundational principle, which has often sparked a debate on the legitimacy of the compliance profession, since mere subservience and yielding to the rule of law has not been sufficient to curb wrongdoing and has an underlying assumption that ethics are not effective against immoral behaviour (Pollis, 1981).

As a shield against compliance risks, the structure of regulatory compliance varies greatly across financial institutions, as an example, for some large banks, the employees who perform compliance duties maybe involved in other operational activities and for others they may be a part of a smaller, exclusive unit, these may appear as anomalous to an external onlooker, but are aligned to the nature, scale and complexity of business activity of the institution and are deemed appropriate as per regulators worldwide (Asenov, 2015). In the Euro Zone area, the European Central Bank is the regulatory body that is responsible for regulatory compliance of member states' central banks and in matters concerning the first line of defence, for significant credit institutions supervised by the ECB under the single supervisory mechanism SSM, there is a clear delineation of the framework of compliance but no clear laws that hold the board of directors and senior management accountable for compliance failures, however, court decisions have established them as responsible for regulatory compliance (Meissner, 2018). The positioning of

compliance personnel is supposed to be independently reporting to the board of directors and senior management with a bold voice, however, this has been under critical scrutiny after reports of misconduct related to hiring of CCO or Chief compliance officers after organizations have had a breach or violation of regulations as a firefighting approach to incidents instead of the role growing organically with the operational activity (Martin, 2015). The educational qualifications of senior compliance officers often stemming from legal profession, their handsome incentives and compensation not assuring absence of misconduct and greater susceptibility to ethical blind spots compared to an average corporate employee has time and again invited industry concerns as well (Baer, 2019).

When it comes to the locus of intersection of regulatory compliance and green transition experience, an important point of convergence is regulatory policy, which not only establishes systems, procedures, guidelines, hierarchies, implementation and progressions at the operational level in line with ESG expectations of legislators and regulators but also carves the way for establishing the industrial acumen and way forward (Krueger et al., 2021). In practice, this has several challenges; from confusion regarding the meaning of the terms ESG and CSR to the grey areas surrounding impact on revenue and traditional business models, rationale for pursuit of the complex web of environmental compliance and socially and ethically responsible business activity (Pollman, 2019b), among others.

1.3 Theoretical background.

Regulatory compliance is a wide ambit of objectives, techniques and targets and varying significantly across these, has its origins in several different theories because of this reason. Table 1 is a literary attempt to encompass this wide ambit pertaining to financial services and it takes into consideration many but not all aspects of the contemporary function of regulatory compliance. Due to the dynamic nature of the function of compliance however, it is not possible to entirely contain all aspects into industry as well as academic records as constant evolution and accrual from various domains, incidents and circumstances will render the exercise futile (Edwards & Wolfe, 2004a).

Table 1 The compliance function

Objectives	Maintaining integrity Guarding reputation Adhering to regulations, laws and rules Meeting codes of conduct
Targets	Money laundering Terrorist financing Conduct of business Conflicts of interest Privacy Data protection Consumer credit Employment law Tax law
Techniques	Monitoring Assessing Conducting risk assessment exercises Advising Reporting Training and educating Evaluating

Source: (Edwards & Wolfe, 2004b, p. 218)

Several foundational principles of the function of regulatory compliance find their origin in the theories of criminology. This entails tracing the beginnings of regulatory compliance to the development of control theory itself. As systems and operational processes in the finance industry became more complex and the need for oversight and accountability escalated, the need for

ensuring compliance with relevant rules and regulations also increased. This led to the materialization of the compliance function within organizations, which is responsible for illuminating and mitigating risks associated with non-conformity to laid out regulations. Early research in control theory, brought to surface the centrality of guilt, embarrassment, and management sanctions as key deterrents to non-compliance. These insights laid the groundwork for the development of comprehensive compliance programs and policies that work in conjunction to cultivate a culture of ethical behaviour and adherence to regulations and regulatory instructions (Tashi, 2009). This is primarily because enforcement is observed as the umbra of the function of regulatory compliance, and this is a phenomenon built around the idea that the threat of a punitive measure will help imbibe righteous behaviour and decision-making. This act of the fear of corrective or chastising punishment as a driver of ethics is the foundation of deterrence theory, and assumes human nature to be hedonistic and lacking morals in an ultimate pursuit of indulgence (Webb, 1980). An interesting take on deterrence theory is Becker's theoretical framework that attempts to explain the intrinsic inclination towards criminal activity as the perceived gain by such an activity to be greater than that of the proceeds from a lawful activity as a way to maximize utility within budget restrictions (Sutinen & Kuperan, 1999). The latter is an approach that sees human intent and the drive towards activities as a trade-off between derived gain and budget constraints and thus allows for a pathway to observe intent in other than criminal connotations.

The idea of regulatory compliance in the modern envelope of finance industry, however, has evolved from a locus of adherence to all regulations, guidelines and instructions to a more refined approach that emphasizes a panoramic view of conformity. This shift has led to changes in the accession of monitoring systems employed to measure the extent of alignment of an organization operations with the regulatory guidelines, from a dichotomous, scattered distribution towards a more holistic evaluation of an organization's commitment to compliance as seen across activities and operations (Fiene, 2019).

The domain of opportunity theory seeks to explore the factors that shape personnel as well as organizational decision-making against the backdrop of regulations, legislations, instructions and regulatory guidelines by analysing how non conformity to rules or violation of regulations presents itself and how the consequences of this process affect conformity. A set of salient features of actors and their interaction with their environment forms the basis of this theory in the recognition that compliance is not solely a matter of or a lack thereof, of rational thinking, or simply a trade-off between cost and benefits of actions but rather is collectively sculpted by a

complex communication of social, political, and cultural factors (Van Rooij & Fine, 2020). Existing literature has sufficiently underscored the significance of socio-political contexts in shaping regulatory compliance into what it is today, around the argument that an actor's identity, as formulated by these contexts, can significantly influence their inclination to comply with regulations (E. Lee, 2008). Moreover, the social fabric and political propensity that target populations are bent towards can also influence how governments react to compliance failures. Also is associated, the literary emphasis on the role of functional hurdles to implementation of compliance at organizational grassroots, such as resource constraints and autonomy dilemmas, as well as the challenges intensified by the heterogeneity of target populations and the intricacies and entanglements of compliance requirements. A thorough knowledge of these factors is central for developing effective compliance layouts and overcoming the barriers to behavioural change and is the ideological foundation of the subcultural theory. In other words, the manner in which individuals and organizations see and identify themselves and their relationship to their broader sociopolitical environment can have a significant impact on their enthusiasm to comply with rules and regulations (Weaver, 2013).

So far, the abovementioned discussion around the origins of regulatory compliance have stemmed from the rationale behind compliance decisions, finding that these can be based on both normative and calculative criteria, and that these rationales can emanate from individual or collectivistic and organizational features, and can be further moulded by an actor's identity, socio-political envelopes of individuals or organizations translating into compliance decisions. Moving on, another set of features of regulatory compliance is observed as a function of adaptive responses. When the function of regulatory compliance is broken down across an industrial pipeline, an important aspect is observed, it is the blending of feedback from practice, audit, incidents, enforcement and sanctions and other punitive measures or warnings as a building block of the operational trickle-down of regulations that maybe incorporated in hindsight but establishes the way forward for the progress of everyday transactions and operations in financial services, adding the dimension of modification of the function of compliance into a circular causal process (M. D. Adams et al., 2013). In computer science engineering, it is seen as an example of a bottom-up approach, or the output from the end of a process which can also be termed as a guiding operation or transaction is fed as an input to subsequential operational process, which can be termed as a guided or complied transaction or operation, and it alters the course of the next guided transaction, more so if there has been a punitive measure that was enforced at the end of the guiding operation. This approach is not always specified in theoretical

terms but in a wide universal set of regulations, legislations, directives, regulatory and industrial or organizational guidelines, instructions, policies or corrective feedback from previous monitoring or audit (Wallach & Asaro, 2020). Feedback can be seen as the concatenation of the guiding operation and complied operation, thereby forming a loop, which sculps the subsequent operations in alignment with the previous ones and by this nature, become loops adapted to feedback, which is a phenomenon rooted in cybernetics (Thomas, 2006). From this purview, it can be observed that the consequences of a systematic probe of past business activities formulate and orient the present or future action, or a lack thereof, when it comes to an institution or organization's compliance operations (Orozco, 2019). The simplest analogy to this compliance phenomenon of a circular causal process can be observed in biology, wherein the shift in blood glucose levels results in hormone secretion to maintain glucose homeostasis in the human body (Rigobelo, 2011). At this point, it is important to understand that while the aim of a successful compliance function cannot be homeostasis, which would imply reaching a point in operations where risk is absent or negligible in complying institutions, instead, is, to maintain an agreed-upon acceptable risk level defined by the regulator and government guidelines. Broadly, an effective compliance function can be perceived as a feedback loop, which must be highly sensitive to its environment and respond promptly to the slightest change. While this perspective sufficiently brings to light, the significance of historical data for compliance, how this data affects everyday operations is a set of various factors completely reliant on the environment of the action itself (Agarwal et al., 2017). This point of concurrence with environmental regulation also being viewed and evaluated as a structured process which depends on the causal relationship between sub-elements such as governance capacity, rising demand for regulations in the wake of a conscious consumer base, social cohesion, democracy and environmental knowledge gives way to the development of a median between compliance and environmental regulation (Blohmke et al., 2016). Furthermore, the phenomenon feeds into a formative crossroad to the pathway of the compliance function, the interweaving of feedback with environmental compliance, an amalgamation that has prime relevance in the contemporary compliance ambiance.

2 Compliance and Green transition: Intersection and interdisciplinarity.

In order to understand the zones of influence of the contemporary evolution of the regulatory compliance function in coherence with the objectives of ESG regulation and policy influence, a picture of the contemporary industrial debate was thought to be necessary to materialize the different elements in the mix. In a seminal work which focusses on a systems approach to regulatory compliance, Edwards and Wolfe (2005) mention that while there is no dearth of academic research and publications on compliance, the primary goal is to examine and discuss how compliance is currently approached in alignment with the changes since the Financial Services Act of 1986 was passed. The shift in focus from individual compliance competence to organizational compliance competency by the FSA is noted and has implications in compliance function extending beyond the legal purview and assuming different connotations and inviting a debate from various other disciplines and domains, significantly among them from managerial behaviour, design thinking, technology, mathematics and theoretical evolution from deontology and criminology, among various others. It emphasizes the value of competence and training in ensuring compliance with company regulations and describes the shift in regulatory approach from a rule-based to a more flexible and ethical one. To articulate this picture, an analysis of the industrial debate in regulatory and ESG compliance is materialized, in the form of analysis of reports by Thomas Reuters regulatory intelligence and Mc Kinsey, both consultancy firms of repute, which publish yearly documents about the contemporary events in the financial services industry in Europe and worldwide, often with a comparative analysis.

The concept of interdisciplinarity is at the core of the transformation of the regulatory compliance function, the foundation of this approach was placed when the scope of the compliance function was estimated to be spilling out of its then restrictive legal origins since the function of compliance is finding applications in several industries which are not finance-related and even the scope of the finance industry is ever-widening. The traditional method of compliance has also stood questioned several times because of its insufficiency of being a robust bulwark against corporate scandals since laws and enforcement are the punitive method of ensuring the integrity of financial systems as safeguards of public funds and are often the bare minimum requirements and do not cater to increasingly sophisticated complexities (P. L. Lee, 2004).

Also central to systems analysis of the interplay of the various contemporary impairing factors to smooth implementation of mitigation regulations in the context of regulatory imposition is the concept of non-compliance, which has been contrasted across industries with an interesting example by Jancsics, Espinosa and Carlos (2023). The authors note that irrespective of its

plausible typical attributes, disobedience can have gravely detrimental and occasionally fatal effects on clients, staff, common people, and entire communities. However, there have been instances in which defying the law might save lives. For instance, when paramedics are prohibited from doing surgery but nonetheless conduct an emergency Caesarean section to deliver a woman experiencing cardiac arrest is an example of non-compliance which derived from personal ethical connotations and as wrongly placed it is in the organizational and regulatory purview, highlights the fact that there is a significant mandatory component to noncompliance; following the law or a regulation is not something the target chooses to do. This implies that when infringement is discovered, the regulator often imposes enforcement actions as well as punitive measures and the function of compliance assumes that the target personnel is both aware of the rules, the consequences of violation and that they are expected to follow the mandate, this is different from practice, where, there are actually several factors that not only separate the erroneously assumed dichotomous behaviour of compliance and noncompliance in the light of a spillover of a multitude of factors that influence real, everyday ethical decision making. To add to this dimension, the increased focus on compliance in the American context in alignment with environmental awareness that kicked off in the 1960s and 1970s has vital lessons in rethinking compliance value to organizations, and Lee (2004) notes that despite the underlying issues of regulatory compliance being prioritized in the aforementioned geography, there is a pressing need for increased regulatory and political scrutiny and risk-management practices aiding everyday operations to stir up the transition from the old paradigm.

There is also a gaping chasm of mismatched expectations from industry and academia when it comes to the compliance-green transition landscape in Europe which is a latent debate of culture rather than intellectual differences, but has gone unnoticed since a long time. Culture has been described by both academia and industry as the pivotal point of convergence of the two areas, and the foundation of this convergence was laid out by regulatory disclosures and sanctions as the prime focus of the green transition process towards the beginning of the 21st century. The debate has entered the next phase since then, with the value of ESG being seen in the light of brand image and visibility and profitability in terms of green revenue in the wake of the progressively conscious consumer (Li et al., 2024). However, early adoption of this punitive method towards green transition has time and again seen in the light of their overall inefficiency at curbing unethical behaviour and a combination of mandates and collaboration to promote culture is gaining industrial popularity as favourable research also has affirmed the idea (May, 2005).

Another important aspect of the problem potpourri is financing, whether it is the cost of regulatory compliance that directly translates as addition to the cost of products and services for the consumer or the cost of financing the green transition, which, if not duly supported by government incentives, subsidies and taxation benefits will eventually be an even greater levy on top of the already high costs of regulatory compliance costs to the consumer, since post Covid-19 polycrises have intensified market volatility and adversely impacted several businesses, and because of this economic impact, the attitude towards financing green transition and bearing ever-increasing compliance costs is ascendingly being observed as a sensitive subject at operational levels, thus weakening the behavioural incentive for upholding these transitional matrices in the highest regard (Syed Abdullah et al., 2010).

In terms of the attitude towards green transition, fuelled by the adoption of certified EMSs, including those suggested by the ISO 14001 and EMAS standards, has become standard procedure for corporate greening in a majority of industries around the globe. The most widely used EMS standard, ISO 1401, was introduced in 1996 and more than 300,100 enterprises were observed to be certified in 2013. The European Commission first released the Eco Management and Audit Scheme or EMAS in 1993, and non-EU firms have had access to it since 2009. Numerous studies have examined the causes and effects of these EMSs on legitimacy of environmental impact of these standards; certified EMSs are broadly, thought to boost brand image and credibility since the process of green transition can veil regulatory influence in the eyes of external stakeholders, the certification process helps to strengthen an organization's commitment to greening. However, what remains less researched is to what extent external pressure for certification actually plays a role in the internalization of environmental standardization (Testa et al., 2018).

Deterrence and firefighting approach.

In the visualization of this multi-pronged system, one of the primary drivers was the discussion pertaining to the sufficiency of the deterrence theory and retrospective effect of the approach to regulatory compliance as an effective barrier from unethical behaviour or conscious violation of laws. Within the scope of research limitations, Aurigemma and Mattson (2017) note that employee behavioural intentions are significantly influenced by punishment experiences, however, a one-size-fits-all approach to security training in regulatory compliance is probably not the best course of action. While sanction effects tend to have a greater impact on employees who have not experienced punishment (e.g., new hires), applying the same approach to

experienced employees who have personally or indirectly witnessed repercussions for security policy violations may not always have the desired effect on security behaviours. This questions the very foundation of regulatory compliance in deterrence theory has direct and strong implications on several endogenous variables like the increasing requests for a feed-forward among managers or a way to reimagine feedback by incorporating thinking ahead with a top-down approach which can facilitate a decentralised, proactive approach to contingency management instead of a retrospective view of the compliance pipeline which results in a firefighting approach. In the area of green transition, the firefighting approach has been evident as bad decision making and recovery from which has proven resource-intensive and despite the expensive route of enforcements, has not been effective in curbing wrongdoing (Fiscor, 2023).

Political will, Impact analysis and grey areas.

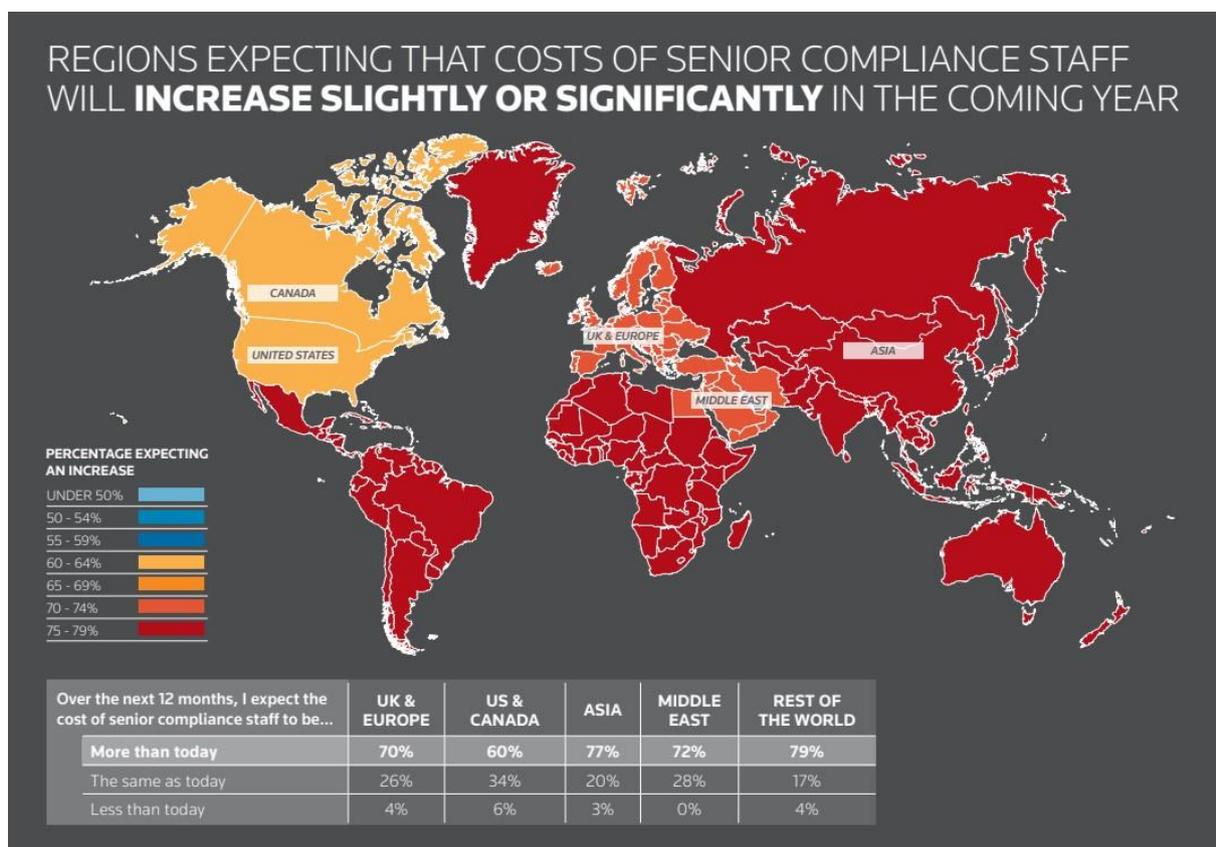
It comes as no surprise that one of the major propellants to corporate green transition is political will, the structure of governments, whether federal or local and other hierarchical scrutiny is the subject of debate because it affects the operational trickle down of mitigation regulations (Nemet, 2010). Government incentives of various forms play a critical role in green transition as well, and they can come in varied forms, from tax rebates and subsidies to relaxations for effective implementation of policies and dissemination and retention of profits (Yu & Huang, 2020). One of the tools by which governments have effectuated a thrust towards mitigation is through mandatory ESG disclosures. In a critical research on the need and effectiveness of these (2024), it is argued that mandatory ESG reports may reveal sensitive information about firms and that such information is then open for public scrutiny by various stakeholders such as governments and interest groups and can be used to exert pressure on firms to increase their investments in ESG activities. This outcome is desirable, and not guaranteed and if such disclosures compel firms to increase non-financial efforts, they would need financing assistance to do so, and one provision by which firms can finance such investments is through retained earnings. The grounds for this allowance is the plausibility that the average dividend would decrease as a saving mechanism for current or future expenditures, given that firms agree and expect to face increased pressure to improve their efforts towards green transition.

Polycrises, economic rationale and vulnerability.

The effect of Covid-19 has been detrimental to the health of markets worldwide. Adding to the woes of the globally hit industries is the strain posed by several geopolitical contingencies like

conflict, natural calamities and the ongoing resource constraint. These crises have caused widespread economic disruption, financial instability, and uncertainty, exacerbating vulnerabilities for businesses operating in Europe (Chen, 2021) and have increased the need for monitoring and supervision. This has created a two-fold predicament including not only the recovery from disruption and revenue losses but the overall sustainability of corporates and entire economies at large. More so for the individual consumer, this vicious loop has caused a decrease in investor confidence and consumer trust in financial services (Jagtap et al., 2022), indicating implications on corporate behaviour and an anxious sentiment for contingency management. These elements further feed the endogenous variables along with a pronounced impact on consumer vulnerability stemming from systemic defencelessness.

Figure 1 Regions expecting increase in compliance costs worldwide 2015



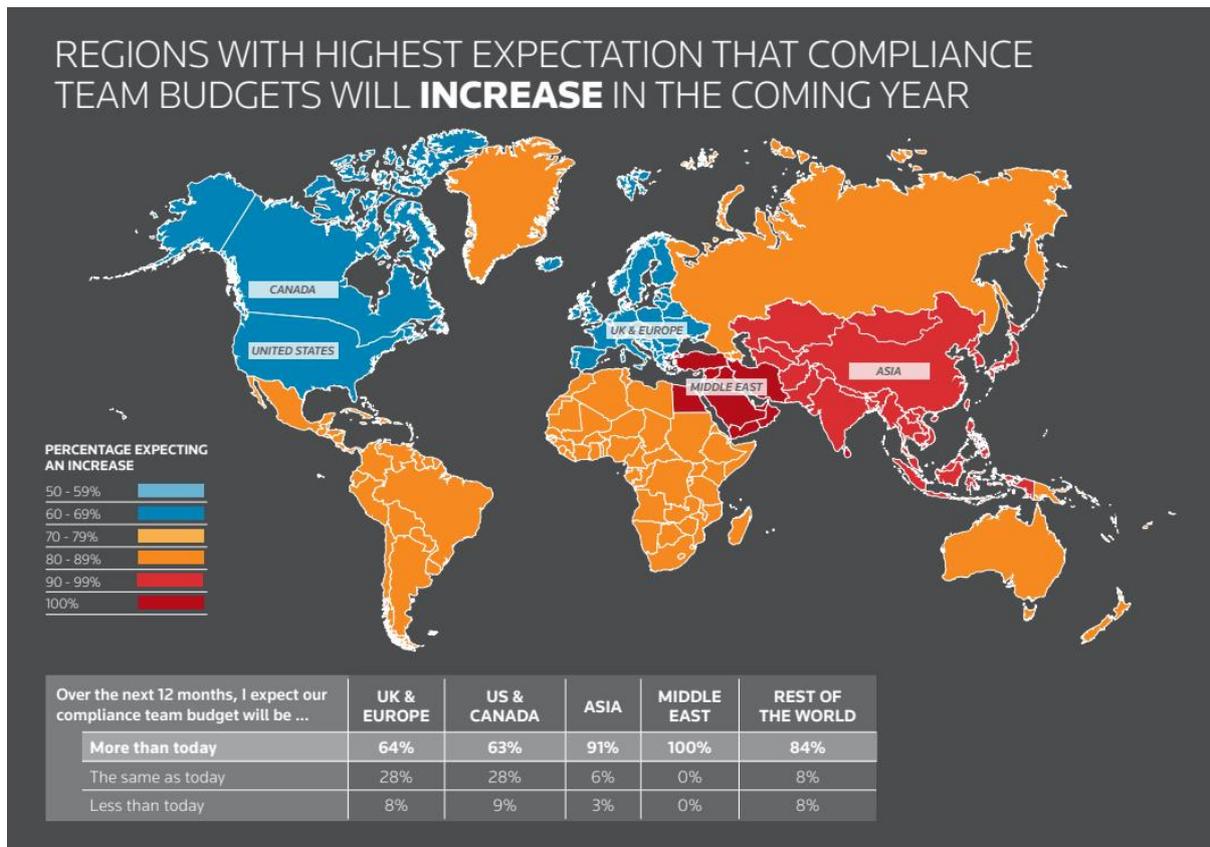
Source: (English & Hammond, 2016, p. 7)

As extracted from the report of the Thomas Reuters global survey on the cost of compliance (2016), conducted on professionals employed at more than three hundred financial services firms worldwide, including the G-SIFIs or systemically important entities which can threaten the health and safety of the global economic system if they failed, it was revealed that one of the primary

concerns was the volume of regulatory change or the number of tasks identified as mandatory for completion of regulatory tasks has increased significantly in the previous years, raising questions of the agglomeration of personal liability further exacerbated the need for an ever-widening chasm of professional, educational and intellectual competencies from a compliance professional. As depicted in figure 1, the survey also revealed that a sharply ascending trend would be witnessed in the cost of senior compliance staff because of this associated contingent accountability, with most regions of the world to have foreseen a jump of as much as 79%, in these costs. The quality of compliance officers was also a matter of concern here with specific mention of a dearth of senior compliance professionals across the globe and this availability crisis adding to the cost of senior professionals. All of these factors were expected to raise investment in compliance in the years to come and eventually, these costs would be borne by the consumers. While the industry outlook towards these exponentially increasing costs was mentioned to be positive, this report does not mention if there were any contingency measures to balance out these costs in case of business failures and the consumer sentiment towards the translation of such costs with additional compliance requirements in terms of information, documentation and other necessities from the consumer. The impact of each one of the above systems of individual factors can be seen on the experience of the management personnel who perform regulatory compliance duties every day at their work desks, and against the backcloth of an organization grappling green transition, this can potentially become an overwhelming experience, which combined with the grey areas due to policy gaps will eventually reflect, marring the consumer experience and feeding the loops mentioned above perennially.

All of these form a vicious circle of costs which have not been analysed in conjunction with their benefits and without a foundation of structured cost-benefit analysis being an industry-wide practice, translate as precariousness at consumer end.

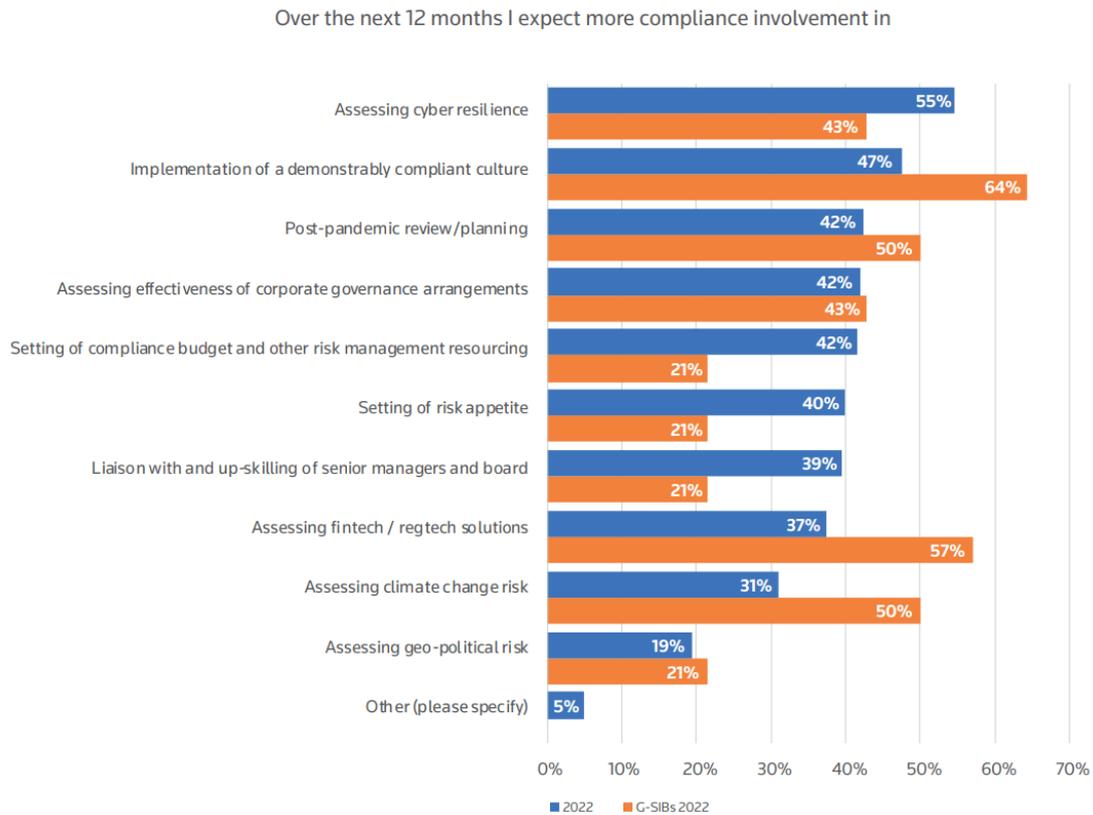
Figure 2 Regions expecting higher compliance budgets in 2017



Source: (English & Hammond, 2016, p. 8)

From figure 2 it can be observed that a similar trend was predicted to be observed in the cost of compliance in many regions of the world, more so in Europe, with compliance team budgets expected to rise upwards of 50%, on the higher side of expected expenditures in 2017. The report portrays this increase in budget in an optimistic light, by mentioning that over two-thirds of respondents expecting increase in budget signals an industry-wide pledge to commit to the function of compliance. Another aspect to be underscored here is the role of G-SIFIs to the propagation of this optimist sentiment, with over fifty-six percent of compliance professionals from these entities of prime importance looking forward to a modest increase in their compliance team budgets and as much as seventeen percent see a hefty team budget increase incoming in the near future. The report further outlines these expectations to be contemporarily aligned and insists that a pinch on resources will ensure effective utilization of those available for the just cause of skills and technology but fails to underline how this insurmountable goal will be achieved.

Figure 3 Expected involvement of compliance in 2022

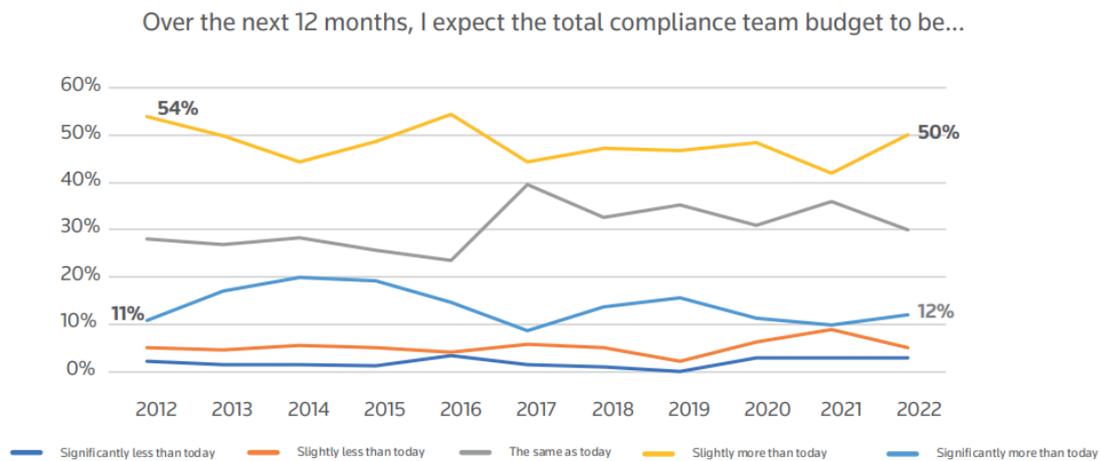


Source: (Cowan & Hammond, 2022, p. 7)

Fast forward to the 13th annual survey of the cost of compliance conducted by Thomas Reuters regulatory intelligence (2022), Hammond and Cowen note that the most pressing compliance challenge of the year is the inundation of ESG expectations and the accumulating compliance mandates that trail behind them. According to figure 3, a whopping 31% of compliance professionals believe that there will be a growth of compliance involvement in ESG and related activities and for G-SIBs, this number is even higher, up to 50%. While the insurmountable ESG-regulatory compliance aggregate onus on implementation and everyday operations is clearly draining business resources, the new report outlines this change in a sharp contrast to the report of the year 2016, mentioning the delicate balance between competitive and compliance pressures as the focus of culture and conduct risk faced by the firm, as reported by the professionals surveyed. This contrast has been attributed to the severe threat to business continuity posed by the Covid-19 pandemic and the exigencies and disruptions posed due to Russia sanctions, further highlighting the profound impact of contingencies on viability and sustainability of business operations. The repatriation of businesses from regions of conflict has been presented as an example, in the European context, primarily from Ukraine, Belarus and Russia seeking assistance

from outsourcing of many functionalities, among them being compliance, to deliver services at a pre-war uninterrupted state. In this volatile business environment, the pre-existing demand for subject-matter experts in compliance in senior positions has still remained in a state of scarcity, continuing from the 2016 report.

Figure 4 Comparison of compliance team budget expectations from 2012 until 2022



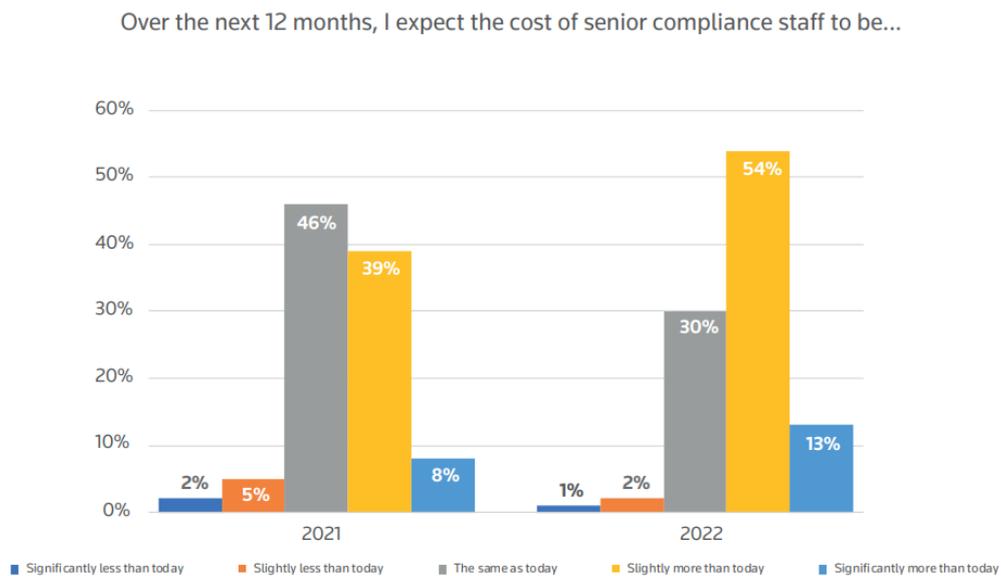
Source: (Cowan & Hammond, 2022, p. 18)

As compared to the optimistic investment in compliance teams in 2016, the budgets in 2022 have been predicted from figure 7, to be the similar in 2021 and 2022, as an indication of a recovered post pandemic state when budgets were expected to decrease immediately after. In 2022, the increase in budget is thought of as modest as best, with only 12% respondents expecting a big jump. Compared to a much higher number of about 20% of G-SIB professionals expecting a fall in budget, in 2022 only 7% of the same pool expect downfall. Regionally, a greater percentage of UK firms expect compliance budgets to increase than continental Europe firms, with the difference between the two being as high as 17%.

In 2022, it is anticipated that the cost of senior compliance staff would increase, however, compared to the pre-pandemic optimism of the 2016 report, there is a marked decline in the overall expectations. Compared to 47% in 2021, two thirds of respondents stated they expect the cost of senior compliance officers to grow. However the number of respondents believing that these costs would increase drastically was only 8% in 2021 and 13% in 2022.

Regionally, the expenses of senior compliance workers are expected to rise in the next 12 months of 2022, according to 75% of respondents situated in Australasia, and 80% of respondents based in the Middle East. However, the industry is always on the hunt for new talent in senior positions more enthusiastically than others because of the constantly evolving landscape creating space for multidisciplinary talent.

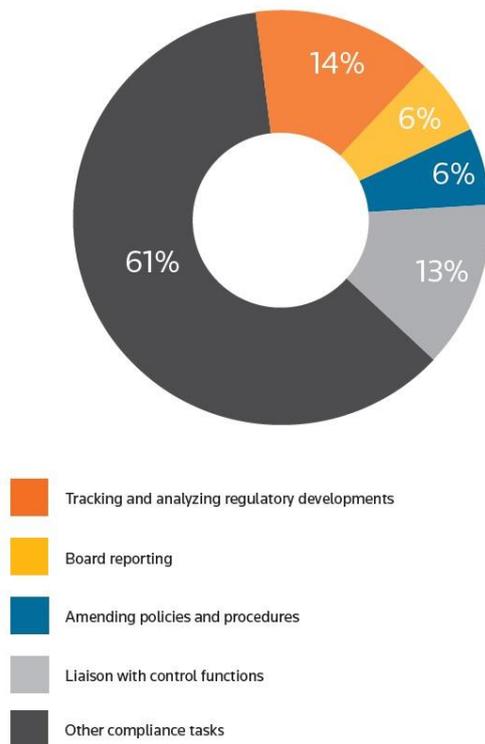
Figure 5 Comparison of compliance professional related costs in 2021 & 2022



Source: (Cowan & Hammond, 2022, p. 17)

2022 was named by Thomas Reuters regulatory intelligence as the year of “competing priorities” with evidences of dearth of skilled professionals, struggle of establishing a compliance culture, budgeting constraints and the impact of technology on the landscape, this is a step in the direction of the interdisciplinary lens from the industry standpoint, at the contemporary problem potpourri of the regulatory compliance landscape. From figure 5, it is evident that a majority of respondents agree that professional related costs will increase, reflecting this scarcity of well-fitting professionals to take on the roles of compliance officers in corporate entities in Europe. This is also indicative of the fact that compliance roles are becoming increasingly challenging with added competencies and qualifications becoming the need of the hour in the wake of the problems described.

Figure 6 Percentage share of activities consuming a compliance officer's week in 2016

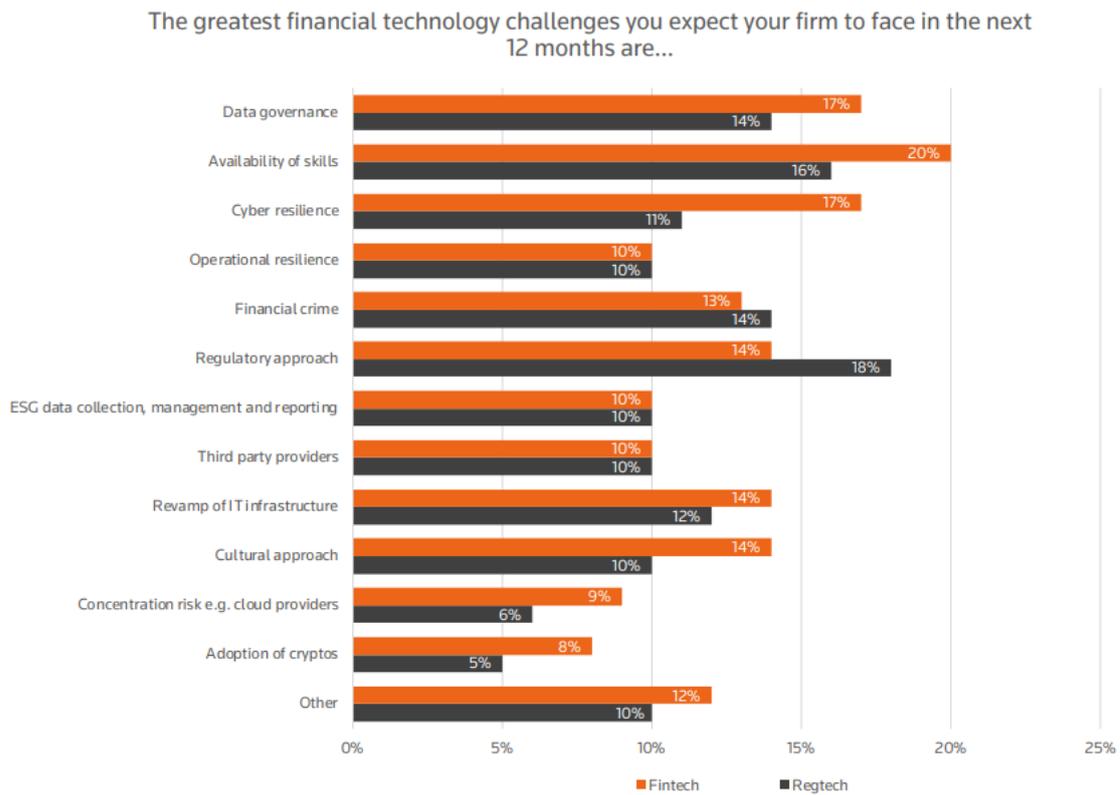


Source: (English & Hammond, 2016, p. 12)

In terms of timing commitment compliance officer needs to devote to various value tasks in a particular work week as indicated by figure 6 in 2016, as much as 61% of the tasks are listed as other tasks, and comprise of a staggering list of duties. They include but are not limited to stakeholder interaction and management, upkeep and renewal of licences, permissions and registrations pertaining to operations and personnel, regulator inspections, scrutiny and reporting, oversight and management of regulatory implementation projects, monitoring and compliance training, reviews of industry and regulatory interactions, cultural change and leadership, advisory on regulatory requirements, lobbying and influencing industry inclination, assessment and feedback on regulatory solutions, oversight of conduct risk, technology disruptions and cyber resilience, recruitment and retention of relevant, skilled and competent compliance staff, acting in the capacities of data protection officer and money laundering reporting officer. The volume of value tasks adds up further with green transition process pipelines becoming prominent and ESG reporting exacting attention of the already overburdened compliance personnel.

Remodelling their skill sets to address these volatile skill-set requirements is a constant challenge for compliance officers.

Figure 7 Greatest fintech challenges to be faced by regulated firms in 2023



Source: (Cowan et al., 2023, p. 6)

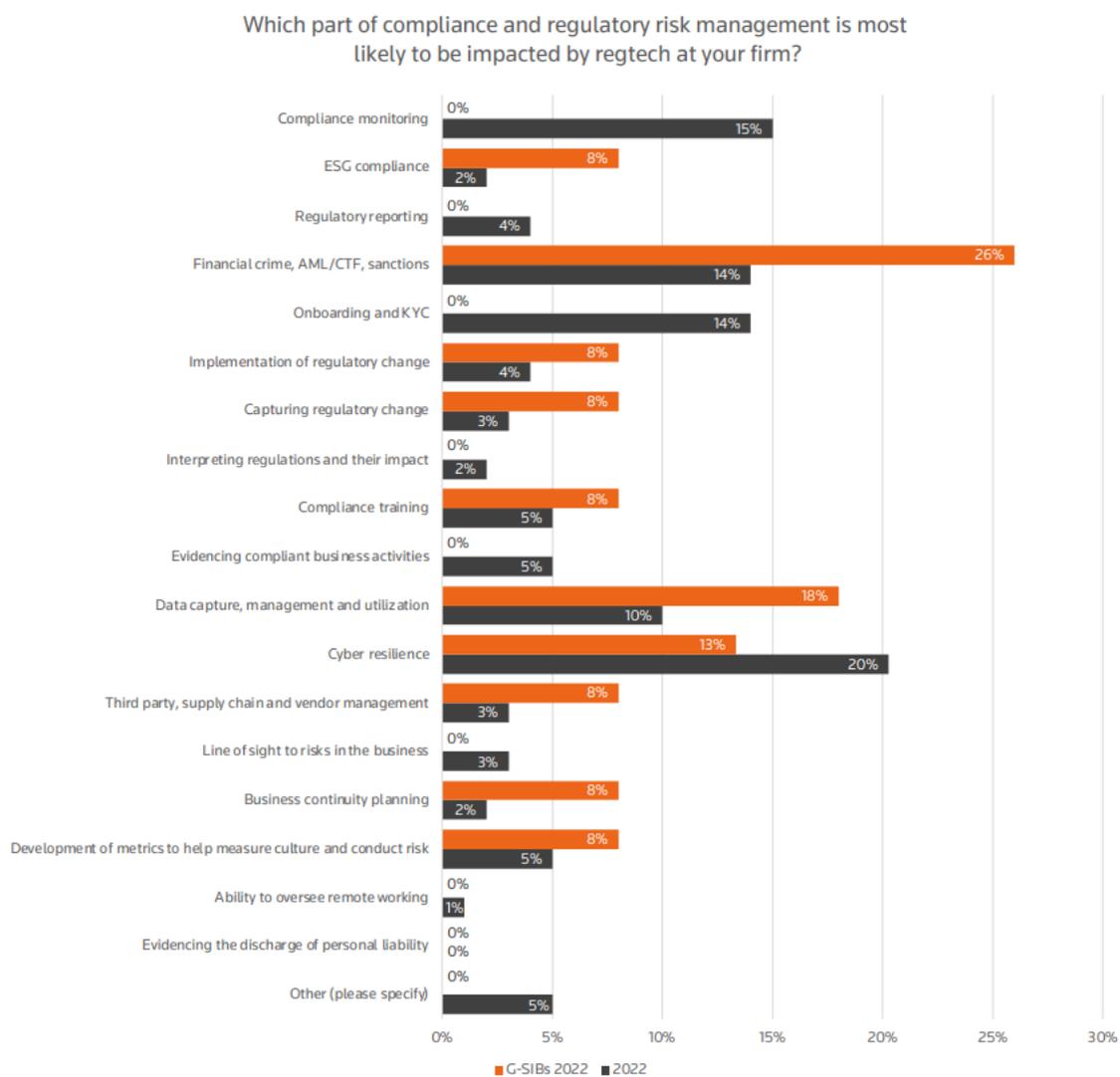
Moving towards the year 2023, defined as the year of the finance industry grappling with its bidimensional dilemma of fintech, an increasing affinity for its utilization, and yet a simultaneous status slowdown when it comes to growth of the sector (Cowan et al., 2023). In the regulatory compliance localism, this implied the rise of “Regtech”. Regtech, in other words a colloquial amalgamation for “regulatory technology”, can be defined as information technology that assists compliance to regulatory requirements by a firm by recognizing the probable impact of regulatory provisions on business models, products and services, functional activities, policies, operational procedures and controls. In terms of its function, regtech facilitates business systems, risk management, data and can execute regulatory reporting (Lynn et al., 2019). The report by Thomas Reuters regulatory intelligence (2023), mentions that as undeniable it is that the post

pandemic years were those of a shift towards heavy reliance on technology for operations as well as compliance and the birth years of regtech due to the nature of the contingency itself, the restriction on physical movement posed by the pandemic, the years 2021 and 2022 thus became the transitional grounds for technology based innovation, however, in 2023 as figure 7 shows, the tendency is already slowing down, this can be attributed to a number of factors, among them the ones the report gravitates towards is the lack of skilled professionals, which remains a pressing concern since the 2016 report, disruptions pertaining to heavy technology reliance, regulatory approach and data governance. Figure 7 also pertains to the most intimidating technology related challenges firms are facing in 2023, according to the professionals surveyed. The highest amassing obstacles for fintech happen to be the scarcity of professionals with the requisite skill-set to encounter everyday operational and regulatory asks at their work desk and the approach of regulatory authorities to compliance. On the other hand, for G-SIBs in fintech, concentration risk and outsourcing related risks took up the counterspace. In systemic banking, concentration risk can be defined as the increased susceptibility of a bank or a financial institution to financial shocks or incidents that can have a spillover effect due to the sheer size of the entity as a result of its significant exposure to a particular borrower, sector, or asset type. This risk develops when a systemic bank's loan portfolio or assets are heavily concentrated in a small number of companies, industries, or geographical areas. This concentration of risk has the potential to feed the financial system's interdependencies and connectivity, rendering it more vulnerable to shocks and worsening the possibility of contagion during financial crises (Barth et al., 2002). The industrial positivity about fintech and regtech already losing momentum in a short duration is hardly surprising, this was foreseen in several research works reviewing the risks associated with technology and their cataclysmic effects on the industry post the global financial crisis, and in one of the seminal works, Bamberger (2010) observes that the legal profession has not been vocal on the various hazards associated with automation of the compliance function and the outsourcing of human discretion pertaining to regulatory decision making to technology tools, thereby dangerously shifting accountability, contorting responsibility of decision making by blurring the boundaries of self-interests and objective judgement and foreboding automation bias, all of which combined had a role to play in aggravating the global financial crisis of 2008.

The integration of fintech and regtech solutions is expected to have orienting effect on the compliance function. Professionals employed at G-SIBs anticipate that regtech will enhance efficiency and effectiveness, allowing for more focus on value activities as technology takes up more mundane tasks at the compliance work desks. It is probable that a greater number of skilled

professionals will be required initially to develop and optimize the strategic potential of technological solutions. On the other hand, from a fintech perspective, G-SIBs professionals observe two key developments of relevance. Firstly, remote work arrangements have become commonplace, with compliance function members increasingly working from home. Secondly, in the long term, the adoption of fintech may result in a reduced need for compliance staff.

Figure 8 Severity of technology related impact on regulatory risk management.



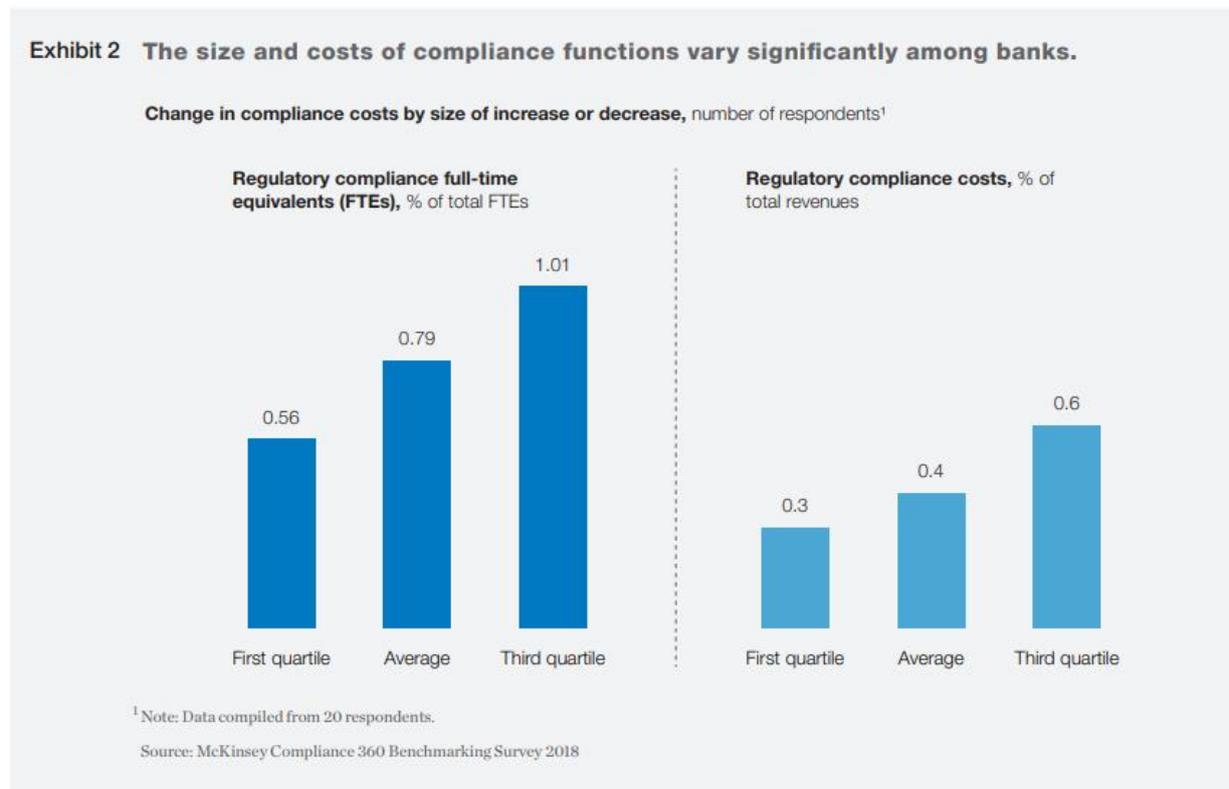
Source:(Cowan et al., 2023, p. 18)

Despite the several concerns, the indispensability of technology reliance cannot be defeated, more so in the aftermath of the pandemic and the geopolitical volatility. As is indicated by the responses in figure 8 above, the most affected area of compliance due to regtech is financial

crime, AML and sanctions, according to 26% of the respondents employed at G-SIBs in the year 2022. However, in other critical areas like ESG compliance, regulatory reporting and onboarding and KYC, the use of technology is still very limited. Among the many capabilities that are expected of fintech and regtech according to the professionals surveyed are still waiting to be materialized are risk management tools, data governance assistance, automation of compliance processes and improved tracking of regulatory change. The report remains mildly optimistic about the potential of regtech and fintech in freeing up time for value tasks in compliance and ESG reporting, however, fails to describe any methods or solutions to approach this standstill.

Adding to the individual uncertainties listed above from the reports by the Thomas Reuters regulatory intelligence division, the Mc Kinsey semi-annual risk report for the year 2019 recognizes the interdependence of the problem factors and insinuates towards the deepening of the compliance crisis because of this stacking and percolation. Not only do the combination of the insights of these reports establish the need for a systems approach to the compliance and mitigation policy cluster but also is one of the foundation stones for the ideological framework of this research. Organizational variations in the proportionate size and budgets of compliance units suggest that compliance has not yet achieved a sustainable, acknowledged balance between efficacy and scale. According to the 2018 McKinsey Compliance 360 benchmarking survey, a typical compliance department allocates 0.79 percent of its full-time equivalent workforce and 0.4 percent of its overall revenue to regulatory compliance alone. Due to their involvement in the financial crisis or more recent compliance lapses (for example, rogue trader episodes or market manipulations), the banks with the biggest compliance departments are typically those that are subject to significant regulatory scrutiny. The survey's findings also show that globally systemically important banks or G-SIBs retain comparatively higher levels of compliance and this is a major drain on their resources, however, it has not been concluded in the report whether there was a correlation between size and effectiveness of compliance functions. These differences emphasize how crucial it is to elevate the compliance function to a homogenized level. Currently, vital decisions like whether an organization needs a separate compliance department or budget allocation and such, are taken at the discretion of the top management and the boards of individual organizations, and this causes policy, implementation and operational alignment lacunae (Bevan et al., 2019).

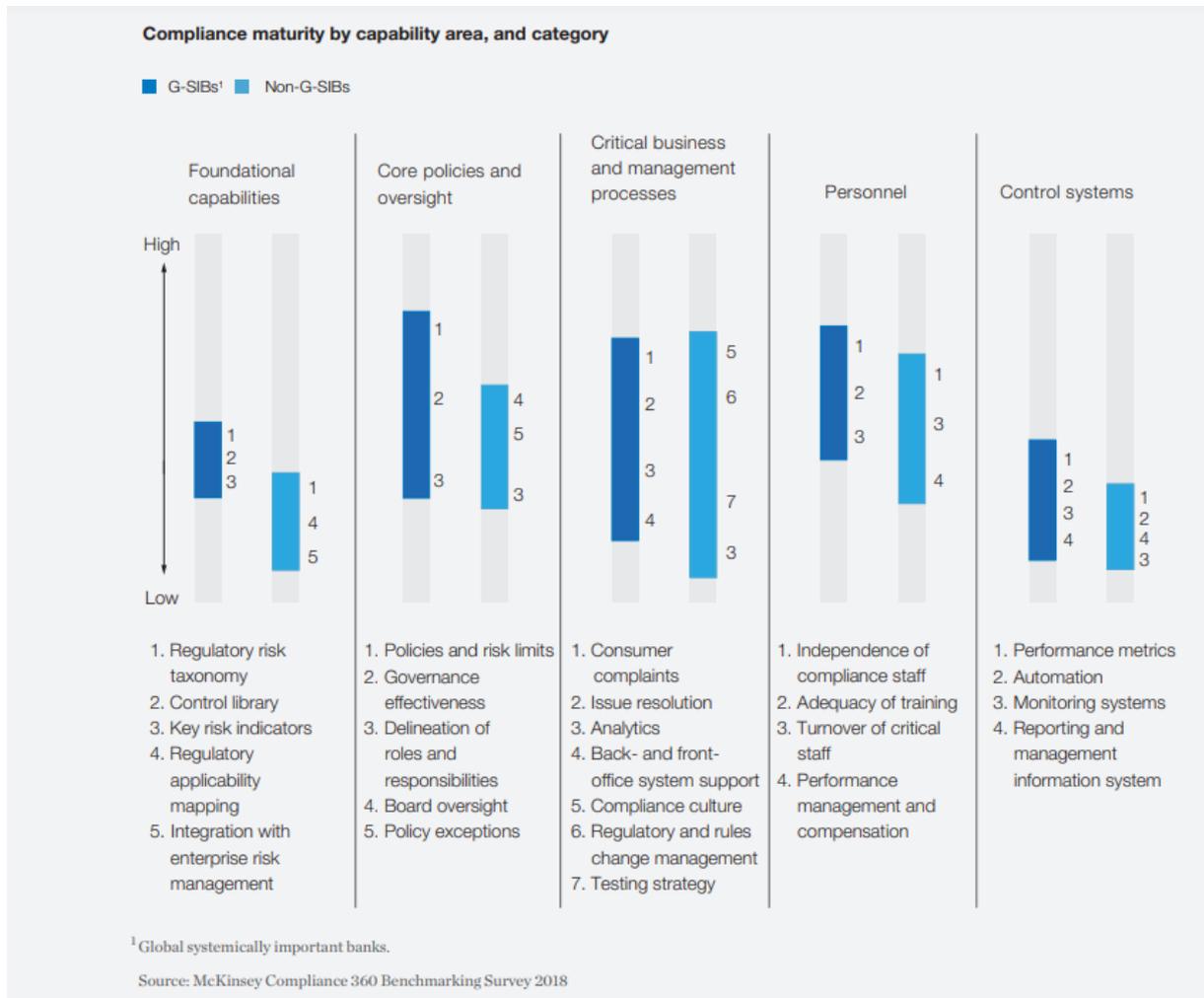
Figure 9 Challenges to benchmarking of the compliance function across different organizations



Source: (Bevan et al., 2019, p. 4)

Figure 9 underscores the fact that one of the key problems in homogenization of the compliance function across the financial services industry is the heterogenous nature of the regulated organizations. Depending on the nature, size and complexity of the operational activities of the financial organization that is being regulated, the structure, number of personnel employed, type of compliance and regulatory authorities, locus and scope of the compliance function, hierarchical disposition of the compliance department, and whether the department will operate solely or in conjunction with others are all factors which will differ greatly and there is greater regulatory freedom stemming from these variations. Another key reason why this is done is the fact that the cost of compliance varies greatly depending on these factors and the variation is difficult to homogenize because of this. A smaller company cannot be expected to have an entire compliance department since they may not just have insufficient resources but also since by the nature and complexity of their operations, there may be no need for a separate compliance department.

Figure 10 Compliance maturity in G-SIBs versus non G-SIBs

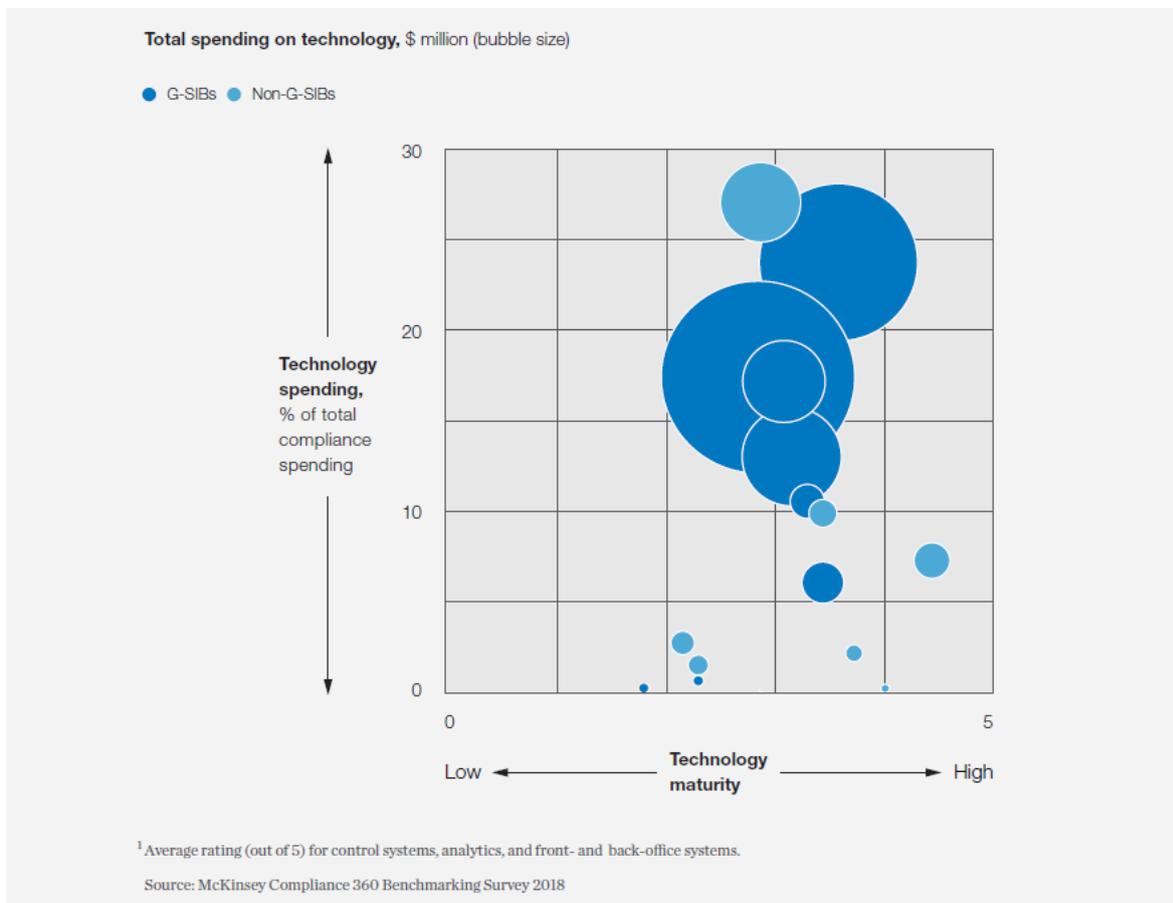


Source: (Bevan et al., 2019, p. 5)

Figure 10 depicts the responses of the surveyed professionals on their idea about the level of compliance maturity across five categories, namely foundational capabilities, core policies and oversight, critical business and management processes, personnel and control systems. The degree of sophistication and efficacy of an organization's compliance program is referred to as compliance maturity in the finance industry (Holter Antonsen, 2021). This depicts the regulated entity's capability to abide by all applicable laws, rules, industry standards, and internal or external policies. The notion of compliance maturity comprises several dimensions, such as the governance structure of the business, risk management protocols, operational procedures, and technology efficacy. A scale from starting level to optimal level is commonly used to quantify compliance maturity, with each level denoting a distinct capacity and development stage. An

organization may initially have reactive or makeshift compliance procedures, with uneven execution and little understanding of regulatory requirements. Compliance procedures get ascendingly proactive, methodical, and integrated into the organization's operations as it matures (Hendra, 2021). This evaluation further accentuated the need for the profile of personnel executing the compliance function in organizations to possess skill sets that were diverse. As seen from figure 14, the maturity of compliance systems of different entities is adjudged on five aforementioned parameters on a scale of low to high and majority of banks received low scores in the control system domain, which includes analytics, reporting and management information systems, automation, monitoring, and evaluation. Consultants from Mc Kinsey discussed this gap with the executives of the organizations surveyed and investigated how data, analytics, and technology might be used to enhance the compliance function and unlock their full potential, in alignment with the survey findings. Across both G-SIBs and non G-SIBs, the anxiety towards assimilation of compliance management with risk frameworks was observed in the report, specifically around risk classification and control functions.

Figure 11 Graph of impact of technology expenditure on technology maturity



Source: (Bevan et al., 2019, p. 6)

Figure 11 depicts the correlation between the expenditure on technology as a portion of the total compliance budget and technology maturity. From the graph it is difficult to infer if there is a clear correlation between the two, which points to the top management dissatisfaction at not seeing the results they wished to see despite the investment since technology at the time was not appearing to aid strategy and expenses were mostly squandered on end-user interaction tools which became dated quickly. CCOs were also not equipped by an articulate technology strategy to assist everyday compliance functions.

Throughout the reports, a sense of vexation at different elements of corporate culture and behaviour, technology, financing mitigation policy individually, as well as their symbiosis with each other creating a vicious loop of vulnerability was prominent. This interaction was the basis of the inspiration for the elements of the causal loop diagram.

3 Research Methodology

3.1 Elemental interplay, stunted discussion and the research question.

One of the fundamental critiques to the ideology of regulatory compliance is that regulated entities in the financial industry often find themselves in a haze of morality, a situation akin to an application of game theory known as the prisoner's dilemma, where the optimal corporate strategy is likely to interfere in ethical terms, with the best practices for the industry from a macro perspective (J. Hu & Lu, 2014). The concept of entrepreneurial risk and competitive advantage which are indispensable pillars to the existence of the corporation for example, are at constant loggerheads with the compliance strategy by the contrasting nature of both of these. As compliance personnel, there is a regulatory expectation to uphold ethical values at the highest hierarchy and actively suppress the pressures of revenue maximization which are critical to business continuity and even survival of the corporate entity itself, and this is an approach that makes for an ever-widening chasm between operations and compliance. While this is no matter of discrepancy that business ethics must be cardinal to all operations, the fact that the societal psyche which determines discretion and what is ethical has undergone a radical shift in the light of the COVID-19 pandemic. Dunham and co-authors argue, that there were several incidents during the pandemic where the society as a whole faced moral dilemmas that questioned the humane approach and urge for an explicit revision of our ethical code as a species, in the face of extreme resource scarcity, making unsettling decisions like putting patients off life support so that those living could receive medical care was one of them (2020). Another literary work (2020), observes that there is a stark deviation in consumer ethics after the COVID-19 pandemic, to a conspicuous inclination towards products and services from corporates that have authentic CSR activities. These examples show that the societal psyche which is behind discretion and ethical decision making has undergone a transformation and the evolved code has not been explored enough, this leaves several lacunae that can damage the global financial systems in ways that were not thought of earlier. When addressing this system of interrelated subsets of societal discretion, ethics, and their trade-off with revenue, it is dangerous for regulators to assume that the sole intent behind profit maximization is ethical wrongdoing. There is also the underlying condition of the degree of risk and the reward it can bring to organizations, if enforcement is something that is imposed extremely frequently and with intensity, the fear of the phenomenon can reduce to a point where it can erode the ethical motivation to deter wrongdoing. This is commonly known as the paradox of trust, and is especially relevant in the times of ethical transitions such as those observed after the COVID-19 pandemic.

Next, this contrasting duality generates several lacunae which feed into various stages of the compliance pipeline, and can potentially lead to decision fatigue and managerial myopia often linked with compliance personnel. With compliance managers facing an ascending trend in rules and regulations to adhere with, the compliance function has become a cumbersome profession. This compliance burden can lead to decision fatigue, a phenomenon where high-intensity and repetitive decision-making diminishes an individual's cognitive resources and impairs their decision-making capacity. While decision fatigue does affect the individual's career prospects in a demanding career like compliance, it also is detrimental to customer experience and at large, organizational revenue and repute. It has also been established by research that sheer volume of demands of regulatory and environmental compliance can cause a narrowed focus on prioritizing short-term targets to minimize the potential for supervisory repercussion (Steinberg, 2012). This approach, also known as "box-ticking" compliance, can lead to a neglect of long-term strategic planning and an impairment to address emerging challenges. This extensive literature review brings us to the research question, the systemic nature of issues of regulatory and environmental compliance have established, long-term effect on the experience of the managers and personnel who perform the compliance function at their work desks which in turn, translates into a detriment to the consumer experience and organizational health and repute, and yet, there is little research on the systemic impact of regulatory compliance issues on the organizational grassroots, or the personnel or managers who perform the compliance function on behalf of their corporate employers and how to reduce this impact for a green transition with lesser friction. The research question then becomes:

RQ: How can the managerial impact of the interplay of key elements ailing the contemporary regulatory compliance landscape of a corporate entity undergoing green transition be reduced, to facilitate a smoother corporate transition?

The first step to answer the research question is to search existing literature for the most pressing concerns of the regulatory compliance with green transition in hindsight. Next, to delve into the elements of the contemporary regulatory compliance debate in the industry in the European context, semi-structured interviews were utilized as a method of qualitative analysis, since such a method allows a researcher to explore a thematic domains within an organic information exchange exercise (W. C. Adams, 2015).

As a precursor to the interviews as a preliminary probe into the problem, two customer journey maps were created, to build and understand the journeys of a consumer of financial services accessing a financial product or service and the personnel employed at a mid-sized corporate

entity who performs the compliance function either in individual capacity or together with a compliance manager in order to make the consumer's experience safe and compliant with extant regulatory guideline. These experience journeys shed light on the panorama of a single compliance operation from the viewpoint of the consumer and the personnel. Next, a derivate of these journey maps as the visualization of the compliance pipeline was a natural consequence. The observations from the customer journeys and the interviews were analysed to arrive at the systemic nature of the research question. Then, as the final stage of the research methodology, a causal loop diagram was created in order to establish the relationships between elements, to observe the degrees of correlation and its impact on the contemporary debate on the pressing concerns of the regulatory compliance landscape.

3.2 Customer Journey Mapping

Customer experience can be defined as the entirety of customer interactions with a product, brand or organization across multiple channels and touchpoints (Schlegelmilch & Winer, 2021). The ideology of customer journey mapping is founded in business and industry practice and has been adapted into academia because of its practical applicability and implications to further research in customer behaviour (Angrave, 2020).

The origins of the concept of Customer journey mapping lies in the early research on consumer behaviour (Baker, 2001) and the intent was the motive to understand the customer's environment and the alignment of their purchase or consumption objectives to promote and inculcate repeat buying, brand loyalty and drive demand (Hoyer, 1984). In order to accomplish facilitation of brand loyalty and ultimately revenue keeping the interest of the consumer as the primary stakeholder (Micheaux & Bosio, 2018) at the centre of managerial objective. The scope of customer journey mapping goes beyond revenue inclination and driving consumer demand, however, with significant implications in service innovation by promoting cross-functional managerial activity (M. Rosenbaum et al., 2017) and ultimately acting as a conduit for sustainability of services (Pantouvakis & Gerou, 2022).

In software engineering, the concept of customer journey mapping is derived from the role of the design of the initial software appearance or the landing page that pops up the moment the customer authenticates their credentials in determining whether the customer will choose to utilize the product or service and come back to it. It is at this moment that the first point of contact of a software is established with a human user, and the subjective opinion of the human user with the software, commonly known as several touchpoints will determine if the product or service is viable and suitable for utilization, eventually signalling software success and brand loyalty (Bernard & Andritsos, 2017). This interaction could make or break the success of the software, more so in the early days of commercialization of computer usage and thus, had to be an interface that the user could comfortably interact with, to issue commands or request services. Hence this subjective customer experience, despite being a behavioural aspect, was one of the primary conditions of importance when designing human-computer interaction (Ludwig et al., 2017).

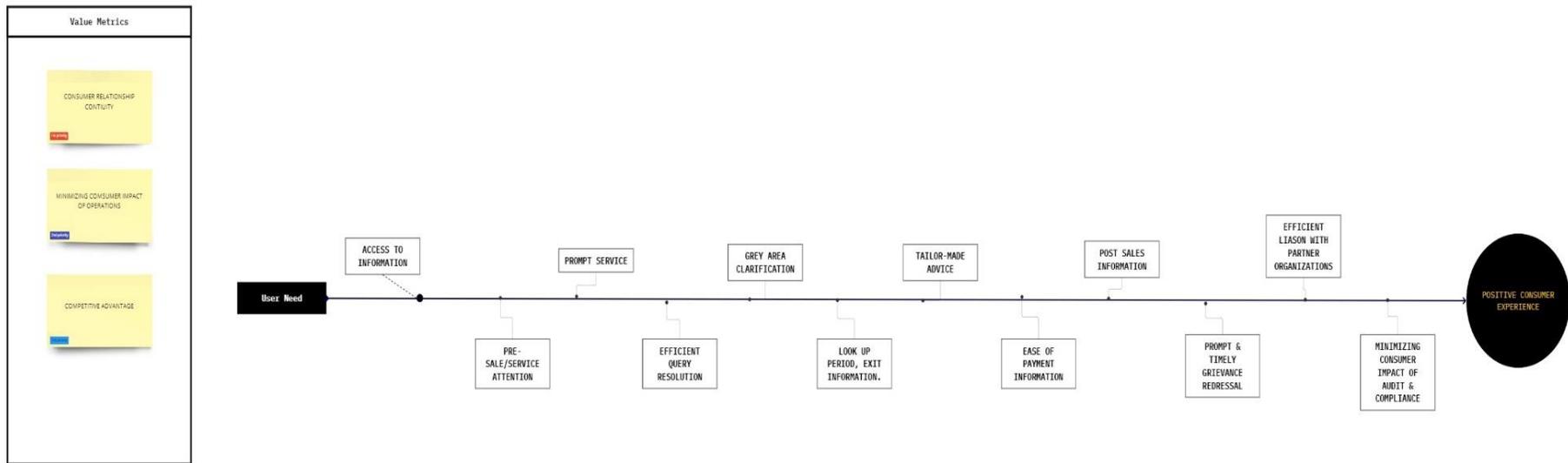
Within the financial services industry, the end-user is the person who requests a financial product or service, which can range from a simple banking transaction to request for insurance, investment and other related services (Suvarchala & Rao, 2018). While the concept of a positive customer experience is researched widely in the banking and financial services industry

(Heshmati et al., 2019; Garg et al., 2014), the experience researched is limited to that of the end-user. In the light of ever-tightening regulations and legislator requirements in the light of the polycrises, scandals and systemic safety of financial environment globally during and post the Covid19 pandemic (Shehzad et al., 2021), and expectations from the industry to comply to these and ensure the highest level of integrity of systems, processes, people and technology assimilation into everyday operation (Godellawatta, 2009). In this increasingly volatile financial services landscape against the backdrop of the additional onus of ESG it is indispensable to consider the experiences of the personnel who are at the financial services frontline, delivering the services to customers, to view the comprehensive picture. In order to address experience from both the customer as well as service providing personnel, the journey mapping has been done two different viewpoints, as the subject of discussion. While the intent of the journey of a customer of financial services is to put into perspective how the structure of the regulatory compliance extends within the financial service industry contemporarily, the regulatory compliance pipeline from the perspective of the management is to rethink the positioning of the Compliance function for the purpose of evaluation in the hindsight of managerial experience of operations.

The customer journey map is thus, a tool for organizations to gain insights about the needs that drive the customer towards a product or service offered by them, or the solution to an existing problem the customer faces and wishes to solve, their pain-points during accessing products or services, and segmented as well as overall expectations. Since this visual journey is aimed at covering each and every aspect of what the customer seeks in terms of existing or prospective needs, these maps are also the perfect environment to foster innovation and identify overlooked voids in the organization's services. This also makes customer journeys the appropriate tool for service innovation (Zhao et al., 2020).

For the analysis covered in this work, there are two types of customer journeys that have been considered. For the first, it is the journey of a customer of a financial product or service as per the persona created, and secondly, the experience of a compliance personnel who is performing the managerial duties in a mid-sized regulated corporate entity wherein the compliance function is not exclusive to other operations, is also considered. This is because, as mentioned earlier, a regulated corporate entity is a consumer of the services, instructions and enforcements that are aimed at green transition, and their compliance personnel are the agents that translate regulations into operations at their work desks.

Figure 12 An insurance end-user's journey map: what makes a positive consumer experience?



Note. A map of an insurance consumer's journey extracted from mapping. Own work.

Fig 12 depicts the all the factors that stem from personnel and managerial actions that would make a positive customer experience. From the consumer point of view a customer Journey usually comprises of touchpoints which are characterized by actual physical interaction of the consumer with the product or service or the landing page of a software which further enables them to access the product or service in question. For the financial services industry particularly, the consumer may not have a physical touchpoint, and the journey of a customer requesting access to a financial product or service often begins with a browser search, a social media advertisement, or some other web-based, intangible access point. For an environmentally aware consumer, it is commonplace to look for sustainability of the product or service they intend to consumer and they often look it up online for information regarding the carbon footprint of the product and whether there are greener alternatives available. In order to put the customer journey into perspective for a customer of financial services, a set of goals for successful transaction were thought of, and a persona of an elderly customer requesting a joint life insurance policy for them and their teenage grandchild was created. The primary objective was to outline the nature of a typical financial service transaction which the fictitious consumer would go through, all the touchpoints they would address, and requirements that would be asked of them, in order to procure a life insurance policy for them with additional coverage for the grandchild. A persona is a fictional representation of s customer or a prospective customer, created on the basis of research or observation, it forms the chassis of the overall journey map (Heuchert, 2019). After creating on this persona, this journey was captured across the several number of visits the consumer would have to make to the office of the insurance provider to access these services. Individual constraints like gender and age, disclosure and document requirements; whether they survived a spouse and have investment needs, a short summary of the proceeds in their bank account and income tax statements, evidence of citizenship and blood relations, nomination and other details are needed to carry out the transaction in question. These requirements themselves have a history in regulatory compliance justifying the ask on behalf of the service provider requesting these from a customer or a prospective customer. Post this, the personnel at the service provider end have to make a decision on the basis of extant instructions, guidelines, rules, regulations, legislations and company and industry policies, whether the said customer can be granted to access the product or service in question. This decision is no easy task and involves many subsets of considerations that lead to the ultimate nod or rejection and once it is made, there is a series of follow-up pathways besides the realm of a typical sales transaction across any other industry. This is because the fact that financial services industry faces an ascendingly

greater amount of scrutiny since it is liable for the health of the economy (Green & Reinstein, 2004).

3.2.1 Customer Journey map: Horizontal and vertical axes.

The customer journey map is essentially a matrix that progresses along two dimensions, which are known as the horizontal and vertical axes. Table 2 depicts the different considerations of a customer journey across the three phases of a consumer requesting financial product or services across touchpoints which are utilized to build the rest of the structure of the customer journey map with the persona as the groundwork. These touchpoints make up what is known as the horizontal axis of the journey map or act as a point of interaction of the consumer in their journey from beginning to the end of transaction completion. Examples of such touchpoints can include various incidents where the customer comes in direct contact with the service provider such as marketing campaigns, sales interactions, product usage, and customer service engagements (Rosenbaum et al., 2017). In the customer journey of a prospective insurance customer which is the basis of exploration for this work, the pre-service touchpoints include the insurance provider's website, portal and other web presence, marketing campaigns, webpage of the service facilitators, insurance provider's office or venue of a customer meet-n-greet, online and offline reviews and consumer opinions, bank or other intermediaries involved in payment transactions, the office of authorities offering grievance redressal if needed. All of these touchpoints can be approached digitally, and this fact adds more elements to how consumers of financial services interact with their new hybridized environment of seeking access to financial services. For example, the added dimension of customer reviews for financial services is still relatively underdeveloped, and there is little information if one wishes to rate their service provider online.

Moving on, the vertical axis, pans out as the change in the moods of the customer as they go through the touchpoints and thereby depict the customer's emotional state, perceptions, and feelings at every individual stage of progression of the journey (Towers & Towers, 2021). This axis is the academic link between design of a product or service, office interfaces, curated experiences and tailor-made interactions on the behaviour of the customer. The emotions, moods and reactions of the customer are vital indicators to businesses about the reception of the product or service by their most important stakeholder, thereby facilitating them to custom-fit their products and services to offer a delightful interaction.

Table 2 Horizontal axis of consumer touchpoint in financial services

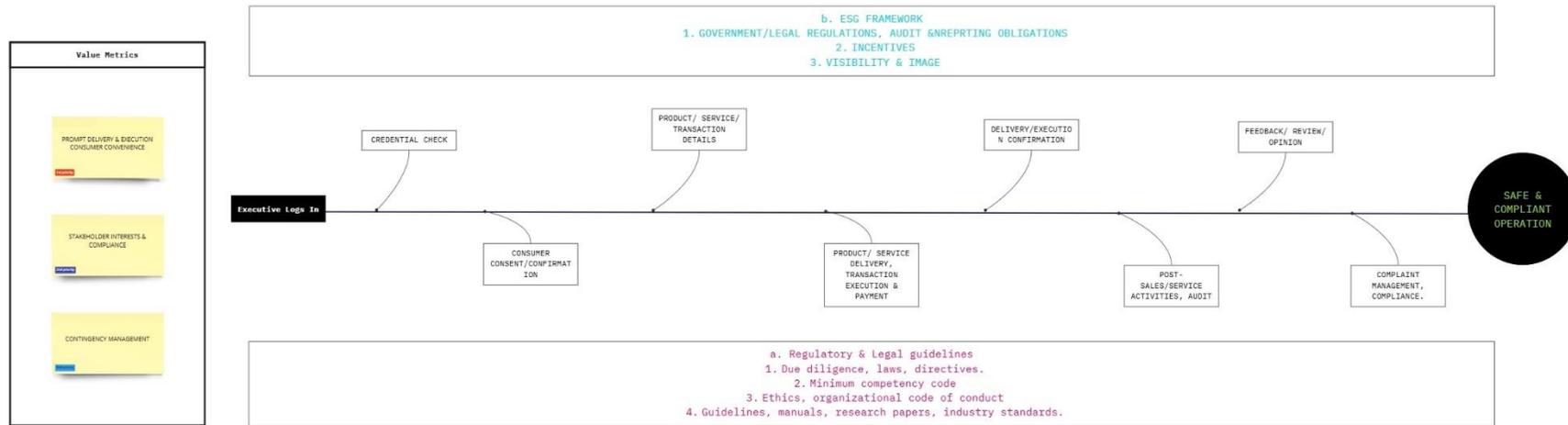
	Pre-service period	Y/N
	Before you decided to request for a financial/ payment/investment/insurance service did you:	
1.	Speak to people you know who already are consumers of the product/service?	
2.	Read reviews online about the product/service?	
3.	Compare and analyse the product/service online or speak to a consultant/advisor?	
4.	Saw an advertisement of the product/service on the internet or on television/radio/post/billboard?	
	Service period	
5.	Did you visit your product/service provider personally?	
6.	Could you find all related information online or in-person, for the product/service you wished to access?	
7.	Were you made aware of the associated risks?	
8.	Were the terms of the contract clearly mentioned?	
9.	Did the payment transaction go through smoothly? Were you issued an invoice? Were you made aware of auto-deductions of future payments?	
10.	Was there a provision of a trial run of the product or service with a refund offered?	
	Post service period	
11.	Were you made aware of the after-sales procedures, your right to seek redressal and laws to protect you?	
12.	Was information made available to you via a durable medium?	
13.	Would you purchase the product or service again? Would you recommend the product/service to friends or family? Would you post an online review about the product or service? What improvements would you wish to see in your experience?	
14.	If you sought a refund after the initial trial ended, what made you do this?	

Note. Touchpoints of the insurance customer's journey from persona and mapping. Own work.

In a sharp contrast, as depicted in table 2, there are several organizational tasks performed by the compliance personnel at the regulated entity, in addition with environmental regulation compliance and everyday operations in majority of regulated corporates, to comprise what is considered a positive experience. These several steps in creating a safe transaction from the regulator's viewpoint is a complex process spread over several years since financial services or products have prolonged gestation periods. The role of the compliance personnel in their most rudimentary tasks like creating a compliance program for their employing organization, have vital consequences in counter terrorist financing and anti-money laundering, both of which are indispensable to not only economic but national security. However, the instructional guidelines for identification of suspicious transactions or entities are dated and little help is available to the personnel performing these tasks, also asking for help is either dismissed as an avoidance of duty or seen as incapability or lack of knowledge, when this in an ever-changing industry as financial services, must be more than welcome. Next, the insurmountable volume of frequent regulatory change makes everyday operations very difficult to align with instructions, regulations and guidelines, the integration of the prominent technology element to this has brought the scarcity for domain expertise to the previously long list of competencies that a compliance officer must possess. Creating and communicating an effective chain of command that promotes a culture of compliance within the organization can also be a significant challenge for compliance personnel. They often find themselves navigating the gossamer balance between enforcing regulations and upholding the trust of employees without any professional negotiation skills, since the employees may view compliance as a hindrance to their everyday operations.

While it is no surprise that a positive customer experience is created by these personnel, their own experience at the job is distraught with several concerns beyond reasonable capacity of problem solving. These observations show the close correlation between personnel action and customer experience, the former is the reason for existence of the latter, which is the ideological stimulus for the need for analysis of whether a positive managerial experience would spillover on the customer experience. However, this is not all, the most important insight from these exercises was the fact that reducing guesswork, developing guidelines to encounter regulatory ambivalence with guiding templates with inputs from previous such cases combined with aligning regulations and industry or regulator-led research on defining the abstractness of common buzzwords like culture and ethics may be helpful to the economy and society as whole.

Figure 13 A compliance personnel's journey towards a safe transaction



Note. The number of steps taken by personnel to make a positive customer experience from customer journey mapping. Own work.

3.2.2 The compliance pipeline.

In order to observe the interaction of customer and personnel at the corporate entity's office in detail and outline the impact of this on the role, responsibilities and engagement, a compliance pipeline offers a visual aid. As can be observed from figure 14, in a typical compliance pipeline in a regulated corporate entity undergoing green transition, a transaction between the consumer and the entity is divided into three stages, the pre-service duration, the service duration and the post-service duration. A precursor to these three phases is the discovery phase, during which, a consumer discovers the corporate entity in their hunt for a solution to their need for a product, service or advisory. The discovery phase begins when the consumer or end-user of product or service or advice actively looks out for a corporate entity who can fetch a certain product or service to them which has some value to them, and in exchange, the consumer pays to compensate, commensurate with the perceived value. The discovery phase can be tangible or when a consumer or end-user actually walks in or approaches a personnel or executive that is either directly employed by a regulated corporate entity providing the product or service or advice or through personnel employed by the intermediary that is in a valid contract with the regulated corporate entity for the provision of the product or service in question. The consumer or end user can also look for the products or services they need completely online where the search, product or service discovery is done without any tangible interaction between the entity or intermediary and the consumer. During this process of discovery, the end-user or consumer also may rely on the existing reviews of the product or service which are present online or word of mouth from peers or family members who have had an experience with the product or service. During the next phase, the consumer or end-user articulates their need for a product or service either in person at the branch or office of the service provider or online by searching for an insurance product suited to their requirements. At this stage, the personnel attending to the customer at the office or branch of the insurance service provider gives them the preliminary information about the available solutions suited to their request, requirements in terms of information, documents and evidence that will confirm the suitability of the product or service recommended to the customer. Information about payment transactions, expected frequency of payments, future deductibles, upcharges, service fee and other associated costs is also conveyed to the customer, usually prior to the customer's decision of whether or not to proceed with the personnel recommendation. Customer suitability at the personnel end is a complex mix of risk appetite, needs and liquidity and regulatory instructions especially in the wake of global (contd.)

Figure 14 The compliance pipeline in financial services



Note. Developed from the customer journeys of service consumers and personnel. Own work.

regulations on money laundering and terrorist financing, demographic information, jurisdiction limitations and geopolitical influencers like sanctions and trade restrictions.

Additionally, the process of customer record creation as a subset of customer relationship management adds data protection and privacy concerns both at the consumer as well as corporate ends. This brings grey areas like data sufficiency and privacy, prevention of data breaches and storage and deletion issues into the already complex mix. In terms of protection of consumer data under the EU's GDPR regulation, an entire data cycle has been created which includes how much information is to be collected from a consumer or a prospective consumer, how is it to be utilized, stored and transferred internally within or externally from the organization (Sirur et al., 2018), these also add to the additional workload of compliance professionals. At these initial pre-service touchpoints, consumers often also seek information in terms of the trial period if available, for the product or service they are about to purchase, and any cautionary information and its impact on their purchase decisions is also discussed, more so when it pertains to volatility or fluctuations due to economic, geopolitical or business conditions, this is because, all of these conditions will have a direct impact on the compliance outcomes of the transactions conducted and will inevitably have legal or enforcement consequences for the regulated corporate entity in question when scrutinized (Anderson & Winslow, 1992). In case of the persona created, Vlad is a person of Russian origin who lives in Vienna and happens to receive pension from Russia, in this case, Vlad will be subject to additional scrutiny in order to clarify their naturalization requirements in Austria, their tax paying arrangements, the innocuousness of their previous employment or any current incomes in the money laundering and terrorist financing aspect and also, the EU sanctions on Russia are likely to impact one or more of these conditions.

Once the initial scrutiny has been satisfactorily completed and the personnel and the consumer is assured of the customer suitability, product or service recommendation and terms and conditions of the contract, the onboarding process starts, official records of the consumer, their dependents, associates and nominees are created, formal contracts are signed and future courses of actions are determined. Once this onboarding process is completed, the customer is no longer prospective and this is the official start of the organization-client relationship, the compliance relationship however, begins much earlier, at the start of the discovery phase. From this stage, the official start of the monitoring and supervision of the customer as an integral part of the organization starts, and now the organization is held liable for the actions of the customer as an embedded human element of the Austrian financial system as part of the fictitious customer's environment from the persona. Also, by logical extension, the personnel employed by the regulated corporate

entity or in case the organization outsources a few or all functions with a legal binding contract, the employees and associates of the outsourced entity who will have a role in customer onboarding will also, by default be incorporated as the key human elements of the regulatory compliance envelope. As is evident from the customer journey, keeping the stakeholders' interests at the forefront, especially when delivering services as frontline professionals is crucial to the smooth progression of these initial phases of the pipeline. During the pre-service stage in the customer journey, there was an unexpected delay in determining customer suitability since Vlad, the protagonist is a naturalized citizen of Austria but hails from Russia, this used to not be very common a few years ago, and is an example of geopolitical volatility that has stirred people movement across the globe and sanctions posed by the EU on Russia having a direct impact on everyday financial transactions.

The next stage, or the service stage is, across financial services, the longest in terms of chronology, this is because, financial products and services are temporal in nature, which means there is a long gap between a customer's investment into the product or service and its maturity, which adds to the susceptibility of the customer's investment because during this long gap, unprecedented changes and volatility can adversely impact the industry, institution, and ultimately the investment (Maguire & Geiger, 2015). Post the customer's explicit consent for proceeding with the product or service recommendation by the frontline personnel alongside data privacy statement, the onboarding begins, and customer records are created and their data is processed as per GDPR and other regulations. At this point, a majority of customers experience delays, since during this stage there are a number of different compliance requirements which vary differently across demographics, and the ever-evolving landscape, there are more than likely, incidents that have not been encountered earlier at the front desk, and in the light of the ESG regulations that have to be additionally addressed, the predicament of the compliance personnel not having sufficient time to keep up with all of this, is a high probability. A majority of the compliance footprint, as is evident, can be observed in this stage of the customer journey, both on the customer and the compliance personnel. This is also where there is a need for external liaison at the managerial work desk, with tasks like seeking legal and other professional opinion on cases, managing and renewing licences and permissions, contacting and interacting with national and supra-national regulatory and enforcement bodies are also important, making it the most complex stage of the customer journey. Personnel who perform these functions are also likely to know their customers with utmost precision and are also expected to upsell or cross sell financial products based upon customer profiles, needs, risk appetite and financial circumstances,

this elevates the service stage as the most scrutinized process for conduct risk, or the risk that arises from the fact that a customer is at a position of natural disadvantage in a financial transaction because the corporate entity has its own interests in mind and has more knowledge than the customer when selling financial products, and this can cost the customer their entire lifetime of savings (Velu, 2024). The service stage is also the estuary for amalgamation of ESG regulations along with the functions mentioned above, and this multi-layered structure of tasks allocated to a management personnel at this work desk makes for the strongest case for examination of the implications of this on reducing vulnerability across the pipeline.

Ultimately, the final step of the pipeline can be bifurcated into operational continuity in the light of customer relationship management, which is of importance from the revenue viewpoint, and the compliance aspect which can be a drain on revenue in case an enforcement is initiated against the corporate entity. Post service stage comprises of the retrospective initiation of the compliance pipeline, it is the feedback from this stage as the audit output, observations from monitoring exercises, reviews, enforcement episodes directed at the organization itself or incidents from the news or industry. This stage comprises of supervision of every aspect of the financial service in the pipeline, with a view to provide assurance to the board of directors and other stakeholders that operations are in alignment with compliance goals.

3.3 Interview analysis

The preliminary probe outlined a set of thematic areas which coincided from the several industry reports which were scrutinized across a pre-polycrises time frame and a more recent one to recognize which domains contribute the systemic nature of the research question. These were then also compared with interview responses to see if there was a pattern which contributed to the pinning of the contemporary debate in the financial services industry on the overlapping of regulatory and environmental compliance concerns and their impact on the human elements of corporates undergoing green transition.

3.3.1 Data Collection

The interview participants were eight compliance personnel ranging from designations in middle to mid-senior management compliance roles and three academic researchers who had background in interdisciplinarity, psychology and improvisation, in an attempt to tease out a

balanced academic as well as industry dialogue. The semi-structured interview questions also allowed the participants to divert the debate to concerns other than the ones explicitly asked about. The questions asked to the industry personnel were:

- Could you elaborate on your compliance role and the industry you currently work in?
- Which compliance tasks do you prioritize each week and which consume the most of your time?
- What is your view on compliance budgets?
- How often does regulatory priority change your operational direction?
- Is there a set of support you actively seek and whether your expectations are met in this regard?
- Which spillover effects do you observe at your work desk, from the compliance environment?
- What do you think about your organization's relationship with regulators?
- What would you do differently to facilitate your organization if you were a regulator?

Apart from these, some other questions were also asked depending on the answers of the participants. For the academic participants, questions were based on their published work that had implications in recognizing the systemic nature of problems, efficacy of existing solutions and assistance that could be extended from research to industry in solving complex problems.

3.3.2 Data Analysis

Thematic analysis was utilized to identify the key patterns from the interview data and whenever a theme was mentioned by more than a single participant, it was taken into consideration for elaboration by observing the causal relationships between the themes from interview responses.

3.3.3 Interview outcomes.

Globalization, geopolitical instability and regulations.

The one theme that stood out unanimously across both industry as well as academic participants is the engorgement of business operations by the sheer volume of regulations and enforcements introduces as an aftermath of the COVID-19 pandemic and several geopolitical conflicts, natural and humanitarian crises and their unavoidable impact. The extent of this domino effect has been observed especially across the financial services industry in the advent of the heavy reliance on

technology and remote operations after the COVID-19 pandemic. These changes are extremely rapid and their number rises exponentially as the brunt of these is felt with the greatest intensity in the financial history of civilization thanks to globalization and consumes a major portion of the contemporary industry, regulatory and national debate. The participants from the industry also expressed their everyday struggle with the lack of clarity on these guidelines and the lack of concrete attempt to contain the sheer volume. Three of the industry participants mentioned that it is common belief that financial services are not as affected by regulations aimed at manufacturers or suppliers of goods, but if one is a compliance officer working in a multi-national bank on credit to SMEs manufacturing in a third country but exporting to the EU, for instance, the operation of the SME may not be in the EU, but will inevitably be affected by the supply of goods to the EU as this single activity of the SME will now make it liable under EU regulation and thus, by extension, the compliance officer who has to ensure safety of the transactions between the SME and the country of export in the EU, will now need to know not just the EU regulation impacting the SME but its operations, supply chain and other details so they can determine sufficient adherence to regulatory requirements on the same. This clearly brings to focus the extreme sensitivity of the compliance profession to the slightest of the changes in the geopolitical conditions around the globe and the fact that the compliance landscape widens every single day as a spillover of the geopolitical inclination, business operations, conflict and crises and no number of qualifications are enough to encompass sufficient knowledge to do the job.

Political will, incentives and environment mitigation.

In the order of priority, the next concern among industry participants was the fact that environmental mitigation regulations demand complete rewiring of business operations from their clients, which is a bold move since it requires stringent guidelines to be followed and grave modifications to be made to the business model, painfully so at the core activity level, such as manufacturing, packaging, marketing and branding. Common agreement has it that, political will and the availability of government and supra national incentives are the biggest propellants towards environmental compliance. The regulatory authorities in EU countries are already funded by an industrial levy, which is an annual fee paid by regulated entities, a cost eventually transferred to the consumer, combined with the fact that businesses were generally severely affected by COVID-19 and many could not survive, in order to direct momentum, clearly indicate that incentives are a necessity. Financing the regulatory compliance function in conjunction with

green transition can mean a major financial burden on corporates and consequently consumers of their services and can greatly slow down economic recovery from polycrises.

Another grave concern is the fact that there is a compounding frequency as well as amount of enforcements which have been directed at regulated corporates in the past five years. The aspect of deterrence that is prevalent here has already been heavily critiqued in literature as having a diminishing impact beyond a certain level. This has an underlying overtone for industry morale and can potentially affect the culture of environmental regulation from utilizing its full potential in the intrinsic integrity of the human element of corporations.

Volatility, minimum competency and on-the-job experience

In the wake of volatility, lack of clear instructions, need for constant skill upgrades and rapid ascending workload, it is hardly a surprise that the compliance job is one fit for an insomniac, as was reported by nearly all industry participants interviewed. However, despite the hours and the effort, because of the several number of variables in the mix, the personnel the job is never sure of themselves. This uncertainty is not because of the lack of skills or experience, but the fact that any amount of information known can be insufficient to take on an evolved challenge. Adding to these words is the concern of trust within the organization, recently several compliance teams at big corporates work collectively laid off. Such incidents make professionals consider their discretion in choosing the compliance profession. In most European countries there is a competency code, which is essentially a set of skills professional and educational qualifications, work experience, industry certifications and more such evidence required to be fit to do the job of a compliance professional. Without a doubt the profession is a very demanding one, and it is not very common to ask for support even when it is needed almost every single day. Also because of the nature of urgency of tasks and the fear of enforcements which constantly loom over the daily activities of a compliance professional, it is challenging to have time for academic activities like using different tools to analyse the problem brainstorming and ideation sessions, this is a major hindrance in seeking academic help. Also relevant here is the fact that the mercurial environment makes it futile to invest time and efforts only to find the solution becoming either obsolete or lacking feasibility by the time it is developed fully.

Regulator relationship and culture.

More than half of the respondents from the industry mentioned that on a regular work day they do not think about active liaison with the regulatory authorities. This is because of their own workload and also the fact that a regulator relationship is seen far up in the level of hierarchy and approaching the regulator for seeking support is not commonplace and may even be seen as a step-down from the competency code. Most regulator interactions either occur in knowledge sharing sessions, conferences, seminars or events by invitation. This causes a mental block at personnel end both in the access to the regulatory authorities and can obstruct the free flow of information and feedback from the industry to the regulator, which will have consequences for development of a homogeneous culture within the industry and the country. At EU level, there is a growing need for standardization and harmonization of instructions, regulations, legislations and guidelines between the apex regulatory and supervision authorities and the national regulatory authorities, and this hampered information flow is an important reason, for keeping the conversation one-sided. Behavioural factors like inclusivity, of not just people, but systems to ensure business continuity, technology, procedures and policies across EU member states have to be uniform, in order to improve clarity and facilitate geographical flexibility for uninterrupted operations.

Tech compatibility, data protection and reliability.

The cost and heavy reliance on technology was a concern across almost all industry participants. While the times of polycrises have elevated the importance of technology like never before, there are also bigger glitches than were ever, witnessed in practice. During and post the COVID-19 lockdown, fraudsters attempted their most sophisticated technology perpetrated heists in the history of civilization, and among rising privacy concerns pertaining to customer data, the various different kinds of soft and hardware that need to be constantly reconciled across geographies, scales, languages, systems and organizations and types of ownership, are some of the predicaments that are highly correlated to the reliability of the sudden shift towards tech-heavy financial operations. However, by the circumstantial push, the shift gained momentum, with many ends still not tended to, according to over fifty percent of participants and these are the loopholes that, if exploited during breaches or to cause vulnerability intentionally, will result in not just crippling enforcements but loss in the extremely hard-earned public trust.

The susceptibility trilogy.

The consumer-organizational/industry-economic vulnerability is highly correlated, according to almost all participants, and the larger financial perspective observes the interrelatedness of these, but practical implementation of this observation is still far from accomplishment. This is a view that needs to be trickling down from the chain-of-command and requires active regulator involvement in operations which is less supervisory and more facilitatory.

While the industry participants saw the questions as an opportunity to express concerns, establish relatedness, observe degrees of effect of problems and analysed roles of various elements including their own against the problem canvas and helped visualize the big picture, the academic participants had a solution-oriented approach. The respondents mentioned an industrial overhaul as the need of the hour, and to address gaps immediately as they can mar economic safety. In the complex landscape, the treatment of corporates as machine-like, deterministic social systems that can be steered traditionally was a dated approach and needed fluidity. However, finance being an area which is extremely sensitive to organizational fluidity, must be exposed to fluidity with caution. To measure uncertainty in such an environment, the VUCA tool was recommended, which helps to put into perspective the scope of the problem across the four parameters namely, volatility, uncertainty, complexity and ambiguity. Further, two of the three academic participants expressed that when it came to environmental regulation and green transition, there were several cognitive impairments, in addition to others, in implicit sustainability and green inclination attitudes in the industry. The collective societal interpretation of what is sustainable should be a matter of industrial concern and there is a need for consumer education in the direction.

3.4 Key elements and causality

The elements of these themes were then utilized as input to a causal loop diagram to deduct whether causality and degrees of association exist in between the themes. The final step of this research will be a conclusive set of action points that attack the systemic concerns in a multi-pronged manner and can serve as possible solutions to detangling this cyclical loop of problems in order to facilitate personnel and managerial experience

3.4.1 Actors to Instances mapping.

The division of actors assumes a hierarchical form which reflects the structure of regulatory compliance in conjunction with mitigation policy in the EU. The apex level of actors are supra-national bodies which have an upper hand in policy making, regulation formulation and law reforms. These organizations have a crucial role in formation and propagation of political will and influencing key decisions and are thus the pillars of decision making. The liaison of these key agencies is the breeding ground for industrial orientation and the most important incentive for corporate action, especially pertaining to compliance, enforcement, culture propagation and funding green transition. In the EU, the approach followed for vertical integration of policies and regulations is termed as SSM or single supervisory mechanism (Ferran & Babis, 2013) for homogenization of the nuances of regulation and legislation at apex levels and at that of the member states. They also are the highest tier of agency for sanctions, enforcements in respect of policy, rules or law violations and establish the chain of accountability. In the EU, the next actor in the hierarchy is the various agencies at national level including the governments, ministries and their sub-divisions operating at the member state level. These bodies are primarily, the bridge between the regulations and laws of the member states and those laid out by the supra national bodies. They also perform the vital function of alignment of national policies, laws and regulations with that of supra-national bodies and offer next-in-line trickle down of enforcement and accountability establishment along with the other compliance related functions like supervision, monitoring and risk management. One of the key functions of national level bodies is consumer protection, and serving grievance redressal to consumers dissatisfied with services provided by regulated entities through their extended arms such as the various ombudsman offices, consumer education agencies and resolution funds to ensure safety of customers of bankrupt and failing institutions. The regulatory institutions at the member state level are also the point-of-contact for supervisory investigations in case of violations of regulations, legislations, directives, guidelines and rules as well as conduct risk violations concerning business ethics. The difference in the supervision paradigms of the supra-national bodies and that of the member state regulatory bodies is the fact that the former have a systemic pathway to compliance and risk management wherein the economy of the member state is taken into consideration as a macro-level perspective whereas the latter follows prudential pathway which means supervision of entities operating within the member state boundaries is considered. This is helpful in laying down the chain of command and structuring the vertical hierarchy for ease of policy implementation at national and supra-national levels. The immediately lower actors are

the legislative bodies which are responsible for exercising their authority in respect of punitive action in the event of investigations revealing violation or wrongdoing. These are also member state level lawmaking bodies and are responsible for deriving country specific legislations from those instructed by higher authorities. Another important function of these bodies is the pivotal role in recognizing anti-terrorist and anti-money-laundering activities to ensure that the EU as a whole does not fall prey to being a pipeline for filtering of funds to feed criminal intent. The next actor is the protagonist from the perspective of this research, the regulated corporate entities. In the EU, these entities fund regulatory bodies through industry-wide levies, the ultimate cost of which is translated to be borne by the customers of these entities through the purchase of products or services. Another important actor in the mix are the consultants and implementation facilitators. They are responsible for dissection of complex and multi-layered policies, rules, regulations, directives and other guidelines for alignment with business operations especially in the case of specific areas like mitigation policies leading to green transition where expertise is needed to break down the intricacies of regulatory and supra-national intent. These facilitators often act in corporate capacity themselves and have a stronghold in industry to authority liaison. Moving on, the business intermediaries and service providers to the regulated corporate entities are the entities onto which, the focus of compliance is greatly shifting towards in the light of the data processing constraints posed by the GDPR laws, they are at a higher regulatory scrutiny than ever before and the relationship between them and the evaluation of their relationship with their linked corporates in the light of distribution of accountability and responsibility is the new focus area. Next set of actors are the management personnel, employees and support staff of the regulated corporate entities which are the grassroots of implementation of policy, regulations and guidelines. They are the ones responsible for translation of policies into business operations and hold discretion when it comes to ground level interpretation of instructions. Finally, the end users, consumers of services and customers and their dependents, beneficiaries of funds are the last link in the compliance pipeline. As the stakeholder of prime importance when it comes to compliance as an assurance function and environmental protection as well as the drivers of market sentiment, they experience first degree impact of regulations and policy and are the most vulnerable actors because of this.

Table 3 Actors to instances mapping

Actors		Instances
Supra-national bodies	<ul style="list-style-type: none"> ○ European Commission ○ European Supervisory Authorities ○ OECD, WBG, UN bodies. ○ Committees on supervision, management, laws, reforms and other associated activities. ○ Alliances for Climate mitigation. ○ ECJ and other Enforcement bodies 	<ul style="list-style-type: none"> ○ Apex authority for systemic monitoring and supervision, Single supervision mechanism approach. ○ Rule/policy-making authority ○ Emergency powers: bans in case of market turmoil ○ Coordination powers ○ Investigation powers
Government Regulatory authorities	<ul style="list-style-type: none"> ○ National Central banks ○ Regulators of financial services ○ Ombudsman offices for post-sales processes ○ Ministries of climate change, Environment. 	<ul style="list-style-type: none"> ○ Implementation of regulations, rules, guidelines ○ Maro- prudential level supervision ○ Conduct of business regulations ○ Resolution of stressed institutions. ○ Investigation of disputes. ○ Consumer protection ○ Grievance redressal
Legislative bodies	<ul style="list-style-type: none"> ○ District, intermediate and apex courts ○ Intelligence units and other assistance to Police ○ Lawmaking bodies in support, committees on pressing concerns, reforms and sector specific issues. 	<ul style="list-style-type: none"> ○ Enforcement, prohibition, sanctions and other punitive measures in the incident of violation or wrongdoing. ○ Appeal of decisions ○ Anti Money Laundering ○ Counter Terrorist Financing ○ Mediation towards a mutually acceptable solution.
Regulated corporate entities	<ul style="list-style-type: none"> ○ Various types of companies ○ Individual investors ○ Institutional investors ○ Retail investors 	<ul style="list-style-type: none"> ○ Funding regulators and compliance costs ○ Operational alignment of regulations, rules, guidelines and authority instructions. ○ Grassroots of implementation of laws, rules and regulations.

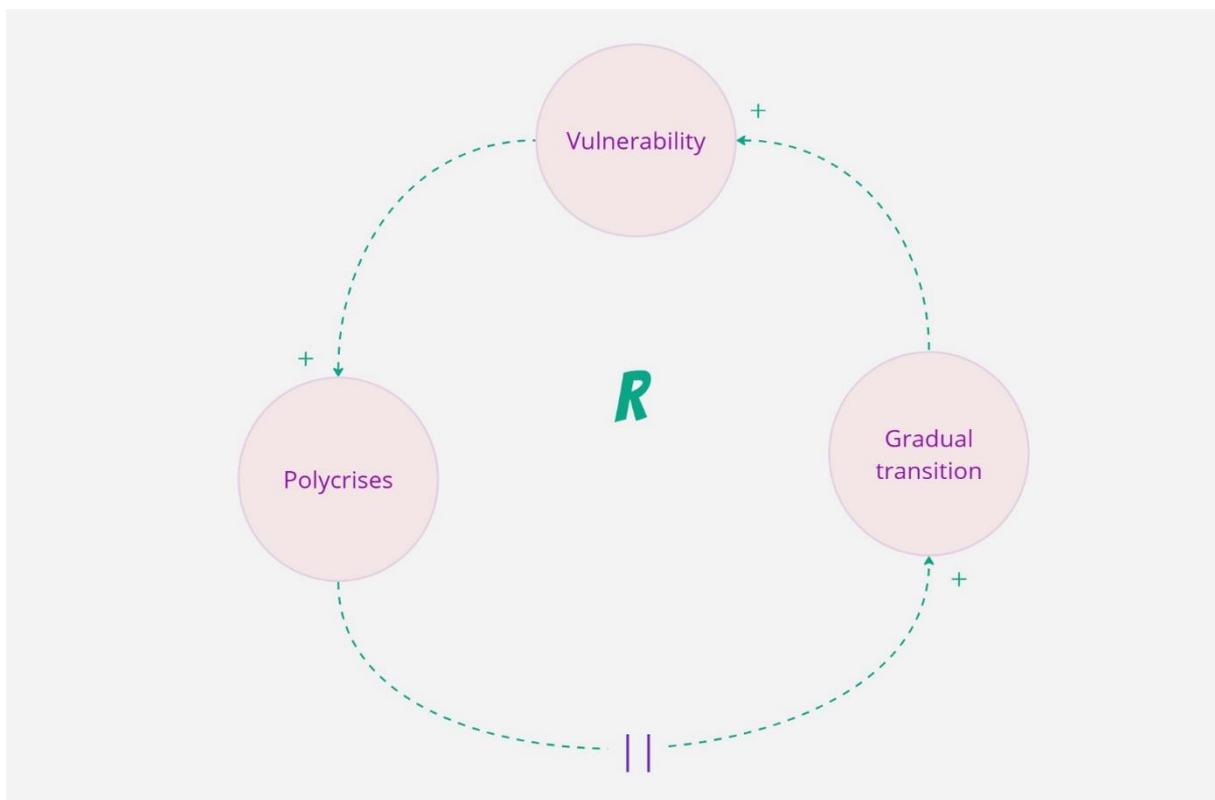
Transition facilitators/consultants	<ul style="list-style-type: none"> ○ Service providers to assist complex regulatory compliance conundrums, enforcement assistance ○ Legal advisory for green transition ○ Operational assistance and regulation to operational assistance advisory 	<ul style="list-style-type: none"> ○ Dissection and interpretation of regulations, laws, guidelines and application to complex industry problems. ○ Tailor make solutions aligned with regulatory and legislative guidelines, regulations, rules, laws. ○ Alignment and liaison with agencies to facilitate implementation.
Technology and other service providers & Business Intermediaries	<ul style="list-style-type: none"> ○ Internet service providers ○ Mobile networks, software & hardware vendors ○ Infrastructure providers ○ Cleaning, maintenance service providers 	<ul style="list-style-type: none"> ○ Outsourced arrangements call for close examination of regulatory and legislative loopholes. ○ Adding data protection, technology compatibility elements to regulation.
Management personnel/ employees/ support staff	<ul style="list-style-type: none"> ○ Support staff ○ Frontline executives ○ Middle management ○ Senior management ○ Top management and board committees 	<ul style="list-style-type: none"> ○ Decision makers for ultimate policy implementation. ○ Discretionary authority for grey areas and TBDs or to be determined. ○ Policy and operational alignment
End-user/ Consumer		<ul style="list-style-type: none"> ○ Taxpayers and consumers of products or services. ○ Information asymmetry renders users/consumers at a disadvantage as compared to corporates in contracts or transactions. ○ Key stakeholders of green transition and economic safety stemming from regulatory compliance. ○ Vulnerability due to temporal nature of financial services. ○ Owners of data, funds and core stakeholders of data breaches with first degree impact.

4 Discussion: Interplay of elements as a causal loop.

In order to clarify the several mental models of the systemic concerns regarding the interjection of the contemporary regulatory compliance landscape and green transition of regulated entities against the backdrop of the polycrises, economic and mitigation policy priorities and green consciousness that propped up during brainwriting of the interview analysis and from literature review, a causal loop diagram was developed. The elements of the causal loop diagram were derived from the impact that these concerns from industry and academic research alike, and also possibilities of existing solutions either feeding the viciousness of the problematic or easing the primary problem or at least a part of it. The approach to the causal loop diagram with the context of the research question in hindsight was the experience of a compliance personnel in a typical time period when their employer is undergoing a green transition as a corporate regulated entity. The time period in consideration is the aftermath of the Covid-19 pandemic and geopolitical vulnerability caused due to conflict in several regions across the globe. This is a complex mix with the added urgency of green transition and in the EU, a complete rewiring of business activities to align with the sustainable development goals of the United Nations and the Paris agreement, as well as inter-continental climate mitigation policy is being administered. The elements of the causal loop diagram primarily stemmed from five parent areas, namely revenue inclination, visibility and the wake of the conscious consumer, financing green transition, corporate behaviour in the transition duration and greenwashing.

For the ideation phase of the causal loop diagram, it was important to put into perspective the individual elements from the parent areas as the ambience of the confluence of regulatory compliance and mitigation policy as part of green transition. In classical set theory, which is essentially a mathematical calculus for organizing objects and relationships between them (Smithson & Verkuilen, 2006), the intersection of two sets is albeit a common zone comprising of elements from both the sets, but is highlighted differently from either of the parent sets since at the zone of intersection, the relationships between the common elements from the two sets and the rest of the elements make them different from their respective parent sets. This aspect was seen very often during the interviews, wherein the point of convergence of compliance and green transition was mentioned in both mitigation and other policy, regulations and guidelines with the enforcement and sanctions becoming increasingly heavy handed in the attempt for complete rewiring on the path to net zero.

Figure 16 Reinforcing loop as the foundation of CLD



Source: Own work

As the figure 16 depicts, three elements, namely polycrises, vulnerability and gradual transition and the interaction between them became the building block of the rest of the causal loop diagram.

When it comes to the point of intersection of green transition and compliance, across all interviews there were concerns about the regulatory framework of the several supra-national bodies which had created an ambitious goal of complete transformation of all business operations within relatively short time periods that are set as benchmarks. For these, businesses are expected to act in a state of emergency and with enforcement measures becoming stricter and sanctions becoming crushing expenses which have the potential to cause major revenue setbacks, this is seen as a draconian move by regulatory chain of command and has created a sense of emergency in the already prevalent dissonance caused by the pandemic aftermath and geopolitical conflicts threatening the longevity of businesses themselves. The cause and effect between these three elements which are the polycrises feeding systemic, organizational and consumer vulnerability and this further decreasing the speed of green transition and which ultimately feeds into the exacerbation of crisis related urgency is the first reinforcing loop that has a dangerous consequential push on the experience of the consumer and health of corporate entities. The build-up of this crisis-slow down of transition-vulnerability impact builds a momentum almost all interviewees spoke about, because of the strong correlation between these elements and a perceptible macro impact. There is also another alarming aspect of this reinforcement, this is the delay that is experienced in transition due to the slowdown of the already complicated regulatory compliance landscape, in addition to the delay caused by the temporal nature of financial services and the gap between investment and realization and associations with market volatility, threat to survival of business in the wake of the polycrises, merger and acquisitions causing the abolishment of an entity and their unavailability to their consumers and more such risks. This inter-temporal nature of finance-related risks can be inferred as the threat of erosion of invested funds of consumers and the economy at large by the susceptibility emerging from the large gap of time between the start of the fiduciary duty of an entity as the safekeeper of the consumer funds and the time of maturity of the investment (Goodhart & Danielsson, 2002). At the desk of a compliance officer, the tasks pertaining to the function of compliance and that of compliance with mitigation regulation are similar in structural and framework terms, but priority-wise, the latter takes precedence because of industry inclination caused by urgency imposed by severe sanctions. This fact adds three more elements to the mix, which are standardization and harmonization of supra-national regulations and instructions with those of regulations in the member states and the subsequent operational trickle-down; the grey areas caused by gaps in policies and consumer expectations and mitigation regulations finding their way into the existing setup of regulatory compliance. The degree of correlation of these three elements is also quite strong, and the six

elements now comprise a bigger loop than the initial one, which is also a reinforcing type, establishing the clear causality between agglomeration of the function of compliance with that of mitigation policy compliance adding both a time and confounding effect on the rest of the elements and ending up making not just the consumer or the organization, but the EU economy vulnerable. This reinforcement is a vicious circle of susceptibility that has been fuelled by elements like the heavy reliance on technology due to restriction in movement caused by the pandemic, and this sudden shift causing tech-compatibility issues. However, there have been rapid advancements in technology efficiency and maturity as mentioned from the Thomas Reuters and Mc Kinsey reports and also interview respondents. Combined together with data protection regulations which have been clearly laid out by the GDPR act in the EU, and the emphasis on viewing compliance in operations as well as ESG from a top-down approach instead of the retrospective approach prior to the pandemic, these elements form a second reinforcing loop, however in contrast to the vulnerability reinforcement loop prior to this, now the elements of tech compatibility, data protection, standardization and harmonization with appropriate reporting obligations and mitigation regulation positioning, this reinforcing loop can help reduce the vulnerability structure of the former loop.

Another dimension of the causal loop diagram was added by the significance of political background of the elements. Across all industry professional interviews, it was observed that geopolitical volatility continues to be a looming threat which is affecting post-Covid recovery, propelling a direct affecting the political motive to facilitate compliance and green transition as a priority. While it has been emphasised by supra-national bodies that climate mitigation and compliance are top financial goals, there is a dispersion and squandering of attention because of associated geopolitical contingencies, directly affecting government incentives to augment the assistance to industry, ultimately diminishing inter-industry collaboration and souring trust along the chain-of-command. In accrual, this points to a balancing loop of the diagram, and compared to the solution orientation of the loop just prior to this one, the geopolitical volatility-industry facilitation loop can dampen the progress anticipated by investment in technology, alignment of mitigation regulation with the compliance function and other elements on the road to conflict and post-pandemic recovery.

One of the major difference of opinions observed during the interviews was on the subject of the responsibility of financing both regulatory compliance and climate mitigation. Most interviewees said that while government incentives are the biggest encouragement to climate mitigation action

and operational trickle down is government and regulatory incentives, from a systems archetype standpoint, this can be seen as a pattern of addiction, where an agent, in this case the regulated corporate entities undergoing green transition, becomes dependent on external support or crutches, which then, over time, impairs internal incentive. This then has an immediate causality of jeopardizing organizational resolve to fulfil mitigation and compliance goals in the absence of government and higher authority incentives, thereby serving as a hair-trigger to organizational and consumer vulnerability. This vulnerability directly opens up pathways to conflict in alignment and propagation of instructions along the chain of command. Upon reinvestment, this pattern translates to a higher cost to consumer, diminishing economic rationale for compliance and a greater need for impact analysis, which is in itself an added cost, thus acting as a reinforcing loop of a lack of internal incentive on the cost to consumer and an abrasive takeaway from business and operational longevity.

Moving on, the next set of elements establish the causality between culture, transparency infrastructure and the time spent by a compliance professional on mitigation regulation. The view of compliance function with its origin in theories of criminality and deterrence has always been criticized for their efficacy since despite the insurmountable enforcement actions, conduct risk remains at peak levels. Culture and ethics of an organization has emerged as not only the antidote to wrongdoing but also as an assurance against greenwashing practices. Enforcement action and deterrence are inevitably, a key part of dissipating the right culture and in conjunction with behavioural cues like clarity translating from well-defined ethical values and vision on the entity level is likely to be strongly correlated to operational trickle down of the right value set which in turn helps build transparency infrastructure and may reduce time spent in ESG compliance because of parallel alignment. Over time, these factors will result in lesser punitive measures in the form of a feedback loop that reinforces righteous behaviour and forms the pillars of the culture of a corporate entity.

5 Conclusions

This research followed a three-pronged structure to elaborate the systemic nature and interconnectedness of underlying problems in the contemporary industrial debate around implementation of green transition policies aligned with regulatory and societal objectives. The preliminary discussion that puts into perspective the contemporary compliance and environmental regulation debate was a chronological contrast of the industry dialogue from the pre polycrises and the post viewpoints, which clearly lays down the structure of the nature and interconnectedness of the problem elements. This then, feeds into the research question and the impact of the systemic problems on customer and personnel experience and finally, the causal loop diagram evaluates which set of problems are the closely related and how does this make or break the experience of the human elements outlined in the previous stage. As can be observed, the three stages clearly delineate the relevance of the behavioural factors on the problem situations and also how they exacerbate human, organizational and economic vulnerability as a whole, culminating into an evaluation of the following action points, that can help break the cyclical structure and alleviate the vicious nature of problems:

Regulator relationship and democratic decision making.

A positive regulator experience is marked by open, democratic dialogue across all directions in the hierarchy. A good example of this is the public survey invited by Central bank of Ireland on behalf of the Advisory council on economic crime and corruption in 2023. It is often reported by end-users/complying officials that the vicarious operational experience of the regulators can obstruct compliance operations, this can be resolved by opening the regulator's floor for combined debate, problem-solving and decision making using several technological tools. The cost of these exchanges can be borne by regulated institutions as they will be infrequent, and may include incentives from the regulator for the same. On a similar note, its is crucial for operational feedback to be reported to a department along all supervisory levels in the chain-of-command, which performs the function of consistently interweaving practical aspects into guidelines, legislations, directives, rules, regulations and instructions.

Ingrained pluralism

Blanket inclusivity must be replaced by a high regard for privacy and incorporating not just assorted demographics but people with heterogenous educational and professional experiences

to assist the compliance function across different industries. As many millennials are going to college relatively later in life to add to their skill set, organizations and institutions will feel the need to include multidisciplinary training/internship experiences which are catered towards such transitioning graduates. As teams will become more cross-functional, an entire gamut of agile learning opportunities will be needed to equip the transubstantiation of a quintessential compliance professional.

Incentive-deterrent trade-off

In order to ensure that the ethical makeup of a person or institution wins over their personal interests when making compliance decisions, the trade-off between incentive and deterrents needs to be explored, since neither can perform the task alone. Behaviour scientists have stated with evidence that attempts to improve behaviour with stricter controls may have an opposite effect on the psyche (Shaffer, 1990). Thus, the impact of the trade-off is central to the existence of the compliance function. A good idea to do this is to reward domain-specific compliance functions at the highest industry level to attain an incentive ceiling, a higher aspiration for everyday compliance function.

Hybridization of structure.

A hyper-evolving environment calls for a flexible structure, because change is inevitable and the associated unpredictability can weigh in on risk and potential loss. This means room for horizontal information exchange from the compliance function across different industries, organizations and other EU countries. Since the compliance function transcended banking and finance boundaries long ago, related fields like ESG still follow suit in terms of existing structures. These horizons need to be widened in the wake of contingencies by adopting hybrid structures which are tailor-made to fit the requirements of the industry, country and regulatory environment.

Interdisciplinarity and transferability

The scope of the compliance function can be widened manifolds as more and more industries, countries, business activities and regulators are being covered under the umbrella. For this to materialize, broad generalizations of the compliance environment need to be made, which can be replicated with relevance across industries and activities. This coupled with the hybrid

structure and allowance for distinct details to be incorporated as per regulator and safety needs, is also an efficient way to cut compliance costs.

Ambivalence and consumer experience.

The task of taking the guesswork out of the everyday compliance operations and ambiguity caused by regulator and structure multiplicity can be reduced to a great extent by utilizing design thinking, augmented and virtual reality along with artificially intelligent systems to perform powerful simulations. Using big data and AI to create knowledge repositories with exoskeletons that can incorporate real-time changes alongside the former can greatly improve data access for the end-teller/complying employee, and save a lot of frustration.

6 Limitations

In terms of the limitation of this research study it is important to quote that, the systemic elemental interplay referred to here is a result of the interconnected set of problems which were put into perspective due to the complete rewiring of business operations which has been advised by the apex supervisory authorities in view of the entirety of green transition. Blended out with the existing regulatory landscape in financial services, this creates several parallel urgencies at the end of the compliance personnel. As these operational and compliance stages transcend, into the next stage of the problems in the compliance arena, the contemporary debate will be heightened around a completely different set of salient features hence the chronological relevance of this work cannot be ignored. Secondly, care has been taken to ensure that when establishing the causality between different elements, the possibility of confirmation bias is minimized by objective observations of literary work, several industrial records conferences, seminars and knowledge-sharing sessions, however this spectre may still loom. Across some European countries, some language restrictions were encountered as well. In terms of harmonization of the supra-national regulations, the interpretation of national guidelines was often observed to have personal discretion and ethical codes being utilized for decision-making. This can cause gaps when translated into the wider implementation of the ethical code when it comes to organizational and industrial collective action and inclination.

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ANNEXE A

Customer Journey: Vlad, Vanessa and the insurance policy.

One of the primary stages for creation of a customer journey map, a persona is a fictitious mental image of a person which is based on research or practice or both, to develop a storyline which acts as the backdrop for a customer's interaction with almost all of the interfaces between them and the organization or software. The protagonist of this persona is an elderly gentleman named Vlad, who lives in Vienna with their teenaged grandchild named Vanessa.

Actors

Vlad: Protagonist, an elderly person who happens to be a naturalized Austrian citizen originally from Russia.

Vanessa: Vlad's grandchild.

Insurance service provider/ regulated corporate: Schnitzel Insurance.

X: Frontline staff at Schnitzel Insurance.

Y: Manager at Schnitzel Insurance.

Background and persona.

Vlad is an elderly artist who now lives and works in Vienna, with their teenage grandchild, Vanessa. Hailing from Russia originally, Vlad is now a naturalized Austrian citizen and Vanessa was born in Vienna, to Vlad's son Edward and daughter-in-law, Emily. Vlad's son and daughter-in-law live in the States for work reasons, leaving Vlad to be the natural guardian of Vanessa in Vienna. Vlad has a source of income from Russia, from the previous place of employment, a job they retired from, many years ago. Vlad realizes that they would like to invest the funds from the pension in a life insurance policy with Vanessa as the beneficiary, so that in case of an eventuality, these funds can fund Vanessa's college education.

On this day Vlad is running late for work and Vanessa has to be dropped off at school. Vlad asks Vanessa to perform a quick google search for the offices of insurance service providers on their way to her school, so they could drop by and discuss their case with an employee about the insurance policy. Vanessa being a tech-savvy teen, quickly searches for the offices, looks up google reviews and even finds an office that is hosting an open day for walk-in clients to talk

about their insurance needs while grabbing a quick, free breakfast by the insurance company on the internet and the duo choose to go to this company, named Schnitzel Insurance. Vlad loads the directions to the store on his cell phone app, and heads in the direction with Vanessa, who will later head to school. Vanessa is excited about going to a place with free breakfast.

Customer Journey: Scenario 1

The Insurance policy with incentives

Journey Phase: Discovery.

Customer Mood: Excited/ happy.

Personnel mood: Happy.

Vlad and Vanessa reach the office premises of the Schnitzel Insurance. An executive named X greets them at the door and seats them in the lobby. In the lobby, there is a spread of breakfast waiting for Vlad and Vanessa, however, there is a small catch. X requests Vlad to download a mobile phone application which is promoted by the Schnitzel insurance, and this application requests some basic data from Vlad regarding their visit to the office today. Vlad reluctantly downloads the company application which mandates sharing of preliminary data, Vlad's location, name, preferred banking partner and which company products they are interested in. After successfully creating a profile, X requests Vlad to scan the QR code generated in the application onto the entry checkpoint at the breakfast lounge. They then proceed with the free breakfast. As they enter the store Vlad is immediately worried about the surveillance with cameras and sensors and especially about the safety of their minor grandchild. They wonder if there is a way to ensure that the surveillance would end when they leave the office since now, they have a mobile application. After Vlad and Vanessa finish their breakfast, X greets them in the lobby again.

Explanation: In the discovery phase, it is common for organizations who provide financial products or services to lure their customers with incentives, popular are free food and treats, this is even more prevalent in bigger cities where there is a possibility of pushing products to several middle and high-income customers at the same time, for example in a building where several corporates have their offices with hundreds of employees, it is common for financial product or service providers to offer free treats and food to attract a large number of corporate employees. It

is also an informal opportunity to get to know your customer and is generally well-received if it is also accompanied by good recommendation and service.

Customer journey: Scenario 2

Getting to know your customer: first impressions matter!

Journey Phase: Pre-service & Onboarding

Customer Mood: Anxious

Personnel mood: Tensed.

Vlad, Vanessa and X proceed in the lobby and get seated. X enquires Vlad about their visit today. Vlad requests an insurance policy product which has Vanessa as his beneficiary, and proceeds to explain that he has some spare funds from his pension from an employment in Russia which he intends to utilize for this purpose. X listens patiently, takes notes and asks Vlad to wait until he speaks to his manager about Vlad's case and gets back with more information. This frustrates Vlad, since he specified that he is now a naturalized citizen of Austria and says that it is X's job to know the information already, which has been requested of him. X apologizes and mentions that there are many rules and regulations one needs to consider before making a decision, otherwise it will mean confusion for both of them. X exits to see their manager and Vlad and Vanessa wait in the lobby.

Explanation: After a successful meet at greet at the free breakfast, customers are usually happy with their experience, up until that point at least, especially if there are activities to keep young kids engaged. However, now the expectations of the customer in terms of the service are higher. Frontline executives are the face of an organization, which means they are the first to be appreciated but also the first to bear the brunt of any lacunae in service, often without any fault of their own, this is a sensitive position to be in. In the case of Vlad, he expected the frontline executive to know the rules and regulations to decide whether he was suitable to enter into an insurance contract that can take care of his investment needs. Since the customer and the society at large is generally unaware of what happens beyond the desk of a frontline executive, there are a lot of assumptions that frontline staff are negligent of client's needs and also, they do not know how to do their job well since they are often unable to product extremely prompt responses. This is important to evaluate from a compliance delay perspective because frontline staff only have a superficial level of access to institutional, organizational and enforcement regulations, the onus

and accountability usually rest with managerial staff and thus in cases with many ramifications, managerial intervention is often sought. Also of relevance here is to note the information storage and dissipation structure for organizations in the financial services industry, since information changes frequently and new and significant changes in regulations, instructions, legislations, post-enforcement changes are commonplace, it is very difficult to maintain an up-to-date repository, and this further adds to delays, and customer and staff frustration.

Customer journey: Scenario 3

The indefinite wait: can vexation be prevented?

Journey Phase: Pre service & Onboarding.

Customer Mood: Anxious.

Personnel mood: Tensed.

X visits his manager Y and walks them through Vlad's case. Y is now quite confused because the instructions about the sanctions on businesses and entities in Russia is the primary focus of regulations, from a broader operations standpoint. In case of naturalized citizens, the situation is tricky since Vlad also receives income from a Russian entity in the form of pension. Y also makes it clear that cases like Vlad are rare, and hence there may not be much literature present, to reach a conclusion on Vlad's situation and suitability fast. To add to Y's frustration, there is a big pile of environmental regulatory compliance waiting for them at their work desk, these can result in quick and hefty enforcement actions. On this particular day, Y read the news about the entire compliance team of a big corporate being laid off overnight, and this makes them worry about their job and future. Y proceeds to look for instructions on Vlad's case but as he expected, there are no clear guidelines internally. If Y decides to escalate the matter to a senior manager it may cause further delays, meanwhile, the customer's patience is already running out. Y decides that they would need Vlad's documents and time to scrutinize them before he can make a decision about whether Vlad is a permissible customer, Y informs X accordingly and asks X to request Vlad for the documents.

Explanation: For most customers, it is natural to expect prompt service since they are paying for it, and they rarely care about the compliance aspect since this is supposed to be the responsibility of the organization. Expectations from the managerial staff both from the customers and the employer is that they provide the best possible solutions in the minimum possible time, without allowing for the other tasks on their work desk to affect customer experience, however, in reality

this is very difficult. All of these factors, coupled with the fact that compliance officials often have to report any wrongdoing within their own organization, are often mistrusted among colleagues and peers, and in many recent cases, entire compliance teams have been sacked at major companies because they escalated discrepancies within operations that could stall potential projects with lucrative value for their employer.

Customer journey: Scenario 4

The confrontation after the long wait.

Journey Phase: Pre service & Onboarding.

Customer Mood: Angry.

Personnel mood: Tensed.

X apologizes for the delay and informs Vlad that they would need to provide a long list of documents and some time for Schnitzel Insurance to decide whether they can recommend an insurance product to suit Vlad's needs. X mentions that because of the EU sanctions on Russia, there could be some complications and instructions are not very clear on the issue. By this time Vlad is extremely frustrated and refuses to go ahead with his request, storming out of the office of Schnitzel insurance and threatening to complain about X's poor knowledge and failure to do his job. X just stands and gasps in horror and is unable to pacify Vlad. Schnitzel Insurance not only loses business but also reputation in the process.

Later that day, Vanessa convinces Vlad to go back to the office of Schnitzel Insurance and submit the papers, Vlad now feels bad for his behaviour and agrees to go back.

The next day, Vlad goes back to the office of Schnitzel Insurance and meets X again, apologizes for his behaviour and hands over the documents confirming his identity, permanent residence in Austria, naturalization details, income, previous employment and taxpayer history and other such requirements. X requests for a day's time to scrutinize the documents and get back to Vlad on the phone about the decision regarding permissibility and suitability. Vlad's mood shifted during this phase, from angry to hopeful and X's mood is now that of relief.

The next day, X calls Vlad at a predetermined hour and informs him that they can proceed with his request, recommends a suitable product and offers two alternatives based on Vlad's needs, financial and personal circumstances and risk appetite. Vlad requests for details, and X sends them over on email including payments, maturity value and market impact. Vlad requests for

some time to scrutinize the brochure and conditions and promises to inform X about his decision in three working days.

After three days, Vlad walks in to the office of Schnitzel Insurance, meets X and signs the contract to purchase the insurance product recommended by X. X is happy to have converted Vlad and explains the next steps to him.

Explanation: In popular culture, it is common to see caricatures of staff employed at financial services entities refusing service often because they are deemed to be lazy and cause delays intentionally, to deny access to services. This is not the case as financial products and services, by their very nature tend to be complex and multi-layered and everyday operations are not as set in stone as other service industries. While there is no dearth of research on customer experience, there is an academic reputation of managers stemming from this general societal reputation and there is almost negligible attention to managerial experience of regulatory compliance with the added accountability of environmental compliance.

Customer journey: Scenario 5

Turning tides.

Journey Phase: Service Duration.

Customer Mood: Relieved.

Personnel mood: Cautious.

Vlad is relieved to have found the right insurance product that could help fund Vanessa's education in case of eventuality. He asked X about when his investments in the product would start yielding returns and how will these be accessible for Vanessa. X informs Vlad that his investment will yield some fixed monthly returns in ten years and there will be an additional lump-sum payment in case of eventuality if the payments are made without default for the next six years.

During the next six years, Vlad barely visited the office of Schnitzel Insurance. The payments for his purchased product were made by Vlad online and he made sure they were timely.

Explanation: During the service duration, when it comes to financial services, the customer to entity or personnel interaction is limited. This is because once a customer has purchased a financial service or product, there is usually a long wait time between the start of service period

and the maturity of the product or service. This is, again, a phenomenon by the temporal nature of financial services.

Customer journey: Scenario 6

A happy ending.

Journey Phase: Post-service Duration.

Customer Mood: Happy.

Personnel mood: Happy.

At the end of six years of timely payments, Vlad receives his first return on investment in his joint bank account with Vanessa who will soon head to college. Vlad is happy and proud of her and glad that he invested his money wisely and is now fetching returns. At this time, another personnel from Schnitzel Insurance asked Vlad for reviews on the product and Vlad was happy to oblige. Vlad was also informed about the methods available to him for grievance redressal, from making a complaint to escalating at the higher level, at the Insurance ombudsman office, which is the authority to resort to in case he is unhappy with the services of Schnitzel Insurance.

Explanation: For many customers, there are several problems that occur before the product maturity since the gestation period for products and services in the financial service industry is quite long. It may so happen that the financial services entity goes out of business or merges with another entity before maturity, often causing very frustrating customer experiences. In order to protect customers in this case, the EU has a network of bodies that have designated authority to offer help in such circumstances.

ANNEXE B Interview Keywords Brainmap.

