



UNIVERSITETET I AGDER

**Organisational responses to
regulatory pressure:
A case study of a Norwegian
Research University's strategic
compliance to GDPR**

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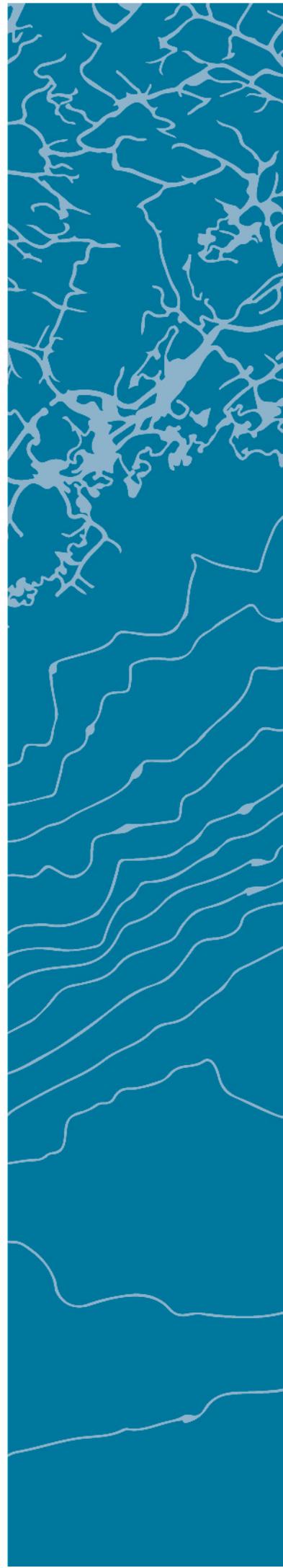
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ABSTRACT

This thesis study seeks to test Oliver's (1991) theory for prediction of Strategic Responses to Institutional Processes, against the case of initial responses taken by a Norwegian research university when faced with General Data Protection Regulation (GDPR) of European Union (EU).

This thesis explores how different parts of the same organisation respond to and manage institutional pressure. It uses a case study of a Norwegian research university's response to the European Union's General Data Protection Regulation (GDPR).

An exploratory case study design frame was used to address the research question, and qualitative data were drawn from 10 key informants representing both administrative and operative core of the university, by utilising research techniques such as semi-structured interviews and document analysis. This thesis found that the perceptions or interpretations of GDPR as an institutional pressure differ from one organisational component to another, and the university administration feels more substantial pressures from GDPR compared to the operative core. Consequently, due to the differences in their perceptions of GDPR, two organisational components of the research university responded to GDPR differently in the empirical settings.

Key words: *Strategic Responses, Institutional Pressure, GDPR, Research Universities,*

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List of Acronyms

CISO	Chief Information Security Officer
DPA	Data Protection Authority
DPO	Data Protection Officer
EEA	European Economic Area
EU	European Union
GDPR	General Data Protection Regulation
HEI	Higher Education Institution
WG	Working Group (refers to the working group responsible for implementing GDPR)

CHAPTER 1. INTRODUCTION

To survive and prosper, organisations must continuously deal with the changes that are happening in the environment in which they reside. Similarly, institutional theory suggests that organisations adapt to their environments to ensure their survival and prosperity. However, a change in the organisation's institutional environment, such as the emergence of new government regulation, could present numerous challenges for many organisations which are expected to comply with the regulation. When such significant institutional change occurs, the pressures towards conformity with that change cause organisations to respond to those pressures by adjusting their internal structures, existing processes, and organisational strategies (Haveman, Russo & Meyer 2001, p. 255). Even though there is a considerable amount of literature about why and how regulatory policies change, the responses of the organisations to these changes are still relatively less explored (Hutter 2011, p. 306).

Given this context, the general interest area of this study is understanding of how organisations respond to pressures caused by the changes in their regulatory environment. To explore the chosen research area further, this thesis singled out the General Data Protection Regulation (GDPR) of the European Union (EU) as a case of the regulatory pressure. Therefore, the focused interest area of this thesis is to find out how organisations responded to GDPR. A brief rationale for choosing this particular regulatory change is as follows.

In 2016, the EU agreed to a major reform of its existing data protection framework by adopting a new regulation – GDPR, which was set to be fully enforced throughout the EU on 25 May 2018 (European Commission, 2018a, p.1). Before GDPR, the European Data Protection Directive (Directive 95/46/EC) adopted in 1995 had been used to protect citizens' rights concerning personal data. In contrast to Directive 95/46/EC, GDPR is a regulation, not a directive, which means every member state of the EU is obliged to (no longer recommended) adopt the regulation and update their national data protection laws. At the same time, GDPR applies to any organisation that deals with personal data of European citizens, regardless of the organisation's physical location or industry to which it belongs (GDPR, 2016). The extended jurisdiction of GDPR, which goes beyond the EU's geographical border or a specific economic sector, arguably makes GDPR one of the most critical and wide-scale changes in organisation's institutional environment as well as one of the most compelling cases of regulatory pressures.

1.1. RESEARCH GAP AND MOTIVATION

As mentioned briefly in the previous section, institutional theory suggests that organisations adapt to their environment. Frontrunners of institutional theorists (Meyer and Rowan 1977, DiMaggio and Powell 1983) argue that organisations are driven by isomorphic pressures to conform to the legal, moral, and cultural expectations of its' environment. Consequently, coercive isomorphism occurs because organisations want to avoid sanctions, where normative isomorphism occurs because organisations are motivated to respect social obligations, while mimetic isomorphism occurs because organisations are driven by their interpretation of others' successful behaviours (Greenwood, Oliver, Sahlin & Suddaby 2008, p. 6-7). However, these early works of institutional theory failed to explain fundamental changes within organisations and failed to incorporate an account of agency (Greenwood et al. 2008, p.13).

Building on this missing part and by combining institutional theory with resource dependence theory, in 1991, Christine Oliver argued that organisational responses to institutional pressure are not only attributed to external pressures but also depend on the internal logic of organisation. She further claimed that organisational responses to institutional pressures do not always have to be reactive, but those responses can be proactive or even strategic (Greenwood et al. 2008, p.13). By employing this logic in her paper – “Strategic Responses to Institutional Processes”, Oliver (1991) proposed an integrated predictive framework of strategic responses to institutional processes which includes varying strategies from strong support for conformity (acquiescence) to substantial resistance against conformity (manipulation). Since then, Oliver's Strategic Responses has become one of the most influential works in the field. According to the information extracted from Web of Science and Semantic Scholar databases at the time of this writing, the article has been cited well over three thousand times and had some significant impact on around six hundred fifty papers since its' introduction in 1991. Consequently, a line of research was opened, within which a considerable amount of studies was conducted to explain why an organisation might adopt a particular response strategy at a specific point of time. However, “most empirical studies assume or imply that organisations enact *single* and *sustainable* responses. In doing so, they largely ignore the fact that different subunits find heterodox ways of responding to the accountability demands of their environment” (Greenwood, Raynard, Kodeih, Micelotta & Lounsbury 2011, p. 351).

Given this identified research gap, the primary motivation for this thesis is to contribute to the literature in this regard by applying Oliver's (1991) framework to predict, test and compare strategic responses enacted by different parts of the one organisation when complying with the same regulative pressure. While this thesis belongs to the research area around organisational responses to institutional pressure, it could also be seen as research on the analysis of GDPR itself.

1.2. RESEARCH SCOPE AND AIMS

As GDPR applies to several different countries and economic sectors, the scope of this thesis has been narrowed down to ensure scalability of research. Therefore, the research will only consider the Norwegian higher education sector, with a focus on the strategic responses enacted by a Norwegian research university to GDPR. Reasons for choosing to focus on research universities and selecting a Norwegian research university are explained later in the following chapters.

The general aim of this thesis is to investigate how different parts of one organisation respond to the same regulatory pressure. Given the narrowed-down research scope, this thesis further aims to analyse how different parts of a Norwegian research university responded to GDPR by using Oliver's (1991) framework as a tool to assess different group's perception of and response to GDPR.

1.3. RESEARCH QUESTIONS

In light of the research gap mentioned above, the over-arching research question is defined as:

R.Q. Do organisations react to institutional pressures in homogeneous or heterogeneous way?

At the same time, based on the research scope and research aim, the sub-question is defined as:

R.Q.1. How did different parts of a Norwegian research university – defined as 'University administration' and 'Operative core' – respond to GDPR?

1.4. RESEARCH OUTLINE

In order to address the research questions articulated above, this thesis study is organised as follows:

This thesis continues with **Chapter Two**, which presents the theoretical framework used in this study. This chapter does two critical things. First, it presents the theories used in this study along with some results from document analysis on GDPR. Then, based on those, it proposes some expectations about how different parts of research universities are predicted to interpret and react to GDPR.

Chapter Three covers the research methodology employed in this study including research design, rationales for selecting the case, data collection procedures, and data analysis procedures. It also discusses the quality criteria of this thesis.

The next **Chapter Four** comprises the empirical findings and analysis, and it is divided into two distinctive sections. The first section presents empirical findings on how two different parts of a Norwegian research university interpreted or perceived GDPR as an institutional pressure. The second section covers the empirical findings on how those two parts reacted or responded to GDPR. Each of these sections also contains some comparative discussions on differences between those two parts of the Norwegian research university – ‘university administration’ and ‘operative core’. The key objective of this chapter is to answer the research questions articulated earlier.

The last chapter discusses the expectations against empirical results. It also includes some discussion about how well Oliver’s (1991) framework fitted for the empirical case. Then, it continues to discuss key arguments in relation to the contribution this study makes to the research literature about organisational responses to institutional pressure. This chapter finishes by mapping out the implications of this thesis for future research.

CHAPTER 2. THEORETICAL FRAMEWORK

This thesis draws on three distinct sets of theories to explore the research questions defined earlier.

First, *organisational neo-institutional theory* provides a framework for understanding how organisations might be influenced by their institutional environment as well as what kind of pressures organisations are expected to respond.

Second, Oliver's (1991) *framework of strategic responses to institutional pressures* identifies different types of strategies that organisations choose for responding to pressures from their environment. At the same time, this framework also outlines five *institutional factors* for predicting the type of strategy an organisation might select in a specific context.

Third, Cook et al.'s (1983) *dimensions of regulation* as well as Mintzberg's (1983) *organisational configurations* are used for identifying research relevant characteristics of both research universities and GDPR. While two different parts of research universities – 'University administration' and 'Operative core' - are defined by using Mintzberg's (1983) professional bureaucracy, the special characteristics of GDPR are the result of the analysis of relevant documents utilising Cook et al. (1983)'s dimensions as guidance. This document analysis process is further explained in the next Chapter 3 - Methodology.

Then, by combining those identified unique characteristics with Oliver's (1991) institutional factors, this chapter moves to conceptualise GDPR as an institutional pressure exerted on research universities and proposes some general expectations about how two different parts of research universities perceive GDPR.

Finally, using those perceptions with Oliver's (1991) strategic responses, this chapter ends with presenting some general expectations about how two different parts of research universities respond to GDPR.

2.1. ORGANISATIONS, INSTITUTIONAL THEORY, AND INSTITUTIONAL PRESSURES

2.1.1. ORGANISATIONS AS OPEN SYSTEM LOCATED WITHIN INSTITUTIONAL ENVIRONMENTS

To ensure their survival and sustainable development, organisations must constantly respond and adapt to the changes in their environment. Morgan (2006, p.38) stated in one of his eight metaphors of organisation, "... organisations, like organisms, are open to their environment and must achieve an appropriate relation with that environment if they are to survive." Similarly, Selznick defined organisations as an adaptive, organic system, affected by the social characteristics of its participants as well as the varied pressures imposed by its environment (Scott 1995, p.18).

However, one question remains, "what does environment means in this sense?". Scott (1998) warned about defining the environment as "everything else" and highlighted the importance of identifying and assessing relevant features of the environment rather than blindly generalising. He, furthermore, identified and elaborated on two main features of environments – *Technical aspects* which are more materialist or resource-based features, as well as *Institutional aspects* which are symbolic and cultural features (Scott 1998, p.131). Also, Jacobsen (2018) stressed that organisations reside in technical and institutional environments, and those environments affect the possibility of implementing change within the organisation. To narrow down the vast field of organisational environments, the focus of this thesis lays on the institutional feature. The next sub-section introduces Institutional theory to explore further the relationship between organisations and their institutional environment.

2.1.2. INSTITUTIONAL THEORY AND INSTITUTIONAL PRESSURES

Institutional theory has been the prevailing approach to understanding organisations. The conceptual foundations of the new institutional theory were established in the works of numerous researchers such as Meyer and Rowan (1977), Zucker (1977), DiMaggio and Powell (1983), Tolbert and Zucker (1983), and Meyer and Scott (1983). However, from the very beginning, the exact concept and meaning of 'Institutions' have varied quite extensively. When addressing this issue, Scott (1995)

brought order to the various aspects of institutional analysis by distinguishing different elements that underpin institutions (Greenwood et al. 2008, p. 14-15).

Scott (1995, p.34) defined institutions as multifaceted systems “... consist of *cognitive, normative,* and *regulative* structures and activities (also called “*pillars*”) that provide stability and meaning to social behaviour.” Consequently, these three pillars have become established as authoritative guidelines for social behaviour (Scott 2004, p.408). The following *Table 1* provides a summary of the characteristics of each pillar.

Table 1. Scott’s Three Pillars of Institutions

	Regulative	Normative	Cognitive
Basis of compliance	Expedience	Social obligation	Taken for granted
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, laws, sanctions	Certification, accreditation	Prevalence, isomorphism
Basis of legitimacy	Legally sanctioned	Morally governed	Culturally supported, conceptually correct

Source: Adopted from Scott (1995), Table 3.1, p.35

Similarly, when discussing how institutionalisation occurs, DiMaggio and Powell’s (1983) proposed **three ‘mechanisms of diffusion’** (coercive, normative and mimetic) where these diffusion mechanisms are usually used for identifying *pressures* from the institutional environment and understanding organisational *responses* to those pressures.

By building on both Scott (1995) and DiMaggio and Powell (1983), institutional pressures can be further categorised into:

- **Coercive pressure** - results from formal rules and regulations; most likely imposed by governments or other authoritative stakeholders from whom the organisation is dependent.
- **Normative pressure** – results from norms and values; most likely spread through experts, professionals or specialised organisations, and can be formalised in industry standards.
- **Mimetic pressure** – results from organisational uncertainty and anxiety; lead to mimetic isomorphism.

(Woolthuis and Taminiiau 2017, p. 7-8).

However, this paper argues that a broader definition of institutional pressures is appropriate for studying organisational responses to regulations of extensive scope, based on the notion that generic regulation or law is, by definition, formalisation of norms in society. Likewise, Scott (2014) also pointed out that the three pillars are often found together despite the fact that written rules and laws are central indicators of the regulative pillar. He further noted that especially the cultural-cognitive pillar provides an infrastructure on which not only beliefs but also norms and rules rest (Greenwood et al. 2008, p. 15).

In the case of GDPR, on the one hand, it seems reasonable to place GDPR in the regulative pillar of institutions or categorise as a coercive pressure due to the simple fact that GDPR is a regulation adopted into the national law sanctioned by the government. On the other hand, a pressure to conform with GDPR is presumed to include not only coercive elements but also normative or even mimetic elements. The rationale for this presumption is based on the fact that principles of fundamental human rights are deeply embedded into the core ideology of GDPR. As GDPR itself stated:

“This regulation protects fundamental rights and freedoms of natural persons...”

(GDPR 2016, Article.1)

Arguably, this makes it challenging to place GDPR in any particular pillar of institutions or troublesome to classify GDPR as a pure coercive institutional pressure.

2.2. ORGANISATIONAL RESPONSES TO INSTITUTIONAL PRESSURES

As indicated in the previous section, institutional theory argues that organisations respond to institutional pressures and adapt to their environments one way or another to enhance their likelihood of survival and prosperity. However, Powell (1991, p.194) pointed out a drawback of seeing the relationship between organisations and institutional pressures along these lines and commented that “... much of the imagery of institutional theory portrays organisations too passively and depicts environments as overly constraining.” Building on this argument, Oliver (1991) suggested that organisations respond to their institutional environments not only in a reactive manner but also proactive or even strategic manner (Greenwood et al. 2008, p. 13-14). Following up on that line of

thought, she proposed an *integrated predictive framework* of strategic responses to institutional pressures.

2.2.1. OLIVER'S (1991) STRATEGIC RESPONSES TO INSTITUTIONAL PRESSURE

This sub-section explains Oliver's (1991) theoretical framework for predicting strategic responses. As an initial attempt to study organisational responses to institutional pressure, Oliver (1991) has identified the different responses that organisations enact as a result of the institutional pressures that are exerted on them. She proposed five types of strategies: *acquiescence*, *compromise*, *avoidance*, *defiance*, and *manipulation*. More details on these strategies are given below.

Acquiescence strategies are adopted when organisations conform the demands from their institutional environment and can take three alternative forms: 1. *Habit*: blind adherence to taken-for-granted rules, 2. *Imitation*: Similar to mimetic isomorphism proposed by DiMaggio and Powell (1983), the imitation of successful organisations and acceptance of advice from consulting firms, and 3. *Compliance*: conscious obedience to the institutional requirements (Oliver 1991, p.152-153).

Compromise strategies are adopted when organisations are more active in promoting their own interests and institutional compliance is only partial. Under such circumstances, organisations may attempt to 1. *Balance*: between multiple stakeholders and internal interests, 2. *Pacify*: partial conformity with expectations of one or more constituents, or 3. *Bargain*: organisations negotiate with environment about expectations from the environment (Oliver 1991, p.153-154).

Avoidance strategies are defined as the organisational attempt to preclude the necessity of conformity, and these strategies include: 1. *Concealment*: disguising nonconformity, 2. *Buffering*: attempting to reduce external inspection or evaluation, 3. *Escape*: exiting the domain within which pressure is exerted (Oliver 1991, p.154-155).

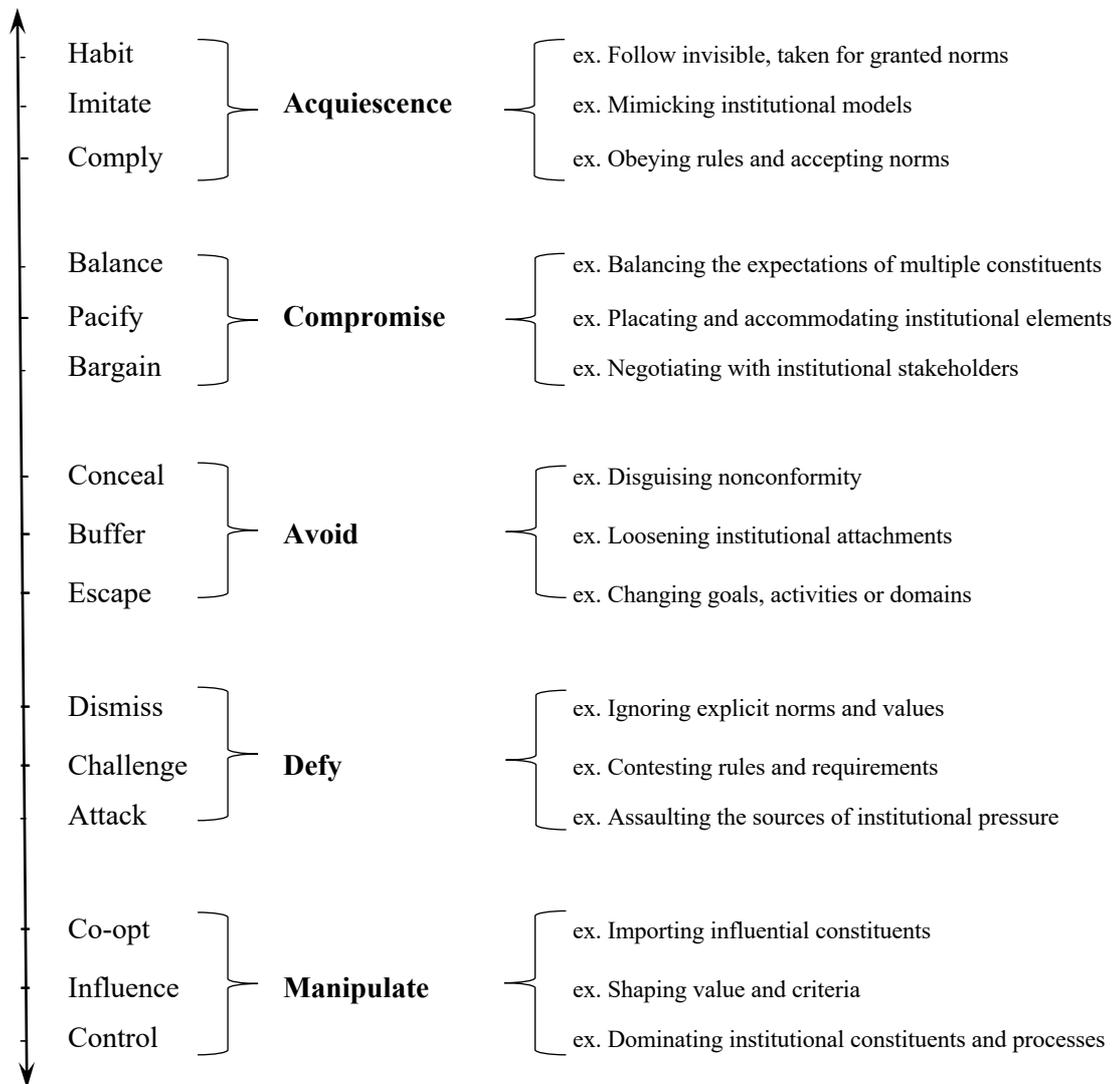
Defiance strategies are more active form of resistance to institutional processes and includes three tactics: 1. *Dismissal*: Ignoring of institutional rules and values, 2. *Challenge*: Active departure from institutional rules, norms, or expectations, and 3. *Attack*: Organisational strategy to assault, belittle, or denounce institutional values (Oliver 1991, p.156-157).

Manipulation strategies are the most active response to institutional pressures and they include: 1. *Co-opt*: Organisational response of choosing to co-opt the source of the pressure , 2. *Influence*: Organisational tactic to influence institutional values and beliefs , and 3. *Control*: Specific efforts to establish power and dominance over external constituents (Oliver 1991, p.157-159).

The following *Figure 1* was sketched by the author to illustrate the relationship between strategic responses and organisational attitude towards the change in their institutional environment.

Figure 1. Strategic Responses to Institutional Pressures

Strong Support



Strong Resistance

Source: Created by the author using Oliver (1991), Table 2, p.152

2.2.2. OLIVER'S (1991) INSTITUTIONAL FACTORS / ANTECEDENTS

According to Oliver (1991), an organisation's choice of strategic responses to institutional pressure depends on the five institutional factors which she calls as *Institutional Antecedents*. Throughout this thesis, the terms 'institutional factors' and 'institutional antecedents' are used interchangeably. These five institutional factors cover ten different predictive dimensions which serve as a tool for predicting organisational responses toward institutional pressure. Following *Table 2* summarises the five institutional factors, corresponding research questions each factor answers to, as well as the ten predictive dimensions those factors cover. The table is followed by the detailed explanations on each institutional factor as well as predictive dimension.

Table 2. Antecedents of Strategic Responses

Institutional Factor	Research Question	Predictive Dimensions
Cause	Why is the organisation being pressured to conform?	- Legitimacy or social fitness - Efficiency or economic fitness
Constituents	Who is exerting institutional pressures on the organisation?	- Multiplicity of constituent demands - Dependence on institutional constituents
Content	To what norms or requirements is the organisation being pressured to conform?	- Consistency with organisational goals - Discretionary constraints imposed on the organisation
Control	How or by what means are the pressures being exerted?	- Legal coercion or enforcement - Voluntary diffusion of norms
Context	What is the environmental context within which the pressures are being exerted?	- Environmental uncertainty - Environmental interconnectedness

Source: Adopted from Oliver (1991), Table 3, p.160

Cause refers to the rationale or reasons for external pressures, and it falls into two dimensions which are *legitimacy* (social fitness) and *efficiency* (economic fitness). While some pressures make organisations more socially fit or acceptable, other pressures have objectives towards economic accountability or rationalisation (Oliver 1991, p. 161).

Constituents include different stakeholders (the state, professions, interest groups, and the general public) who impose a variety of laws, regulations, and expectations on the organisation. However, Pfeffer & Salancik (1978) argued that pressures from these constituents are not necessarily unitary or coherent, and organisations often confront incompatible and conflicting demands that make conformity to the environment difficult because satisfying one constituent can result dissatisfying another. Furthermore, constituents factor falls into two dimensions which are **multiplicity** (the degree of multiple or conflicting constituent expectations) and **dependence** (organisation's dependence on the constituents who exert pressure) (Oliver 1991, p. 162-164).

Content factor focuses on the content of institutional pressure itself and falls into two dimensions which are **consistency** (the consistency of the pressures exerted with goals or objectives of the organisation) and **constraints** (the loss of decision-making discretion the pressures imposed on the organisation) (Oliver 1991, p. 164-165).

Control refers to the means by which institutional pressures are exerted on organisations and falls into two distinct processes by which those pressures are imposed. Those processes can have two dimensions, which are **coercion** (legal or government mandate) and **diffusion** (expectations and practices diffused or spread voluntarily) (Oliver 1991, p. 167-169).

Context within which institutional pressures are imposed on organisations is the last important institutional factor presented by Oliver (1991), and it falls into two dimensions which are environmental **uncertainty** (the degree which future states of the world cannot be accurately predicted) and **interconnectedness** (the density of inter-organisational relations among components of an organisational field).

By using the predictive factors explained above, Oliver's (1991) further proposed some hypotheses of choosing strategy of either acquiescence, compromise, avoidance, defiance or manipulation; depending on the variation in the ten dimensions of five institutional antecedents, which are outlined in the following *Table 3*.

Table 3. Institutional Antecedents and Predicted Strategic Responses

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
Cause					
• Legitimacy	High	Low	Low	Low	Low
• Efficiency	High	Low	Low	Low	Low
Constituents					
• Multiplicity	Low	High	High	High	High
• Dependence	High	High	Moderate	Low	Low
Content					
• Consistency	High	Moderate	Moderate	Low	Low
• Constraint	Low	Moderate	High	High	High
Control					
• Coercion	High	Moderate	Moderate	Low	Low
• Diffusion	High	Moderate	High	Low	Low
Context					
• Uncertainty	High	High	High	Low	Low
• Interconnectedness	High	High	Moderate	Low	Low

Source: Adopted from Oliver (1991), Table 4, p.160

With regard to the above explanations of the institutional antecedents and their dimensions, it is evident that these institutional factors are significantly dependent on both the unique characteristics of the institutional pressure and the specific characteristics of the organisations on which the pressure was imposed. Hence, to be able to use Oliver's (1991) institutional antecedents as a tool for conceptualising GDPR as a case of institutional pressures, it is essential to start by identifying the research-relevant characteristics of both GDPR and the organisation in question. Thus, those relevant special characteristics of both GDPR and research universities are discussed in the next section.

2.3. CHARACTERISTICS OF GDPR AND RESEARCH UNIVERSITIES

This sub-section begins by outlining the research-relevant characteristics of GDPR using four dimensions of regulation proposed by Cook et al. (1983). These main characteristics set a foundation for conceptualising GDPR as a case of institutional pressures. Then, this sub-section continues with

a discussion on - what kind of organisations are the research universities - by utilising Mintzberg's (1983) organisational configurations.

2.3.1. REGULATION: MAIN CHARACTERISTICS OF GDPR

By researching the ways hospitals behave when facing a regulatory change, Cook et al. (1983) identified four specific dimensions of regulation that should be considered when studying any regulation (Cook, Shortell, Conrad, & Morrissey 1983, p.195). Those dimensions are:

- ***Scope of the regulation:*** extensiveness of the regulation,
- ***Restrictiveness or stringency of the regulation:*** the degree of constraints imposed,
- ***Uncertainty of the regulation:*** the degree of change in the regulatory process
- ***Duration of the regulation:*** length of time that regulation has been in existence

Below, the paper illustrates the main characteristics of GDPR using the dimensions mentioned above. The following unique characteristics of GDPR are the result of the analysis of relevant documents to this case. The comprehensive list of those documents is shown in the next chapter of this thesis under the methods section.

SCOPE OF GDPR

As mentioned in the previous chapter, GDPR is a regulation that was issued by the EU. By definition, EU regulation is a binding legislative act which must be applied in its entirety across the EU ("EUROPA," 2019). At the same time, GDPR is one of 69 EU legislative acts relevant to the European Economic Area (EEA) which includes Norway, Iceland, and Liechtenstein in addition to 27 EU member states (European Free Trade Association 2018). However, the geographical scope of GDPR is even beyond EEA borders because organisations that operate in EEA countries all have to sign up to the rules along with organisations based outside the EEA that deals with data of European residents. In addition to its' broad geographical scope, GDPR applies to all organisations processing the personal data of European residents regardless of the sector they belong to. Consequently, GDPR can apply to any organisation (private companies, municipalities, universities etc...) as long as they deal with personal data of European citizens.

RESTRICTIVENESS OR STRINGENCY OF GDPR

According to GDPR (2016), the personal data refers to “any information about an identified or identifiable natural person”, and that information includes but not limited to names, contact details, locations data, IP addresses, race, sexual orientation, religious beliefs, political opinions, union memberships, and health information etc... GDPR (2016) suggests seven key principles for organisations to keep in mind when it comes to dealing with these kinds of personal data. Those key principles are listed and described briefly in the following *Table 4*.

Table 4. Key principles of GDPR

Key Principles	Organisations are required to...
1. Lawfulness, Fairness and Transparency	Obtain the data on a lawful and transparent basis.
2. Purpose Limitation	Collect and use data only for agreed purposes.
3. Data Minimisation	Justify the amount of data collected.
4. Accuracy	Make sure the data stored are accurate and up to date.
5. Storage limitation	Retain data for only a necessary limited period and delete.
6. Integrity and confidentiality	Ensure the data is kept secure and protected.
7. Accountability	Document and prove their compliance.

Source: Adopted from GDPR (2016, Article.5)

According to the principles and requirements listed above, GDPR requires organisations to prove that they have lawful and justifiable reasons for collecting, storing, and processing personal data; and even more importantly, to demonstrate or document how they are keeping those personal data safe. At the same time, the consequences of failing to comply with these requirements of GDPR could result in a hefty fine of 20 million euros or 4% of the organisation’s global annual turnover, whichever is higher (GDPR 2016, Article 83).

UNCERTAINTY OF GDPR

GDPR is a unique regulation owing to its’ extensive scope. Consequently, the original articles of GDPR are broad and vague, needing some clarification if they are applied in practice (Colesky, Hoepman & Hillen 2016, p. 1). One example, as mentioned in the prior section, GDPR defines personal data as “any information about an identified or identifiable natural person” where the phrase

- 'any information' makes it difficult to interpret the definition. Similarly, many privacy and data protection experts have been critical of the concept of personal data expanding broadly, and even claimed that GDPR is at risk to become 'the law of everything' – law applicable to all circumstances but impossible to comply with in practice (Purtova 2018, p.41). Moreover, GDPR being a general regulation not tailored to any specific sector or industry makes it cumbersome for different types of organisations to comply with GDPR.

DURATION OF GDPR

As mentioned in the previous chapter, GDPR is the successor of the *European Data Protection Directive 1995 (Directive 95/46/EC)*. By taking account of the ever-growing amount of big data and concerns over data privacy issues, in 2011, an initiative to draft more comprehensive and effective law was purposed. After five years of preparation and debate, GDPR was finally approved by the EU Parliament on 14 April 2016. Following a two-year post-adoption grace period, GDPR was fully enforced throughout the EU on 25 May 2018 (European Commission 2019, p.2-3). GDPR was adopted into the EEA-Agreement by EEA Joint Committee on 06 July 2018 and fully enforced throughout EEA on **20 July 2018** (European Free Trade Association 2018, p.3). In the months leading to its' adoption, GDPR received a much attention from global media and general public, and consulting companies or lawyers offering information or services related to GDPR boomed expansively (Prethus, Sørnum & Andersen 2018, p.2).

2.3.2. ORGANISATION: MAIN CHARACTERISTICS OF UNIVERSITIES

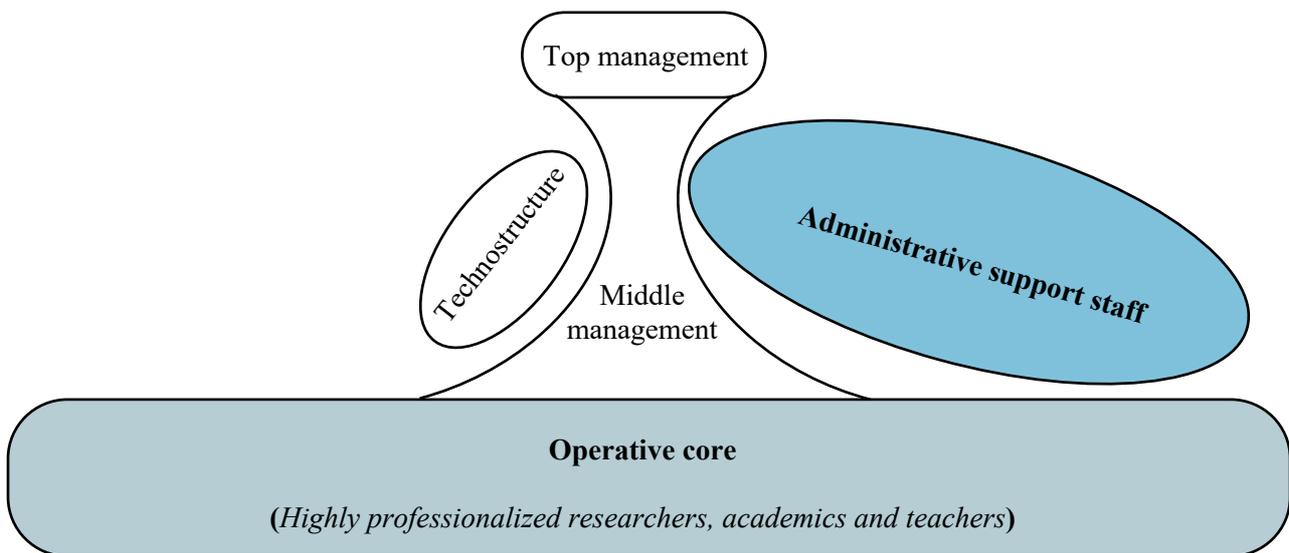
As mentioned in the previous section, this study considers research universities as adaptive organisations affected by the social characteristics of their participants as well as the varied pressures imposed by their environments. (*See 2.1*) At the same time, to move forward, it is necessary to explore specific characteristics that distinguish universities from other organisations. In this regard, the paper turns to Henry Mintzberg's organisational structures to further assess universities as organisations.

Initially, Mintzberg (1983) sees organisations as a system of currents flowing between 5 different organisational components namely: *strategic apex* (top management and its support staff), *operative core* (workers of the organisation), *middle line* (middle management), *support staff* (admin support

and indirect services), and *technostructure* (analysts). Furthermore, Mintzberg (1992, 2009) suggested that organisations can be differentiated along three basic dimensions: key part of the organisation, prime coordinating mechanism, and type of decentralisation. Using these three basic dimensions, he classified organisations into five structural configurations: *simple structure*, *machine bureaucracy*, *professional bureaucracy*, *divisional form*, and *adhocracy*.

Universities are *professional bureaucracies* (see Figure 2), which means, their professionals (academics) are highly trained and somewhat autonomous in their execution of daily tasks. These unique characteristics of research universities result relatively larger operative core and administrative support staff (Lunenburg 2012, p.5).

Figure 2. Structure Configuration of Research Universities as professional bureaucracies



Source: Adopted from Mintzberg (1983)

Also, due to the complexity associated with teaching and research activities, there is a certain degree of *specialisation*, which results in *structural decoupling* both within and across internal faculties, departments and research units (Pineiro, Geschwind, Ramirez & Vrangbæk 2016, p.16). At the same time, this paper believes this structural decoupling nature of universities makes them a suitable organisational type for observing differing responses to the institutional pressures among different parts of the same organisation. The paper will come back to this point in the next chapter.

2.4. HOW ARE THE DIFFERENT ORGANISATIONAL COMPONENTS OF A RESEARCH UNIVERSITY EXPECTED TO PERCEIVE GDPR?

By combining the unique characteristics of GDPR with structural decoupling nature of research universities, this paper proposes the following general expectation:

EXPECTATION 1: The perceptions or interpretations of GDPR as an institutional pressure differ from one organisational component to another.

As stated earlier, two of the most significant organisational components of a research university are its' *operative core* and *administrative support staff*. Thus, this section continues by discussing GDPR as institutional pressure from their perspectives and ends by further proposing summarised expectations about how exactly different organisational components interpret various factors.

2.4.1. CONCEPTUALISING GDPR AS AN INSTITUTIONAL PRESSURE IMPOSED ON RESEARCH UNIVERSITIES USING OLIVER'S INSTITUTIONAL FACTORS

This sub-section utilises Oliver's (1991) institutional factors and their predictive dimensions to conceptualise GDPR as an institutional pressure imposed on research universities.

CAUSE OF GDPR – WHY IS THE ORGANISATIONAL COMPONENT PRESSURED TO COMPLY?

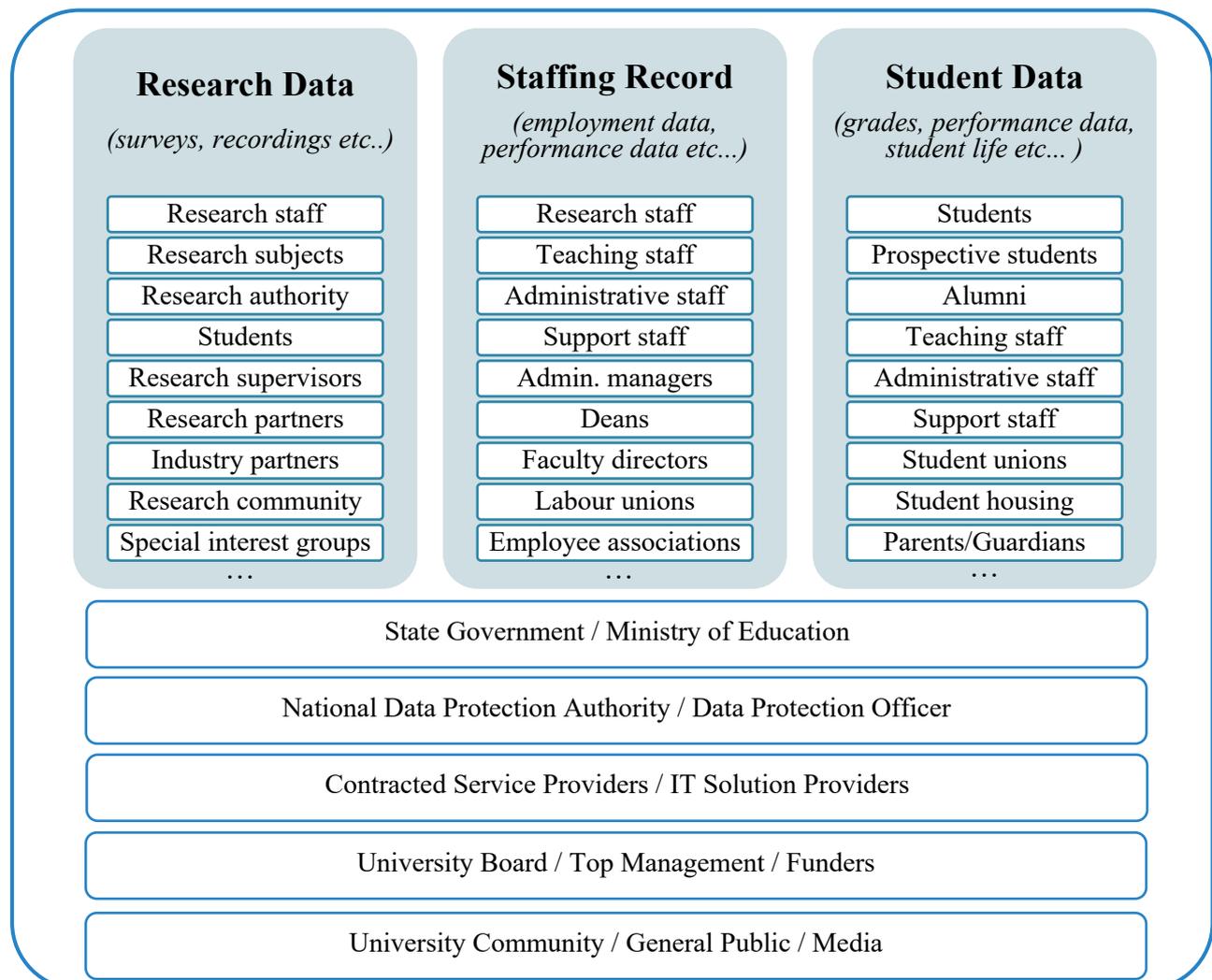
Legitimacy Dimension: GDPR is a regulation that was adopted into national laws of EU/EEA countries. Thus, by complying with GDPR, any organisation or individual would obtain legal legitimacy from the state. In general, legal legitimacy leads individuals and organisations to comply with laws not because they agree with each specific articles of the law in question, nor because they try to avoid sanctions, but because they accept that it is morally right to abide by the law (Jackson et al. 2012, p.3). At the same time, the close linkage between the core ideology of GDPR and the fundamental rights of individuals, adds even more weight to the social legitimacy perceived to be attainable from conformity by both university administration and operative core.

Efficiency dimension: Core principles of GDPR expects organisations to re-evaluate their existing workflows, make risk assessments, and redesign new processes and implement them. Consequently, GDPR compliance could increase the level of bureaucracy, operating cost and workloads for both university administration and operative core. However, from the organisational point of view, the costs of non-compliance are far greater than any investment made to comply with GDPR due to the potential legal sanctions for non-compliance (European Commission 2018, p.18). Thus, arguably university administration is more economically motivated to comply with GDPR than operative core.

CONSTITUENTS OF GDPR – WHO IS EXERTING PRESSURES ON THE ORGANISATIONAL COMPONENT?

From the organisational point of view, universities function around many different stakeholders.

Figure 3. Potential Stakeholders - GDPR and University



Source: Author's Research and (Björkquist 2009, p.18)

The above *Figure 3* illustrates lists of potential stakeholders present within university ecosystem concerning three different types of personal data (research data, staffing record and student data) that exist in universities.

Multiplicity Dimension: Considering the high degrees of social legitimacy perceived to be attainable by complying with GDPR, even though research universities are surrounded by numerous stakeholders, those stakeholders' general attitude towards GDPR compliance is expected to be universally positive.

Dependence Dimension: When it comes to dependence dimension, it is necessary to emphasise the fact that universities are *archetypes*, and their formal and informal structures are laden with history (Pinheiro et al. 2016, p. 17). Universities are historically free from powerful actors like state, and their professionals highly value their academic freedom (Jacobsen 2018, p.62). Due to these unique cultural characteristics of universities and professionals, operating core is argued to be less dependent on the stakeholders in the university ecosystem compared to university administration.

CONTENTS OF GDPR – TO WHAT NORMS OR REQUIREMENTS THE ORGANISATIONAL COMPONENT IS PRESSURED TO CONFORM?

Consistency Dimension: In principle, data protection is an ethical issue which involves respect for individuals fundamental right to privacy. Similarly, the concept of data protection is in line with organisational and professional ethics valued in many universities in Europe, as well as the code of conducts of research and teaching activities within those universities. Therefore, the relatively high degree of consistency is expected between GDPR requirements and organisational goals of both university administration and operative.

Constraint Dimension: In addition to its' primary objective of strengthening individuals' rights, GDPR is also designed to equip the national data protection authorities with stronger enforcement powers (European Commission 2019, p. 4-7). Consequently, the compliance with GDPR arguably results in some level of loss in organisational freedom. As Pfeffer and Salancik (1978, p.94) noted: "Compliance is a loss of discretion, a constraint, and admission of limited autonomy." Thus, GDPR is expected to result high levels of constraint to both university administration and operative core.

CONTROL OF GDPR - HOW OR BY WHAT MEANS ARE THE PRESSURES BEING EXERTED ON THE ORGANISATIONAL COMPONENT?

Coercion Dimension: As explained in the prior sections, GDPR is undoubtedly a coercive pressure imposed by the state on organisations. Concurrently, from the viewpoint of the university administration, not complying with GDPR could result in substantial consequences starting from a massive legal sanction to losses of social legitimacy and organisational reputation. The same can be said of the professionals within the university. However, in that case, the coercive pressure is expected to be imposed heavily by the university administration rather than the state because GDPR requires organisations to be accountable for the personal data within their organisation (GDPR 2016, Article.5)

Diffusion Dimension: The degree of voluntary diffusion is expected to high for university administration and operative core considering the ethical and moral reasons, and the attainable legitimacy factor explained above.

CONTEXT OF GDPR - WHAT IS THE ENVIRONMENTAL CONTEXT WITHIN WHICH THE PRESSURES ARE BEING EXERTED?

Uncertainty Dimension: As presented in section 2.4.1, due to its' extensive scope and vaguely defined concepts, GDPR brings a lot of uncertainty to organisational environments. Consequently, both the university administration and the operative core are predicted to deal with many practical questions related to GDPR compliance in the context of the university.

Interconnectedness Dimension: As stated earlier, universities are professional bureaucracies, in which their operative core is highly professional. At the same time, those professionals (teachings staffs, research staffs, etc...) are more loyal to their disciplinary fields than the university itself (Berg and Pinheiro 2016, p. 151). By taking into account of this unique characteristic of universities; this section assumes that the degree of interconnectedness between universities, university professionals and university administration are expected to be high.

2.4.2. EXPECTED INSTITUTIONAL FACTORS FROM THE TWO DIFFERENT COMPONENTS OF A RESEARCH UNIVERSITY

Building on the discussion above, this sub-section summarises the main points and moves to elaborate on how exactly the university administration's and operative core's perceptions of GDPR are expected to differ. The following *Table 5* was created to outline the differences and similarities in perceptions in each predictive dimension of Oliver's (1991) framework.

Table 5. The comparison of different organisational components' perceptions of GDPR

Institutional Factor	Dimension	University Administration	Operative Core
Cause	Legitimacy	high	high
	Efficiency	high	low
Constituents	Multiplicity	low	low
	Dependence	high	low
Contents	Consistency	high	high
	Constraint	high	high
Control	Coercion	high	high
	Diffusion	high	high
Context	Uncertainty	high	high
	Interconnectedness	high	high

Source: Author's Research

Based on *Table 5*, the following key points can be said the same for both organisational components (university administration and operative core):

- The degree of social **legitimacy**, the degree of legal **coercion** and the degree of voluntary **diffusion** are expected to be equally *high* for both organisational components because GDPR is a regulation adopted into national laws sanctioned by the governments of EU/EEA countries (European Commission 2019, p.2).
- The degree of constituent **multiplicity** and the degree of goal **consistency** are predicted to be *low* and *high*, respectively, for both organisational components. These are due to the legal, moral, and ethical reasons for GDPR compliance explained extensively in the prior sections.

- The degree of discretionary **constraints** imposed by GDPR is expected to be *high* for both organisational components. This is because, in general, compliance is seen as an admission of limited autonomy (Pfeffer and Salancik 1978, p.94).
- The context factor (the level of **uncertainty** and the degree of **interconnectedness**) is expected to be *high* for both organisational components due to the research-relevant special characteristics of GDPR (uncertainty) and research university (interconnectedness) explained in the prior sections.

In contrast, the following dimensions seem to be different for both organisational components:

- The degree of economic gain (**efficiency**) perceived to be attainable from conformity to GDPR is expected to be *high* for university administration because non-conformity can result in a hefty fine for the administration. On the contrary, this degree is expected to be *low* for the operative core because professionals are more concerned about the increased level of bureaucracy and workloads due to GDPR compliance.
- The degree of external **dependence** on pressuring constituents is predicted to be *high* for the university administration but *low* for the operative core. This is mostly because university professionals are historically independent, and they value their academic freedom to a great extent (Jacobsen 2018, p.62).

As a result, the paper expects that:

1. University administration feels more substantial pressures from GDPR compared to the operative core because the university administration has a high degree of external dependence and is concerned about the potential administrative fine for non-compliance.

2. The operative core feels less substantial pressures from GDPR compared to the university administration because the operative core is somewhat independent and is concerned about the technical or operational efficiency.

2.5. HOW ARE THE DIFFERENT ORGANISATIONAL COMPONENTS OF A RESEARCH UNIVERSITY EXPECTED TO RESPOND TO GDPR?

Building on the expectations of differing perceptions above, this section proposes:

EXPECTATION 2: Two organisational components of a research university – university administration and operative core – *respond to GDPR differently* because of the differences in their perceptions of GDPR as an institutional pressure.

To develop this general expectation further, this section turns back to Oliver’s (1991) framework of predicting strategic responses based on the institutional antecedents explained in Section 2.2. By placing the organisational components’ expected perceptions of institutional antecedents on the predictive table offered by Oliver (1991), it has become possible to propose some further expectations about which strategies each organisational component is more likely to choose when responding to GDPR. Thus, following two tables were created based on each component’s perceptions of GDPR.

Table 6. Prediction of the university administration’s strategic responses to GDPR

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
Cause					
• Legitimacy	High	Low	Low	Low	Low
• Efficiency	High	Low	Low	Low	Low
Constituents					
• Multiplicity	Low	High	High	High	High
• Dependence	High	High	Moderate	Low	Low
Content					
• Consistency	High	Moderate	Moderate	Low	Low
• Constraint	Low	Moderate	High	High	High
Control					
• Coercion	High	Moderate	Moderate	Low	Low
• Diffusion	High	Moderate	High	Low	Low
Context					
• Uncertainty	High	High	High	Low	Low
• Interconnectedness	High	High	Moderate	Low	Low

Source: Author’s Research

As seen from *Table 6*, since the university administration is expected to perceive a *high degree of social legitimacy*, a *high degree of efficiency*, a *low degree of constituent multiplicity*, a *high degree of constituent dependence*, a *high degree of goal consistency*, a *high degree of legal coercion*, a *high degree of voluntary diffusion*, a *high degree of environmental uncertainty*, and a *high degree of environmental interconnectedness*; the **acquiescence strategies** are expected to dominate in the responses to GDPR by the university administration. At the same time, there might be some **elements of other strategies** present due to a perceived *high degree of discretionary constraints* imposed on the university administration by GDPR.

Table 7. Prediction of the operative core’s strategic responses to GDPR

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
Cause					
• Legitimacy	High	Low	Low	Low	Low
• Efficiency	High	Low	Low	Low	Low
Constituents					
• Multiplicity	Low	High	High	High	High
• Dependence	High	High	Moderate	Low	Low
Content					
• Consistency	High	Moderate	Moderate	Low	Low
• Constraint	Low	Moderate	High	High	High
Control					
• Coercion	High	Moderate	Moderate	Low	Low
• Diffusion	High	Moderate	High	Low	Low
Context					
• Uncertainty	High	High	High	Low	Low
• Interconnectedness	High	High	Moderate	Low	Low

Source: Author’s Research

As seen from *Table 7*, since the operative is expected to perceive a *high degree of social legitimacy*, a *low degree of constituent multiplicity*, a *high degree of goal consistency*, a *high degree of legal coercion*, a *high degree of voluntary diffusion*, a *high degree of environmental uncertainty*, and a *high degree of environmental interconnectedness*; the **acquiescence strategies** are also expected to dominate in the responses to GDPR by the operative core. At the same time, there might be some

elements of other strategies present due to the expected a *low degree of efficiency, a low degree of constituent dependence, and a high degree of discretionary constraints* from the operative core.

Considering all things said above, for the sake of simplicity, this paper expects that:

3. *Even though the acquiescence strategies are expected to dominate in both organisational components' responses to GDPR, the operative core might demonstrate more elements of other strategies compared to the university administration due to the differences in their perceptions of GDPR.*

These expectations are touched upon slightly in Chapter 4. Empirical Findings and Analysis, and further discussed against empirical results in Chapter 5. Discussion.

CHAPTER 3. METHODOLOGY

This chapter presents the research methodology employed in this thesis. More specifically, this chapter describes research design, rationales for selecting the case, data collection procedures, and data analysis procedures. A discussion of the quality criteria of research design closes this chapter.

3.1. RESEARCH DESIGN

The purpose of this section is to explain how the research aims and questions presented in Chapter 1 led to the following research design.

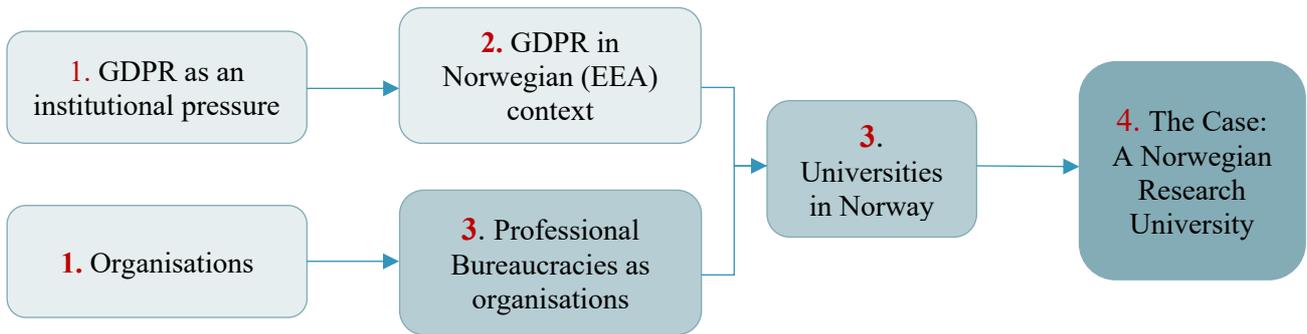
As stated earlier, this thesis aims to address questions such as “How different parts of one organisation respond to the same institutional pressure?” and “How did different parts of a Norwegian research university defined as – ‘university administration’ and ‘operative core’ – respond to GDPR?” At the same time, even though there are several different methods for doing social research (including experiments, surveys, histories, case studies), the case study method is preferred when: “A ‘how’ or ‘why’ question is being asked about a contemporary set of events, over which the investigator has little or no control.” (Yin 2009, p.13). Consequently, *the case study method* was the most suitable choice for this research.

When it comes to designing case studies, Yin (2009) proposed two ways: single-case design and multiple-case design. He also advised using a single-case design when the case in question is a critical case for extending a well-formulated theory (Yin 2009, p. 38). At the same time, based on the rationales explained in the preceding chapters, this thesis believes that a research university’s strategic response to GDPR is a critical case for studying differing responses and extending Oliver’s (1991) framework in practice. Thus, this thesis decided to choose the research design of *an embedded single case study*. The design is considered to be embedded because even though only a single case (one organisation) was chosen, it involves units of analysis at more than one organisational component.

3.2. SELECTION OF THE CASE

Having the research design of *an embedded single case study* in mind, this section explains how and why the particular case of the Norwegian University’s strategic response to GDPR was selected for this study. The following *Figure 4* depicts the mind map used to select the case for this research.

Figure 4. Mind Map used for selecting the case



Source: Author's Research

First, GDPR was chosen as a case of institutional pressure exerted on organisations due to its' extensive scope, complicated nature, and future potentials explained in the preceding chapters.

Second, even though GDPR applies to extensive geographical areas, the scope of this study has been narrowed down to the Norwegian context to ensure the feasibility of this thesis. Additionally, this choice was also supported by the notion that it could be interesting to study the adoption of an EU regulation in an organisation located outside the EU.

Third, considering the research aim to study strategic responses enacted by different parts of the one organisation, this thesis focused on professional bureaucracies since this is the type of organisation where differentiated responses are most likely to occur. Out of all professional bureaucracies, this thesis was motivated to look into research universities because they collect and deal with different areas of personal data, including research data, staffing record and student data.

Fourth, the particular Norwegian Research University chosen for this study is one of the ten state-owned universities that engage in research activities and offer doctoral-level study programmes (Norwegian Ministry of Education and Research 2020). Thus, it was believed to be a good representative of the research universities in Norway.

Lastly, this thesis is convinced that the chosen empirical case is a critical case for studying potential differences between different organisational components in response to institutional pressures by utilising well-formulated framework like Oliver's (1991) considering all the factors presented up to this point.

3.3. DATA COLLECTION PROCEDURES

This study continues with this following section which explains the data collection procedures, including data evidence sources, data collection methods, and the collected data.

3.3.1. CHOSEN EVIDENCE SOURCES AND RESEARCH METHODS

Documentation, archival records, interviews, direct observation, participant-observation, and physical artefacts are among the most commonly used case study evidence sources for collecting data for researches involving case studies. At the same time, it is advised to use multiple sources of evidence in order to maximize the benefits from each source (Yin 2009, p.99-115). Having that advice in mind, this thesis chose *documentation* and *interviews* as the sources of evidence to address the research questions outlined in Chapter 1.

Considering the two sources of evidence chosen above, two qualitative research methods - *document analysis* and *semi-structured interviews* – were used as primary tools for collecting the data.

- First and foremost, an analysis of relevant documents related to GDPR and personal data protection in Norway was conducted to address the background question of “*How different parts of a research university are expected to respond to GDPR?*”. At the same time, these documents were used again as a way to verify the data gathered from individual interviews.
- Second, individual interviews were designed, and conducted with the key informants within the different parts of the research university in question to address the research sub-question of “*How did different part of a Norwegian university respond to GDPR in empirical settings?*”. With this, a convenience sampling (*snowball sampling*) technique was also used to identify the key informants to interview.

These data collection methods and evidence sources are described further in next two sub-sections.

3.3.2. DOCUMENT ANALYSIS

Bowen (2009, p. 27) defined ‘document analysis’ as “A systematic procedure for reviewing or evaluating documents – both printed and electronic material.” The following Table 9 lists the main documents used for this thesis. The prior literature was not included in this list because those works of literature are considered as authors’ description or interpretation of raw data (Bowen 2009, p. 28).

Table 8. The main documents reviewed and analysed in the thesis

Type of Document	Original Title	Publisher	Short Description
Law or legal document	<i>Regulation (EU) 2016/679 ... General Data Protection Regulation</i>	The European Parliament	GDPR text with EEA relevance
Law or legal document	<i>Lov om behandling av personopplysninger 2018 (Personopplysningsloven)</i>	Ministry of Justice and Public Security of Norway	The Personal Data Act (Norwegian adoption of GDPR)
Policy document	<i>Data protection rules as a trust-enabler in the EU and beyond – taking stock 2019</i>	EU Commission	Communication from the commission to the EU Parliament and Council
Policy document	<i>Stronger protection, new opportunities - Commission guidance on the direct application of the General Data Protection Regulation as of 25 May 2018</i>	EU Commission	Communication from the commission to the EU Parliament and Council
Organisational report	<i>Annual Report 2018</i>	Norwegian Centre for Research Data (NSD)	Annual report
Organisational report	<i>Årsrapport (2018–2019)</i>	Directorate for ICT and joint services in higher education and research (UNIT)	Annual report
Guideline	<i>The GDPR: New opportunities, new obligations</i>	EU Commission	An EU publication / general guideline
Guideline	<i>Guidelines on transparency under Regulation 2016/679</i>	EU Commission	The Working Party's guideline
Guideline	<i>Databehandleravtaler – sjekkliste</i>	(UNIT)	Checklist for universities
News article	<i>Felles forum for personvernombudene i høyere utdanning og forskning / Trondheim 4. og 5. desember 2018</i>	Directorate for ICT and joint services in higher education and research (UNIT)	Joint forum for privacy ombudsmen in higher education and research

Source: Author's Research

Most of these documents were used to conceptualise GDPR as an institutional pressure in the context of Norwegian research universities and to understand the general context better.

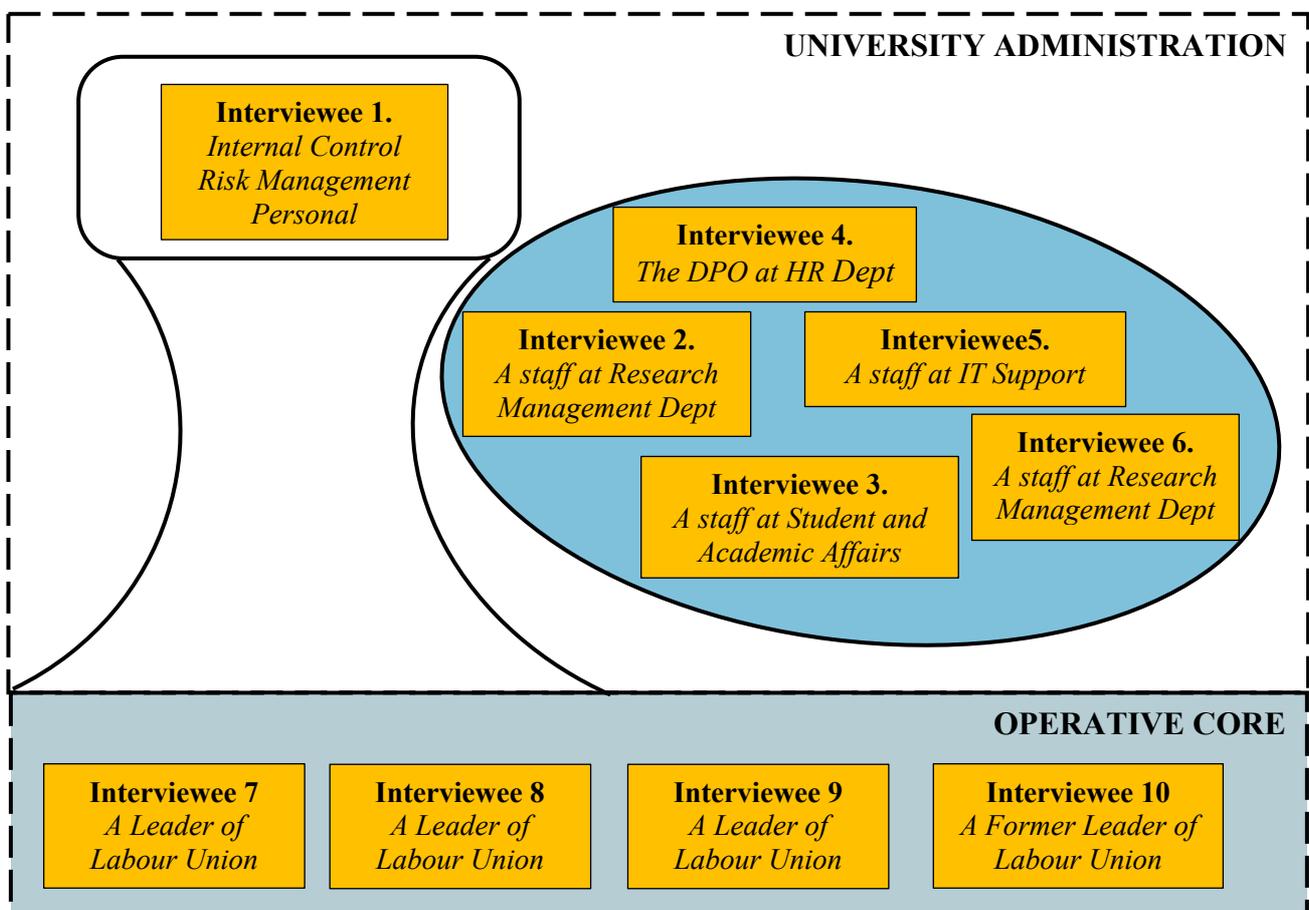
3.3.2. INTERVIEWS

Generally, this thesis study is interested in the different group's perceptions of GDPR as an institutional pressure as well as those group's responses to GDPR. Thus, the semi-structured interview method was chosen due to its' potential capacity to provide insights into how research participants view the reality (Bryman 2012, p. 471).

SELECTION OF INFORMANTS FOR THE INTERVIEW

Considering the research questions and expectations outlined in the preceding chapters, this paper aimed to select informants from two different parts of the university – university administration (representing management support staff) and operative core (representing professionals). Therefore, the selection of informants was strongly guided by Mintzberg's concept of Professional Bureaucracy.

Figure 5. Interviewees and their position within the organisational configuration



Source: Author's Research

As illustrated in the *Figure 5*, six key informants representing the university administration as well as four key informants representing the operative core were interviewed within the scope of this thesis. For reasons of anonymity, only information is given on the position of the informants.

Additionally, all six informants from university administration are also members of the working group (WG) which was responsible for implementing GDPR at the university. These six interviewees were chosen because they were the most insightful and well-informed candidates from university administration about the topics around GDPR and the compliance process at the university as well. Concurrently, all four informants from the operative core were the leaders of the largest labour unions at the university. They were chosen because of the notion that the leaders representing professionals' unions are the most insightful about the collective opinions of the professionals (researchers, lecturers, and nurses in this case) within their unions.

Finally, it is necessary to note that in the beginning identifying informants were a hard task because the GDPR implementation strategy is subject to each organisation, and there are no clear steps for the implementation process. At the same time, GDPR itself named one of the most critical stakeholders to GDPR compliance process as the Data Protection Officer (DPO). Therefore, the data protection officer at the university was approached as the initial point to gather information and connect to other informants. Other informants were identified using the snowball sampling method and were selected based on the information provided by the prior informants.

INTERVIEW DESIGN: INTERVIEW GUIDES AND INTERVIEW QUESTIONS

Two interview guides were prepared before the interviews, based on the research questions, the empirical context, the result of document analysis and the relevant academic literature. Each of these guides consisted of a broad range of questions to encourage detailed and insightful answers. The final versions of the interview guides can be found in the Appendix.

At the same time, the interview questions were inspired and shaped by Oliver's (1991) institutional factors and their dimensions. Therefore, the vast majority of the questions were aimed to understand informant's perception of GDPR and responses to GDPR. The final consideration of the design process was the sequencing of the questions. The first two questions required the informants to give general answers about their position and involvement in the topics around GDPR. These questions were designed to put the informants at ease before asking more detailed questions. At the same time, this was a strategy for building trust and collaborative environment during the interview.

CONDUCTING OF THE INTERVIEWS AND DATA GATHERED

Once the key informants were identified, interview invitations were crafted and sent out to those informants via invitation e-mails. At the same time, those informants have been informed about the purpose of the study, data processing and the rights of participation. Also, the consent forms were sent out to them according to the guidelines from the Norwegian Centre for Research Data (NSD). The templates used for crafting these invitations and consent forms can be found in the Appendix.

As soon as the participation was confirmed, interviews were arranged individually with informants. Although the initial plan was to do face-to-face interviews, these interviews were conducted via audio and video calls due to the current situation of the world battling with a pandemic. During the interviews, the pre-designed interview guides were used but adapted as necessary depending on the nature of the informant's role and position. Each interview lasted between 30 to 90 minutes, and where consent was granted, the interviews were recorded. Otherwise, the author made detailed notes during the course of the interview. As a result, 65 pages of text were produced for analysis. This data is not included here due to the requirements from the Norwegian Centre for Research Data (NSD). The following *Table 9* presents the summarised information about interviews conducted.

Table 9. Dates and Durations of the Interviews

	Date	Duration	Group	Department/Unit	Role
1	07.04.2020	1h 20min	Administrative	Management Support	WG Leader
2	15.04.2020	0h 40min	Administrative	Research Management	WG Member
3	15.04.2020	0h 49min	Administrative	Student and Academic Affairs	WG Member
4	31.03.2020	0h 59min	Administrative	Human Resources	DPO
5	03.04.2020	1h 10min	Administrative	IT Services	WG Member
6	02.04.2020	0h 44min	Administrative	Research Management	WG Member
7	23.04.2020	1h 33min	Professional	Researchers' Union (UNIO)	Union Leader
8	22.04.2020	1h 02min	Professional	Nurses' Union	Union Leader
9	07.04.2020	0h 56min	Professional	TEKNA Union (Akademikerne)	Union Leader
10	08.05.2020	0h 30min	Professional	Researchers' Union (UNIO)	Union Leader

Source: Author's Research

During the interview, it was revealed that one of the interviewees (*interviewee 6*) from the university administration group joined the GDPR working group right after the implementation process. At the

same time, this thesis is interested in the initial responses to GDPR. Thus, considering the scope of this thesis, the data provided by this interviewee were not given weight and were not included in the analysis.

3.4. DATA ANALYSIS PROCEDURE

First and foremost, the data gathered from the interviews were categorised into two groups (the university administration and the operative core) according to the informant's position in the university. After careful reading and re-reading of the data from each category, further arranging and analysis were performed by utilising the framework of Oliver (1991). Consequently, the data was arranged according to their relevance to the institutional factors and the strategic responses suggested by Oliver (1991). Then this restructured data was analysed both descriptively and comparatively. Findings of these analyses are presented in the next chapter.

3.5. QUALITY OF THE CASE STUDY RESEARCH DESIGN

Before moving into the empirical findings, this section addresses the quality of research design at hand using three criteria - *Internal validity*, *External Validity*, and *Reliability*. These three criteria have been commonly used to test the quality of any empirical qualitative research (Yin 2009, p. 40). In the following subsections, each of this criterion is used to critically discuss the quality of this thesis.

3.5.1. INTERNAL VALIDITY

Internal validity focuses on if the results can be interpreted as correct and if the inferences made correctly. (Yin 2009, p. 41). The focused aim of this study was to find out how different organisational components perceived GDPR and how those two components responded to GDPR based on their perceptions. In order to reach this aim, this thesis utilised the semi-structured interviews as the research method for collecting the empirical data. In general, the semi-structured interview method is trusted to have the potential capacity to provide insights into how interviewees view the reality (Bryman 2012, p. 471). Therefore, this thesis believed the chosen method would be most suitable for exploring interviewees' subjective views on perceptions of and responses to GDPR. This method has

been proven to be suitable for exploring perceptions of GDPR because perceptions are by definition descriptions of interviewee's view of reality. However, when it comes to the responses, the method tends to be less valid due to the sensitivity around the research topic of 'regulatory compliance'. In other words, the method heavily relied on the direct answers provided by the interviewees regarding the actions that they have taken as responses to the regulatory pressure, and consequently, the method faced with few challenges when the interviewees are hesitant to talk about potentially illegitimate practices.

3.5.2. EXTERNAL VALIDITY

External validity is "the test that deals with the problem of knowing whether a study's findings are generalisable beyond the immediate case study." (Yin 2009, p. 43). This thesis believes that the findings from this study can be transferable at some level to the larger population (at least, to the other research universities in Norway) due to the rationales for the selection of the empirical case explained earlier. However, when it comes to GDPR, the GDPR implementation strategy is subject to each organisation, and there are no clear guided steps for the implementation process. Therefore, it might be hard to generalise the result of this thesis study due to selection of the institutional pressure chosen for this study. At the same time, it is essential to remember that this study aimed at revealing whether organisations interpret and react to institutional pressures in homogeneous way. Thus, generalisation was not the priority of this study.

3.5.3. RELIABILITY

"The goal of reliability is to minimise the errors and biases in a study." (Yin 2009, p.45). Above mentioned the sensitivity around the research topic, led to a suspicion that some of the interviewees might not have been completely honest when answering the questions. This could also be the case for the author's unfamiliarity with the interviewees because of the notion that people will be hesitant to admit that they are 'breaking' law to someone to whom they are not close enough. At the same time, due to the current situation with a pandemic, all interviews were conducted via audio and video calls, not in person. This might have made it even more possible for the interviewees to lie or withhold the truth from the author. Moreover, all interviews were conducted in English because of the author, even though all interviewees' first language was Norwegian. This made it hard for the interviewees to express their opinions in a clear manner. Lastly, the author's inexperience with conducting qualitative and 'investigative' interviews might have affected the collecting of valuable information.

4. EMPIRICAL FINDINGS AND ANALYSIS

This chapter presents the empirical findings from the interviews. For the sake of simplicity, this chapter is arranged into two sections. The first section covers the empirical findings on how two organisational components of a Norwegian research university *interpreted* or *perceived* GDPR. The second section presents the empirical findings on how those two organisational components *reacted* or *responded* to GDPR. In each of these sections, the empirical results are discussed comparatively in order to showcase the observed differences between two organisational components – ‘university administration’ and ‘operative core’- when it comes to *perceptions of* and *responses to* GDPR.

4.1. THE DIFFERENT ORGANISATIONAL COMPONENTS’ PERCEPTIONS OF GDPR

This section is further divided into three sub-sections. The first sub-section covers the empirical findings from the interviews with the administrative support staffs representing the university administration. Similarly, the second sub-section covers the empirical findings from the interviews with the leaders of labour unions representing the operative core. Then, the last sub-section ends with some comparative discussions on the different organisational components’ perceptions of GDPR.

4.1.1. FINDINGS FROM THE INTERVIEWS WITH ADMINISTRATIVE SUPPORT STAFFS AT THE UNIVERSITY

This sub-section seeks to describe and summarise the empirical findings on perceptions of GDPR from the interviews conducted with *five informants representing the university administration*. In doing so, this sub-section assesses the informants’ personal and collective perceptions of GDPR by using Oliver’s (1991) institutional factors. Also, some original quotes from the informants had been included to highlight the empirical findings when it was deemed necessary. Again, the information provided by the sixth informant was not given any weight in this analysis due to the reasons explained in the previous chapter.

CAUSE OF GDPR – WHY IS THE UNIVERSITY ADMINISTRATION PRESSURED TO COMPLY?

When asked about the main reasons and rationales behind complying with GDPR, there was an overwhelming consensus among the interviewees in the university administration group that the degrees of legitimacy and efficiency perceived to be attainable by GDPR compliance are both high. The following *Table 10* demonstrates some original quotations by the interviewees.

Table 10. Quotes on the “Cause” factor (University Administration)

CAUSE	Legitimacy Dimension	Efficiency Dimension
Interviewee 1	“GDPR was adapted into Norwegian <u>law</u> . So, we had to comply. It’s just the way it is. It is also about <u>reputation</u> .”	“If we weren't compliant with GDPR, there are extremely <u>high fines</u> to get. So that was a scare for everyone.”
Interviewee 2	“As we are a public institution, we need to abide the <u>law</u> ... And it's important for our <u>reputation</u> to show that we are serious, and we take GDPR seriously.”	“Of course, if something goes really wrong, I know we can get <u>economically punished</u> .”
Interviewee 3	“We have to be compliant with <u>law</u> in all of other areas as well... It is really important to be a good ambassador.”	“Well if we do not comply, then we would receive <u>fines</u> from Datatilsynet. ”
Interviewee 4	“Following the <u>law</u> is important for our public institutions. Also, possible loss of <u>reputation</u> is the reason to comply.”	“The consequences of non-compliance are the <u>financial consequences</u> ...”
Interviewee 5	“The <u>law</u> is valid for us... I think administration will get into trouble if we break the rules. It would be very bad for our <u>reputation</u> ”	“The worst thing that could happen to us is that there are some <u>huge fines</u> in breaking the rules.”

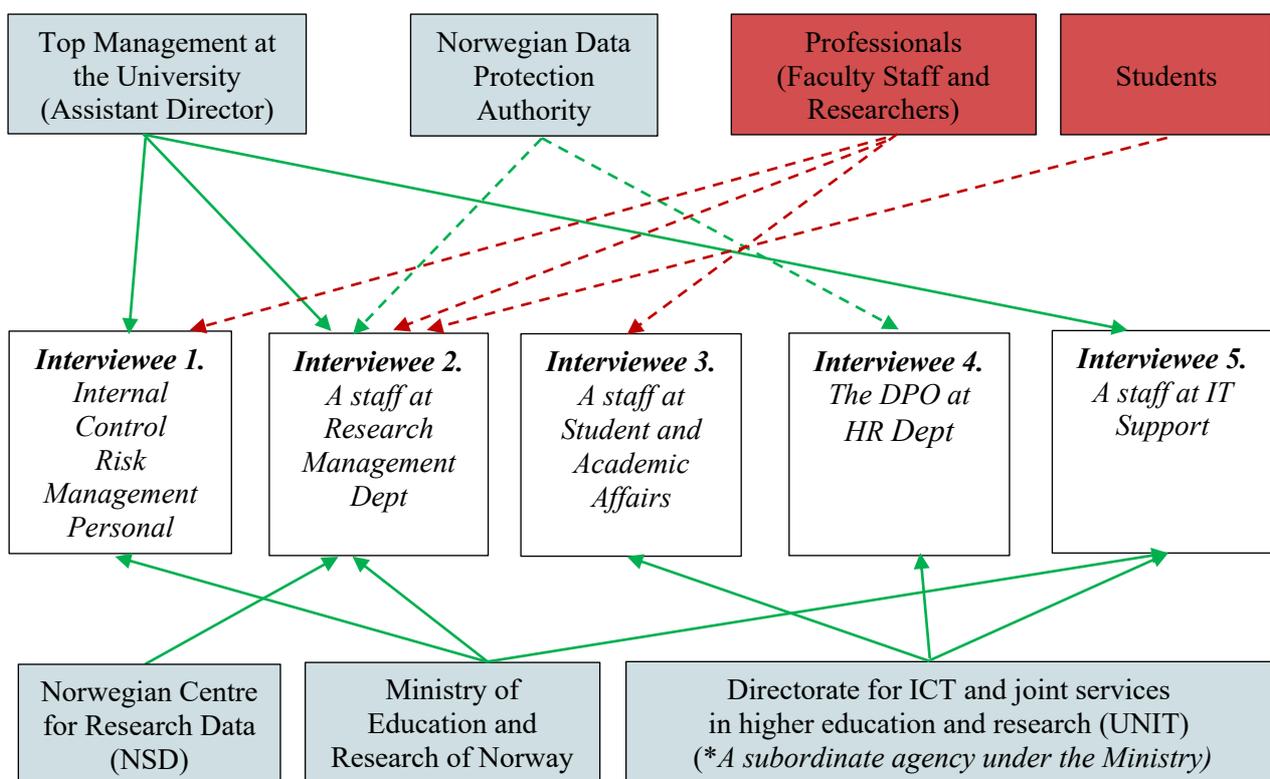
Source: Original quotes from the interviews

As highlighted in *Table 10*, words such as ‘law’, ‘reputation’, and ‘fines/ economic punishments / financial consequences’ were repeatedly mentioned by all of the interviewees. Thus, the degrees of legal and social legitimacy perceived to be attainable, as well as the amount of administrative fine perceived to be avoidable by GDPR compliance are found out to be **High** among the interviewees representing the university administration.

CONSTITUENTS OF GDPR – WHO IS EXERTING PRESSURES ON THE UNIVERSITY ADMINISTRATION?

When asked about the attitudes from different stakeholders towards or against conformity to GDPR, the informants in this group identified a few stakeholders who were expressing their support or resistance more actively than others. The following *Figure 6* illustrates those stakeholders and each interviewee’s view about the support or resistance shown by the stakeholders.

Figure 6. Support and resistance map of the “Constituents” factor (University Administration)



Source: Author’s Research

As marked with green arrows (→), the majority of these stakeholders were pushing towards the university’s GDPR compliance. Specially, all interviewees indicated that they felt support from the Norwegian ministry responsible for higher education and research. These supports were coming directly from the ministry itself as well as through its’ subordinate agency - UNIT (Directorate for ICT & Joint Services in Higher Education & Research). Notably, the ministry and other stakeholders identified above are governing organisations which have extensive power over the university. Thus, the degree of external dependence perceived by the interviewees of this group is universally **High**.

At the same time, as marked with red arrows (→), three of the interviewees noticed some subtle frustrations among the professionals and students at the university regarding GDPR compliance. As *Interviewee 2* stressed in the following quote, despite the frustration, everyone at the university seemed to understand and accept that GDPR compliance was unavoidable.

“There was frustration both among students and researchers... But still, we did need to abide by the law. And I think most people accepted this, even though they maybe did not like it.”

(Interviewee 2)

At the same time, most of the frustrations were a reaction to the lack of clear guidance and uncertainty that comes with GDPR. Therefore, those frustrations were not strong forms of resistance meant to oppose the university being compliant with GDPR. The following two quotes illustrate this situation.

“It was not resistance in a way like: ‘We do not want to be compliant.’ It was more of: ‘This is okay. We got it. But how are we going to do this? You have to tell us.’”

(Interviewee 1)

“I think most were concerned about how we do this in practice. People just wanted to know what to do, and they wanted someone to tell them how to do it right.”

(Interviewee 3)

Consequently, it can be concluded that the degree of constituent multiplicity was perceived to be **Low** by the interviewees within the university administration group.

CONTENTS OF GDPR – TO WHAT NORMS OR REQUIREMENTS THE UNIVERSITY ADMINISTRATION IS PRESSURED TO CONFORM?

When asked about their views on the content factor of GDPR, majority of the informants from this group spent considerable amounts of time talking about how ‘GDPR’ or ‘the right to privacy’ is ‘a good thing’ in general. For instance, *Interviewee 1* and *Interviewee 2* quoted.

“It is about protecting people’s data. I think GDPR is a good thing. We need to protect our data and information in this crazy time.”

(Interviewee 1)

“I think it is a positive law. It is very important to make sure that we handle people’s information in a safe way and that everyone owns their own information.” (Interviewee 2)

However, surprisingly, when they were asked a question - “How does GDPR go with the organisational goals of your university or your department?”, the answers were significantly varied. While three of the interviewees answered that the organisational goals and GDPR fit together, remaining two stressed the areas where those two contradict. The following *Table 11* presents some original quotes by the interviewees to highlight these contradictions.

Table 11. Quotes on the “Contents” factor and “Consistency” dimension (University Administration)

CONTENTS	Consistency Dimension
Interviewee 1	<i>“GDPR connects with the university’s goals. We always treat students and employees with <u>respect</u>. That is how the university wanted to be.”</i>
Interviewee 2	<i>“They go together. It is something about being <u>professional, trustworthy, safe</u> environment for research, for students and for personals.”</i>
Interviewee 3	<i>“I must say Communication department (PR department), they found that quite challenging. Because they want to be more <u>proactive</u> towards people. They really want to make bigger approaches, but they are not allowed to now because of GDPR.”</i>
Interviewee 4	<i>“One of the university’s values is for example, <u>collaboration</u>. That and privacy can occasionally go in different directions. So, collaboration and sharing may not always go in same direction because you should not share more than necessary for the job.”</i> <i>“... Within research community in Norway, we have a lot of <u>trust</u> of informants. For us to continue having this trust, we have to comply with GDPR.”</i>
Interviewee 5	<i>“I think it has been very much in line. Because the goals of the university are <u>to treat people correctly</u>, and for this reason we have to follow these rules.”</i>

Source: Original quotes from the interviews

The evidence from these interviews suggests that high-level organisational ‘values’ such as *respectfulness, professionalism, trustworthiness, safety, and fairness* are seemed to be consistent with the core principles of GDPR. In contrast, the evidence also suggests that ‘organisational goals’ which relates to operational efficiencies, like *proactiveness and effective collaboration* are seemingly

inconsistent with GDPR. Consequently, the degree of consistency of GDPR and requirements with organisational goals are perceived differently by the interviewees in this group.

When asked about the potential loss or restriction of organisational freedom due to GDPR, all of the interviewees reported that rules and processes have become much stricter with GDPR in many areas.

Those areas include but not limited to:

- Sending or sharing information with organisations and research partners outside the EU/EEA
(reported by *Interviewee 1, 2, 3, and 4*),
- Storing of sensitive information in the local or personal systems
(reported by *Interviewee 1, 2, and 5*),
- Proving or documenting the legal basis for collecting and storing personal data
(reported by *Interviewee 1, 2, and 4*),
- Making decisions on choosing computer software and system for use
(reported by *Interviewees 1, 4 and 5*),
- Dealing with audio recording for research
(reported by *Interviewees 1, 2, 3, 4, and 5*).

However, several of the interviewees also stressed that stricter rules and processes do not necessarily translate to the loss of freedom. It could just mean that there are more steps to cover when making choices or decisions that relate to dealing with personal data. As one of the interviewees highlighted:

“I think that decision-making or freedom is fine in general, but GDPR has made the practical doing of things more difficult.” (Interviewee 2)

At the same time, interestingly, all interviewees emphasized that there was an increased level of overall control over different systems and data within all departments and faculties in the university.

Two of the interviewees quoted:

“I think we have a better overall view with GDPR. This overall view was often talked about but was never prioritised. With GDPR, now we have more control over what we have in where.” (Interviewee 3)

“Information security definitely had a boost because of GDPR. Lot of guidelines and routines have been updated because of GDPR.” (Interviewee 4)

Additionally, even one of the interviewees further described how GDPR could potentially expand academic freedom within research at the university by making it legally possible to conduct research when acquiring consents is out of option:

“Getting consent is ethically correct. But there are some projects where it is not possible to get consents. In those cases, GDPR opens up possibility of processing personal data without consent in the legal basis of public interest. This is something that has opened up with GDPR.”
(Interviewee 4)

These pieces of evidence imply that the degree of discretionary constraints imposed by GDPR was perceived to be **Low** by the interviewees in the university administration.

CONTROL OF GDPR – HOW OR BY WHAT MEANS ARE THE PRESSURES BEING EXERTED ON THE UNIVERSITY ADMINISTRATION?

As explained in the prior sections, GDPR is undoubtedly a coercive pressure imposed by the government on the university through law. The 'law' factor was also equally stressed by all the interviewees within the university administration. Additionally, several of the interviewees emphasised the size of potential sanctions that could result from the breaking of this law. According to one of the interviewees, the amount of administrative fine that can go up to 20 million euros (GDPR 2016, Article 83) was a 'scare' for everyone in the administration:

"There are extremely high fines to get if we were not compliant with GDPR. That felt like 'We're going scare you to get compliant.' So that was a scare for everyone at the university administration."
(Interviewee 1)

Additionally, the evidence from interviews with this group suggests that the Ministry of Education and Research of Norway, as well as its' subordinate agency - Directorate for ICT & Joint Services in Higher Education & Research (UNIT) were actively pushing towards GDPR compliance. For example, UNIT provided guidelines and information for universities (*Interviewee 4*), was involved in the process of creating templates and documents (*Interviewee 5*), offered security consultants and experts (*Interviewee 5*), and initiated the network of Data Protection Officers in Higher Education

Sector in Norway (Interviewee 4). Thus, the degree of coercion behind GDPR was perceived to be **High** by the interviewees in the university administration.

When it comes to voluntary diffusion, all interviewees from this group repeatedly expressed their personal views about how ‘GDPR’ or ‘privacy rights’ or ‘protection of personal data’ is considered as ‘moral’ (Interviewee 1), ‘ethical’ (Interviewee 4), or ‘right’ (Interviewee 2, 3, 4, 5) thing to do. Consequently, the compliance process was initiated voluntarily by two administrative departments at the university – Internal Control and IT – about one year ahead of the scheduled implementation date, which was 20th July 2018 (Interviewee 1). Therefore, it can be implied that the degree of voluntary diffusion of GDPR was perceived to be **High** by the interviewees in the university administration. According to the interviewees in this group, the high degree of voluntary diffusion was further fuelled by the unusual factors such as:

- the management personals having ‘legal’ or ‘military background (Interviewee 1),
- the notion that Norwegians are generally accepting regulations and rules (Interviewee 2), and
- the university administration’s motivation to have better overall view of systems and data within the university (Interviewee 3).

Lastly, one of the interviewees quoted:

"If we hadn't been compliant, I think that must be because we made a mistake and we were not aware of that mistake. We were all interested in being compliant and doing the right thing."

(Interviewee 3)

This quote illustrates that the high level of voluntary diffusions by the university administration.

CONTEXT OF GDPR - WHAT IS THE ENVIRONMENTAL CONTEXT WITHIN WHICH THE PRESSURES ARE BEING EXERTED?

All interviewees in the university administration group overwhelmingly reported the high levels of uncertainties surrounding the GDPR compliance process at the university. These uncertainties can be categorised into three main groups - uncertainty regarding the content of GDPR, uncertainty regarding the practical application of GDPR to the research university, and uncertainty within the environment.

First, as members of the GDPR working group responsible for implementing GDPR at the university, all interviewees in this group were specifically responsible for the interpretation of the regulation itself. Their job was to make sure their own departments are compliant with GDPR. However, at the same time, none of them was familiar with the articles and concepts of GDPR. Consequently, nearly all of the interviewees stressed that they had to spend significant amounts of time trying to understand the content of GDPR, including its' main concepts and core principles. Even, one of the interviewees remembered that the very first meeting of the GDPR working group itself started with a question: "What is GDPR?" (Interviewee 1) Similarly, another interviewee referred GDPR as 'the elephant in the room' in the following quote :

"We all started with the question 'What is this?'. And I think it took a long time to understand what it was really about. I sense that like everybody had the same feeling about this. I personally spent so much time trying to read books and understand what it is really about. It's like the elephant in the room, like everybody sees it, but nobody really knows what to do with it."

(Interviewee 3)

Second, the majority of the interviewees also highlighted that it was a challenging job to apply GDPR to the context of the research university. Since GDPR was not specifically written for research or universities, the question "What does this means to us?" has been asked constantly. (Interviewee 1) One interviewee described the frustrations associated with the task in the following quote:

"There was frustration in the group in the months before GDPR came into effect. Because it was hard to grapple with how to deal with this on an institutional level. Also, what kind of decisions can we as a working group make on behalf of the university. That was uncertain."

(Interviewee 2)

Lastly, several of the interviewees pointed out that there was a high level of uncertainty in the university's environment. As one of the interviewees quoted:

"We first tried our best to find out how the university could meet the GDPR, but still felt like we did not have enough information. Feeling a bit lonely, the feeling that every institution was struggling with the same problems, but no one had the answers. There was a lot of uncertainty in the environment. Everyone was trying to comply, and everyone was struggling"

(Interviewee 2)

At the same time, one interviewee also described the frustration associated with the guidance provided by the authorities in the following quote:

“I do recall, we tried to get some guidance from the Data Protection Agency, but we were not really getting the answers we wanted. If I recall correctly, some of the questions we asked were right/wrong questions. Then their answers were like: ‘It is up to you’. That was frustrating.”

(Interviewee 3)

The above pieces of evidence imply that the level of uncertainty in the environment was perceived to be **High** by the interviewees in the university administration.

At the same time, all of the interviewees stressed the importance of the interconnectedness of Norwegian universities, especially the personal and professional networks of administrative support staffs when dealing with the uncertainties mentioned above.

Figure 7. Interconnectedness (University Administration)

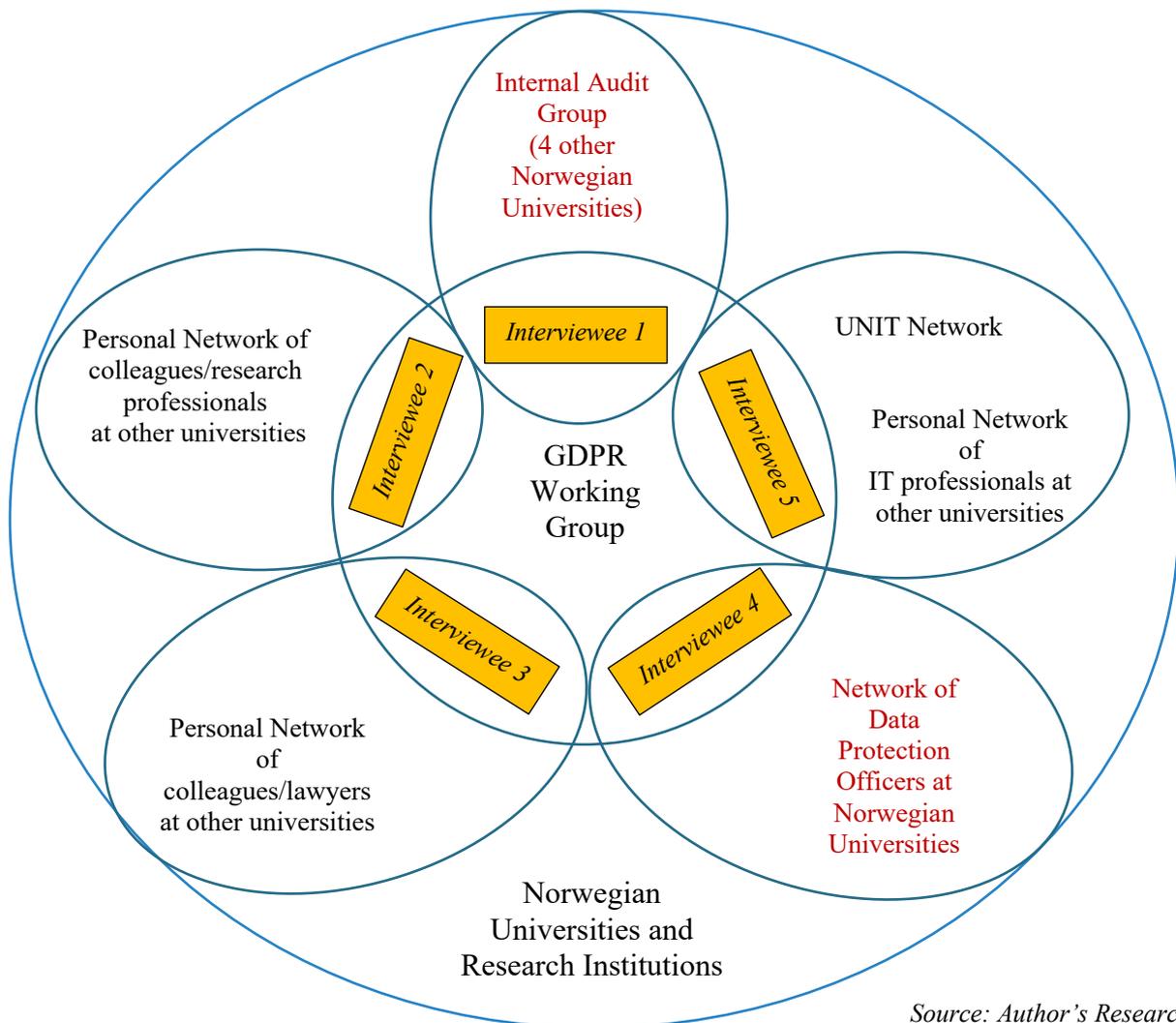


Figure 7 illustrates each interviewee's personal and professional networks utilised for dealing with GDPR compliance in the context of the research university. As highlighted in red, two of the networks were extensively utilised when it comes to dealing with uncertainties around GDPR- the pre-existing **Internal Audit Group** with four other Norwegian universities (*Interviewee 1*) and the **Network of Data Protection Officers** at Norwegian universities (*Interviewee 4*). Regarding these group and network, interviewees quoted:

"I was in the group with the four other universities, who had the same kind of working groups and we shared experiences and ideas and "how we did this or that". We tried to get a similar way to go about it. I felt it was an experience change exchange with our other universities. That was a good thing. Everyone was overwhelmed and insecure in the beginning."

(Interviewee 1)

"We as DPOs at universities, have our own network and we discuss cases there because we have many similar cases which are typical for the sector. Also, the position of DPO is quite lonesome sometimes. It is really good to have a discussion with other people with same jobs."

(Interviewee 4)

Concurrently, all interviewees reported that they had utilised their own personal network of colleagues (mainly the network of administrative support staffs who work at the same position as them in different universities) when dealing with GDPR. As one of the interviewees quoted:

"We tried to help each other as much as we could. For example, I have a lot of good colleagues in other universities, and if I had a GDPR question, then I would send an e-mail or call them, and they would help me as good as they could. And of course, the same goes for me."

(Interviewee 3)

Consequently, this sub-section concludes that the degree of interconnectedness was found out to be **High** by the interviewees within the university administration group.

THE INTERVIEWEES' PERSONAL AND COLLECTIVE PERCEPTIONS OF GDPR (THE UNIVERSITY ADMINISTRATION)

Based on the empirical findings described above, the following Table 12 was created to summarise each interviewee's perceptions of GDPR within the university administration group. The table also compiles the list of most dominating or common perceptions within the group under the column 'University Administration' to highlight the collective attitudes towards GDPR within the university administration group.

Table 12. Interviewees' personal and collective perceptions of GDPR (University Administration)

Dimensions	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee 4	Interviewee 5	University Administration
Legitimacy	High	High	High	High	High	High
Efficiency	High	High	High	High	High	High
Multiplicity	Low	Low	Low	Low	Low	Low
Dependence	High	High	High	High	High	High
Consistency	High	High	Low	Moderate	High	High
Constraints	Moderate	Moderate	Low	Low	Low	Low
Coercion	High	High	High	High	High	High
Diffusion	High	High	High	High	High	High
Uncertainty	High	High	High	High	High	High
Interconnected	High	High	High	High	High	High

Source: Author's Research

It can be observed from *Table 12* that the interviewees in the university administration group perceive GDPR in the same way in the majority of dimensions. However as highlighted in **red**, the interviewees' perceptions vary to some level when it comes to the **content factor** of GDPR – **the degree of consistency** between organisational goals and GDPR, as well as **the degree of constraints** imposed by GDPR.

4.1.2. FINDINGS FROM THE INTERVIEWS WITH THE LEADERS OF LABOUR UNIONS AT THE UNIVERSITY

This sub-section seeks to describe and summarise the empirical findings on perceptions of GDPR from the interviews conducted with *four informants representing the operative core*. In doing so, this sub-section assesses the informants’ personal and collective perceptions of GDPR by using Oliver’s (1991) institutional factors. Additionally, some quotes from the informants had been included to highlight the empirical findings when it was deemed necessary.

CAUSE OF GDPR – WHY IS THE OPERATIVE CORE PRESSURED TO COMPLY?

When asked about the main reasons and rationales behind complying with GDPR, all the leaders of labour unions at the university reported *High* degrees of legal and social legitimacy perceived to be attainable by conforming to GDPR. For example, one of the interviewees emphasised the importance of the relationship between social fitness and GDPR by quoting:

“Everyone is expected to be compliant as the rest of society. It would be very ‘strange’ to stand out in the crowd and resist GDPR openly.” (Interviewee 8)

Table 13. Quotes on the “Cause” factor and “Legitimacy” dimension (Operative Core)

CAUSE	Legitimacy Dimension
Interviewee 7	<i>“In general, Norway tend to comply with <u>EU regulations</u> very quickly. Also, since it became Norwegian <u>law</u>, the university, of course has to comply.”</i>
Interviewee 8	<i>“Main reason is because it is new <u>law</u>. So, we are very strict on doing legally right things in these situations.”</i>
Interviewee 9	<i>“It was <u>EU regulations</u> and Norwegian <u>law</u> that we had to follow as part of the government.”</i>
Interviewee 10	<i>“In Norway, we are very loyal to <u>EU regulations</u>. We also have to follow rules and <u>law</u>.”</i>

Source: Original quotes from the interviews

As highlighted in *Table 13*, words such as **‘law’** and **‘EU regulations’** were repeatedly mentioned by all interviewees within the operative core. At the same time, it is interesting to note that the majority of the interviewees in this group were highlighting the EU relevance of GDPR and emphasised the notion that Norwegian organisations tend to comply with EU regulations. (*Interviewee 7, 10*)

However, when interviewees were asked about the economic fitness (efficiency) attainable by GDPR compliance, the majority of them focused more on the individual cost of GDPR compliance and not so much on the potential administrative fines that can result from non-compliance. All interviewees indicated that they were aware of the existence and the size of administrative fines that can be levied under GDPR. At the same time, three of the four interviewees (*Interviewee 7, 9, and 10*) stressed that the level of bureaucracy and workload for professionals at the university increased significantly with GDPR compliance. Especially with activities related to conducting research, it became mandatory to document that researchers are following the procedures of GDPR, and that documentation process ‘steals’ much time from researchers (*Interviewee 7*). At the same time, these extra workloads or the ‘stolen’ time was not compensated with more research or teaching time. Two of the interviewees described the situation as:

*“The university administration said that we could get administrative support and guidance for documentation. But that does not work because we still have to do the work ourselves. Nobody can write on our behalf what we have done in our research project... I think GDPR is a **‘time-thief’**, that has not been compensated by more research time.”* (*Interviewee 7*)

“GDPR means that we as workers have to do more, but this is not compensated in any way to comply with the rules or learn to use new systems. Researchers and teachers have to do more within the timeframe they have. Usually this means that timeframe will be expanded without being compensated.” (*Interviewee 9*)

Considering the fact that time is a type of limited resources, it could be implied that the GDPR compliance is indeed a costly process for the professionals at the operative core and the degree of efficiency perceived to be attainable by GDPR compliance is found out to be **Low**.

CONSTITUENTS OF GDPR – WHO IS EXERTING PRESSURES ON THE OPERATIVE CORE?

When asked about the pressures or resistances from different stakeholders towards or against conformity to GDPR, all four interviewees agreed that the only pressure was coming from the top management of the university through faculty directors, deans and group leaders. Each faculty or department was given the responsibility to make sure their members are compliant with GDPR and following the rules and guidelines. The professionals at the university received links to the new routine descriptions and were asked to comply with those. (*Interviewee 7*) However, to what level these rules and routines were monitored within the faculties were still unknown. At the same time, several of the interviewees within this group touched upon the topic of academic freedom (*Interviewee 7, 9, 10*). For example, one of the interviewees even described how some professionals ‘delete everything and install their own stuff’ when they receive a new computer from the university. According to *Interviewee 9*, it is their way of ‘taking the control back’. Consequently, it can be implied that the degree of constituent dependence was perceived to be **Moderate** by the interviewees within the operative core.

At the same time, none of the interviewees reported any kind of strong resistance from any stakeholders. One of the interviewees speculated about the reasons for this:

“I do not think there was much loud resistance. But even if there was resistance, people do not talk about that loudly. They rather just don’t do it (complying with GDPR rules). And we just do not hear about that. I know people do not follow every GDPR rules even they know them.”

(Interviewee 9)

As a result, it was implied that the degree of constituent multiplicity was found out to be **Low** by the interviewees within the operative core.

CONTENTS OF GDPR – TO WHAT NORMS OR REQUIREMENTS THE OPERATIVE CORE IS PRESSURED TO CONFORM?

When they were asked a question - “How does GDPR go with the organisational goals of your university or your department?”, three interviewees reported some levels of inconsistency between GDPR and the goals of professionals at the university, while one interviewee reported high

consistency. The interviewee who reported a high level of consistency works as a nurse, and highlighted that nurse's work had been strictly regulated even before GDPR. (Interviewee 8) At the same time, other three interviewees all emphasised the inconsistency between GDPR and organisational efficiency-related goals such as 'having more time for research activities' (Interviewee 7), 'being able to finish tasks quickly' (Interviewee 9), or 'being able to share and edit information' (Interviewee 10). Even one of the interviewees felt that GDPR is 'too strict' in some areas, and quoted:

"I think the strictness (of GDPR) should have been lifted somewhat. For commercial use, I fully agree with the strictness there. But for training purposes or student assignments, it could have been lifted." (Interviewee 7)

Similarly, all interviewees agreed that GDPR increased the level of bureaucracy, made the practical doing of things more complicated and restricted. Examples include but not limited to:

- It became necessary to get the permit for collecting and storing data (Interviewee 7)
- It became necessary to document that the researcher is following the rules. (Interviewee 7)
- It was no longer permitted to store data in unsafe places like Dropbox. (Interviewee 7)
- It became impossible to use some programs and systems without agreeing. (Interviewee 8)
- It restricts how the information can be used or shared. (Interviewee 9)
- It restricts the use of some programs or teaching assistances for teaching. (Interviewee 9)
- It made it hard to share employee's information with the administration. (Interviewee 10)
- It was no longer allowed to share data in some formats. (Interviewee 10)
- It was no longer allowed to record interviews unless students/researchers were using decoded voice recorders. (Interviewee 7, 8, 9)

These pieces of evidence led to a conclusion that the degree of discretionary constraints imposed by GDPR was perceived to be **High** by the interviewees in the operative core.

CONTROL OF GDPR – HOW OR BY WHAT MEANS ARE THE PRESSURES BEING EXERTED ON THE OPERATIVE CORE?

All interviewees within this group acknowledged in their interviews that GDPR is a coercive pressure imposed by the EU and Norway through the means of legal coercion. At the same time, they also indicated that GDPR was implemented by the university management and was 'forced' on the

operative core through organisational guidelines and rules. Thus, the GDPR compliance process at the university was mostly ‘top-down’ (Interviewee 8). Similarly, two other interviewees quoted:

“Faculties had no freedom in how they should interpret regulations of GDPR. Because the routines and guidelines were sanctioned by the board” (Interviewee 7)

“It has been stated from the management that you have to follow rules. But I have not received any pressure from other parts to follow it” (Interviewee 9)

Despite GDPR being a coercive pressure, the evidence from interviews suggested that the degree of voluntary diffusion to GDPR compliance found out to be **Low** for the operative core. This could be explained by the factors mentioned in the previous sections. Additionally, one of the interviewees highlighted that most of the times, faculty members and teachers at the university do not always ‘think’ about GDPR before making decisions, and only ‘remembers’ it when it is pointed out to them:

“People just do things. And if it is pointed out to them that they have to remember GDPR, then the reactions are: ‘Oh yeah, of course, I will try to follow the rules.’” (Interviewee 9)

This suggests that GDPR is not always a key concern or priority for the operative core.

CONTEXT OF GDPR - WHAT IS THE ENVIRONMENTAL CONTEXT WITHIN WHICH THE PRESSURES ARE BEING EXERTED?

When asked about the uncertainties surrounding GDPR, there was an overwhelming consensus among the interviewees in the operative core that the level of uncertainty caused by GDPR compliance was found out to be **High**. As one of the interviewees noted:

“...In the beginning, the students were left in uncertainty. The faculty were left uncertain.... At the same time, people were curious to know whether the existing processes were compliant with GDPR.” (Interviewee 8)

While discussing around 'From where they get their information about GDPR', all interviewees listed different sources including but not limited to: their respective academic departments, some regional

organisations that they are a member of, labour union itself, and even the EU. Consequently, this indicated that GDPR was well-discussed topic within their networks and environments. The following *Table 14* presents some original quotations from the interviewees related to this topic.

Table 14. Quotes on the “Context” factor and “Interconnectedness” dimension (Operative Core)

CONTEXT	Interconnectedness Dimension
Interviewee 7	“In our department, we were also discussing previously about what we see as a problem with big companies that work with the internet. I think GDPR is actually a response to the misuse of highly personalised data. The problems with personal data and the strategic implications of GDPR are something that we have been discussing in <u>my department</u> since long before 2016.”
Interviewee 8	“There were a lot of discussions in Norway about new rules from the EU, and there were debates about what it would mean or how it would regulate things. But it is difficult to remember where exactly I got most of my information because I am also a member at the board of <u>a regional organisation</u> .”
Interviewee 9	“We started discussing about GDPR quite earlier because most of <u>our members</u> (of the labour union) have interests in the technical part and data storing in general.”
Interviewee 10	“I heard about GDPR quite early. I think it was in Brussels at <u>the EU</u> . We were there at the Norwegian house, and we spoke about GDPR, how it would affect Norwegian labour unions.”

Source: Original quotes from the interviews

Moreover, *Interviewee 10* also stressed the pre-existing high level of cooperation between the university management and labour unions at the university, in general. For example, *Interviewee 10* quoted:

“We have a very good tradition in our university. Labour union leaders openly talk with all the leaders at the university. We have regular meetings. As for me, I used to meet with the university administration for one hour every week. I remember we were talking about GDPR a lot in those meetings”.

(Interviewee 10)

Consequently, it was concluded that the operative core sees the level of interconnectedness within the organisational environment as ‘**High**’ when it comes to GDPR compliance.

THE INTERVIEWEES' PERSONAL AND COLLECTIVE PERCEPTIONS OF GDPR (THE OPERATIVE CORE)

Based on the empirical findings described above, the following *Table 14* was created to summarise each interviewee's perceptions of GDPR within the operative core. The table also compiles the list of most dominating or common perceptions within the group under the column 'Operative Core' to highlight the collective attitudes towards GDPR within the operative core.

Table 15. Interviewees' personal and collective perceptions of GDPR (Operative core)

Dimensions	Interviewee 7	Interviewee 8	Interviewee 9	Interviewee 10	Operative Core
Legitimacy	High	High	High	High	High
Efficiency	Low	Low	Low	Low	Low
Multiplicity	Low	Low	Low	Low	Low
Dependence	Moderate	Moderate	Moderate	Moderate	Moderate
Consistency	Low	High	Low	Low	Low
Constraints	High	High	High	High	High
Coercion	High	High	High	High	High
Diffusion	Low	Low	Low	Low	Low
Uncertainty	High	High	High	High	High
Interconnected	High	High	High	High	High

Source: Author's Research

It can be observed from *Table 14* that the majority of interviewees in the operative core group perceive GDPR in the same way in all dimensions. However, as highlighted in red, one of the interviewees' perception differs from others in one dimension – **the degree of consistency** between organisational goals and GDPR. As explained earlier, this can be due to the interviewee's line of work or profession, which is a nurse.

4.1.3. COMPARATIVE DISCUSSIONS ON THE DIFFERENT ORGANISATIONAL COMPONENTS' PERCEPTIONS OF GDPR

This sub-section presents some comparative summary on the different organisational components' perceptions of GDPR.

Table 16. The comparison between perceptions of University Administration and Operative Core

Institutional Factor	Dimension	University Administration	Operative Core
Cause	Legitimacy	High	High
	Efficiency	High	Low
Constituents	Multiplicity	Low	Low
	Dependence	High	Moderate
Contents	Consistency	High	Low
	Constraint	Low	High
Control	Coercion	High	High
	Diffusion	High	Low
Context	Uncertainty	High	High
	Interconnectedness	High	High

Source: Author's Research

Based on *Table 15*, the following key points can be summarised:

- The degree of *social legitimacy*, the degree of legal *coercion*, the level of *uncertainty*, and the degree of *interconnectedness* were found out to be equally **High**; and the degree of constituent *multiplicity* was found out to be equally **Low** for both organisational components.
- The degree of *economic gain (efficiency)*, the degree of goal *consistency*, and the degree of voluntary *diffusion* were found out to be **High** for the university administration and **Low** for the operative core.
- The degree of external *dependence* on pressuring constituents was found out to be **High** for the university administration and **Moderate** for the operative core.
- The degree of discretionary *constraints* imposed by GDPR was found out to be **Low** for the university administration and **High** for the operative core.

In conclusion, as expected earlier (*See 2.4*), two organisational components at the chosen university – university administration and operative core – perceive GDPR differently. To what degree or how they differ is a topic for the next chapter and is elaborated further in there.

4.2. THE DIFFERENT ORGANISATIONAL COMPONENTS' STRATEGIC RESPONSES TO GDPR

This section is organised the following way. First, it presents the empirical findings from the interviews with the administrative support staffs representing the university administration. Second, it moves to the empirical findings from the interviews with the leaders of labour unions representing the operative core.

4.2.1. FINDINGS FROM THE INTERVIEWS WITH ADMINISTRATIVE SUPPORT STAFFS AT THE UNIVERSITY

This sub-section summarises the empirical findings on strategic responses to GDPR from the interviews conducted with *five informants representing the university administration*. In doing so, this sub-section assesses the informants' personal and collective responses to GDPR by using Oliver's (1991) strategic responses. Also, some original quotes from the informants had been included to highlights the empirical findings when it was deemed necessary. Again, the information provided by the sixth informant was not given any weight in this analysis due to the reasons explained in the previous chapter.

EMPIRICAL EVIDENCE OF ACQUIESCENCE STRATEGY ADOPTED BY THE UNIVERSITY ADMINISTRATION

The evidence from the interviews with the five informants of this group suggests that the *Acquiescence strategies* were the most dominating strategy adopted by the university administration in responding to GDPR.

All interviewees stressed the fact that staffs at the university administration were aware of the importance and consequences of GDPR compliance and started working on the GDPR compliance process 'quite early'. To highlight this, *Interviewee 1* quoted:

"Chief Information Security Officer (at the university) and I started talking about this (GDPR) and how it is going to be important. It was also my job to work to get us compliant with these

kinds of things. So, we got together with all the other department in the administration and got their managers to appoint members to the working group that we were putting down to get us compliant with GDPR. This was in 2017. We started this work about one year ahead of the GDPR implementation date in Norway.” (Interviewee 1)

As can be seen from the quote above, the university administration’s very first reaction to GDPR was ‘forming of the working group which was responsible for the GDPR compliance at the university’. This working group was composed of representatives from different administrative departments – Risk Management (Internal Control), IT Support, Research Management, Student and Academic Affairs, and Human Resources, and these representatives were responsible to becoming compliant within their respective departments. (Interviewee 1) As for the first steps, standardised processes like a ‘gap analysis’ (Interviewee 1), and ‘risk assessment’ (Interviewee 4, 5) were also conducted. Using the results from the gap analysis and risk assessment, all administrative departments made lists of their then-existing processes and personal data in their systems, and from there necessary changes were implemented to achieve compliance. As a result, a lot of guidelines and routines have been introduced or updated because of GDPR. (Interviewee 4)

When asked to discuss the critical changes that had to be implemented at the university due to GDPR, interviewees revealed an overwhelming amount of evidence indicating the adoption of acquiescence strategies. This evidence includes but not limited to the activities related to **creating a new contract** for sending students for exchange studies, **signing data processing agreements** with IT service and system providers, **updating documentation process, purchasing new GDPR -approved equipment** and **implementing new data classification system**. The following original quotes are presented to elaborate more on these activities.

*“Let’s say some of our students want to do exchange studies somewhere else in the world, in another university. We cannot send out any information about our students unless the receiving university is compliant with GDPR requirements. So, we have created **a new contract** for this. With that contract, they conform to us that they handle the information of our students in the right way. Or else, we are not allowed to send information about our students.”*

(Interviewee 1)

“One of the first things we realised was that we needed to have the data processing agreements with all our IT service and solution providers. Thus, we went through all our systems and signed these agreements with the service solution providers. This has been a lot of paperwork.”

(Interviewee 5)

“Within research, a lot was in place already because this has been well-regulated in Norway for many years. The only thing missing was documenting what researchers were doing. So, we had to make changes in the system where documentation was easier to find. Also, for research, GDPR changed to that every sound recording was regarded as personal information. So, we needed to grapple with the fact that researchers need new equipment, made suggestions to the top management and bought some GDPR-approved recorders.”

(Interviewee 2)

“We have implemented classification system in Microsoft teams. So now, if there is sensitive data, I can store it there.”

(Interviewee 1)

At the same time, the majority of the interviewees within the university administration group mentioned that they faced with an overwhelming level of organisational uncertainties and anxieties when dealing with GDPR. Despite their best intentions to comply with GDPR, its’ extensive scope and vaguely defined concepts made it impossible to know all the answers to every problem (*Interviewee 1, 2, 3, 4, and 5*). These uncertainties pushed interviewees to look for answers and supports from their professional and personal networks. Consequently, the interviewees from the university administration described what can be seen as elements of ‘imitation’ form of acquiescence strategy. All interviewees within this group reported a high level of collaboration with other research universities when it comes to complying with GDPR and universities shared their best practices. Regarding this, some of the interviewees quoted:

“We were not only institution struggling with uncertainty. When we had questions that we didn’t know how to deal with it, our Data Protection Officer (DPO) used the network of DPOs regularly to discuss and ask for solutions to questions we raised.

(Interviewee 2)

“When the question of voice recorder came up, we went to different universities and asked them what they did. Then we got to know that we had to have GDPR-approved recorders.”

(Interviewee 5)

EMPIRICAL EVIDENCES OF OTHER STRATEGIES WITHIN THE UNIVERSITY ADMINISTRATION

There was little or no evidence from the interviews about the adoption of other strategies in response to GDPR, aside from the example of dealing with the topic of ‘Next of Kin’. *Interviewee 1* described the example as:

“We had a big discussion about the next of kin. When employees and students are asked about their next of kin, they give someone’s name and phone number, for example. However, that person has not consented for them to give his/her name to the university database... In the end, I think we solved this problem with ‘the need basis’. But we had big discussions about this.”

(Interviewee 1)

In general, GDPR sets a high standard for consent, but it also allows organisations to justify their reason for storing and processing data on a lawful basis. In the above example, the university stores and processes the personal data of next of kin *on the lawful basis for vital interests* where processing is necessary in order to protect the vital interests of the data subjects or of another natural person (GDPR 2016, Article.6). This example can be considered as a hint of compromise strategy where the university administration tried to balance differing expectations and interests of different constituents.

CONNECTION BETWEEN EMPIRICAL EVIDENCES OF PERCEPTIONS OF GDPR AND RESPONSES TO GDPR (THE UNIVERSITY ADMINISTRATION)

The absence of evidence about the adoption of strategies other than the acquiescence, relates back to the university administration’s perceptions of GDPR explained in the previous section. The following *Table 17* compiles the empirical findings on the university administration’s perception of GDPR as an institutional pressure into Oliver’s (1991) framework of predicting strategic responses based on the institutional antecedents explained in the preceding chapters.

Table 17. Expected Result based on the perceptions of GDPR (University Administration)

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
Cause					
• Legitimacy	High	Low	Low	Low	Low
• Efficiency	High	Low	Low	Low	Low
Constituents					
• Multiplicity	Low	High	High	High	High
• Dependence	High	High	Moderate	Low	Low
Content					
• Consistency	High	Moderate	Moderate	Low	Low
• Constraint	Low	Moderate	High	High	High
Control					
• Coercion	High	Moderate	Moderate	Low	Low
• Diffusion	High	Moderate	High	Low	Low
Context					
• Uncertainty	High	High	High	Low	Low
• Interconnectedness	High	High	Moderate	Low	Low

Source: Author's Research

As can be seen from *Table 17* above, the university administration's adoption of acquiescence strategies in responding to GDPR was understandable and supported by the interpretations of institutional factors and their dimensions.

4.2.2. FINDINGS FROM THE INTERVIEWS WITH THE LEADERS OF LABOUR UNIONS AT THE UNIVERSITY

This sub-section summarises the empirical findings on strategic responses to GDPR from the interviews conducted with *four informants representing the operative core*. In doing so, this sub-section assesses the informants' personal and collective responses to GDPR by using Oliver's (1991) strategic responses. Also, some original quotes from the informants had been included to highlights the empirical findings when it was deemed necessary.

EMPIRICAL EVIDENCE OF ACQUIESCENCE STRATEGY ADOPTED BY THE OPERATIVE CORE

The evidence from the interviews with the four informants of this group suggests that the *Acquiescence strategies* were the relatively dominating strategy adopted by the operative core when responding to GDPR. All interviewees described the instances of acquiescence strategies in detail, explaining what exactly they had to change or start doing to comply with GDPR requirements.

When asked to discuss the changes that came with GDPR, interviewees revealed an overwhelming amount of evidence indicating the adoption of acquiescence strategies. This evidence includes but not limited to the activities related to learning and teaching about GDPR compliant-research methods, storing no more than necessary information, change in the way of exchanging information, and change in the means of storing information. The following original quotes are presented to elaborate more on these activities.

“We had to do something we did not have to do before. It was to get a permit to collect and store data. Even master students had to apply for this permit to NSD (the Norwegian Centre for Research Data). So, it became a standard in the research method course with us that they learn about how to apply and what should be in an application for NSD to use personal data. Because at least in my department, or as the policy of most departments, or when I was involved in teaching research methods, we were very clear about these regulations and that it is absolutely necessary to comply with these regulations” (Interviewee 7)

“I am more aware of not storing things are not necessary. So, I don’t store as much as earlier.” (Interviewee 8)

“Previously, we used to e-mail back and forth. It was not good considering GDPR rules regarding how to exchange information, when it comes to sensitive information. So, the most concrete change was now we use Microsoft teams for sharing all the data.” (Interviewee 9)

“Many researchers used to store information on their computers even they should not have. With GDPR, they weren't allowed to store on their computers. After the research period has finished, the information also had to be deleted. That was a new eye-opener and wake-up call” (Interviewee 10)

EMPIRICAL EVIDENCES OF OTHER STRATEGIES ADOPTED BY THE OPERATIVE CORE

Even though the interviewees at the operative core understood the importance and benefits of GDPR compliance, they also reported some pieces of evidence that indicates the adoption of other strategies. The following text presents one to two examples of evidence for each strategy that has been adopted. These examples were relied heavily on the original quotes by the interviewees to preserve the authenticity of the evidence that has been found.

An example of Compromise Strategies (Balance)

In the following quote, *Interviewee 7* explains how the university appeared not to follow GDPR requirements, but it was following other laws that are above GDPR in the case of mid-term evaluation.

“The feedback of this mid-term evaluation, that also involves how the teacher has behaved, and it is spread to let's say, 400 students. One of the lecturers at the university, he questioned whether this was compliant with GDPR... The answer was that there are some laws that are above GDPR. Like the law of state employee and the law of publicity. In this case, it was allowed to distribute the information about the quality of the course under those laws. This is an example of how we (professionals) discussed whether the procedures we had were compliant with GDPR. And the answer was no. It is not compliant with GDPR. But it is complying with other laws that go above GDPR.” (Interviewee 7)

The above example can be seen as an evidence of compromise strategy where the university tried to balance differing expectations and requirements from different constituents in its' environment.

An example of Avoidance Strategies (Concealment)

In the following quote, *Interviewee 7* narrates an example of avoidance strategy in the case of voice recorders and recording of research interviews.

“We had master students who planned to do interviews as part of their data collection. But with GDPR implementation, by an internal regulation, the use of a smartphone was forbidden. At the same time, the university did not have any analogue recorders, and those recorders came

too late. I heard and seen some students saying 'Uff. I cannot get hold of recorders that are allowed to use. So I will just pretend that I have used them.' This was difficult to prevent because the university did not have the necessary equipment. So students took a chance of not being observed. Because they are under the pressure of time and other resources." (Interviewee 7)

As revealed by the above quote, because the students did not have access to the necessary equipment, and they were under pressure of time and resources, they choose the strategy of concealment (disguising of non-conformity).

Two examples of Defiance Strategies (Dismissal)

In the following two quotes, *Interviewee 9* narrates two examples of defiance strategy in the case of usage of devices and computer programs.

"While teaching, lecturers interact with their students, and use different software to teach. And some of this software might be not compliant with GDPR. But most of the lecturers continue using the software because using those software benefits more to the program and to the students." (Interviewee 9)

As revealed by the above quote, because of the perceived benefit of the software, the lecturer chose strategy of defiance (dismissal).

"When people get new computer from the IT Support, they just delete everything on that computer and install their own stuff. It is because they want to have control of their computer. Because IT has pre-installed things and they have some control, but professionals do not like control. So they just install their own operating system and software " (Interviewee 9)

As revealed by the above quote, because the professionals do not like control from university administration, they sometimes chose to ignore the pressures from them, and chose strategy of dismissal (ignoring explicit rules).

However, there was no evidence from the interviews about the adoption of manipulation strategies in response to GDPR from the operative core.

CONNECTION BETWEEN EMPIRICAL EVIDENCES OF PERCEPTIONS OF GDPR AND RESPONSES TO GDPR (THE OPERATIVE CORE)

The presence of evidence about the adoption of different strategies other than the acquiescence, relates back to the operative core’s perceptions of GDPR explained in the previous section. The following *Table 18* compiles the empirical findings on the operative core’s perception of GDPR as an institutional pressure into Oliver’s (1991) framework of predicting strategic responses based on the institutional antecedents explained in the preceding chapters.

Table 18. Expected Result based on the perceptions of GDPR (Operative Core)

Predictive Factor	Strategic Responses				
	Acquiesce	Compromise	Avoid	Defy	Manipulate
Cause					
• Legitimacy	High	Low	Low	Low	Low
• Efficiency	High	Low	Low	Low	Low
Constituents					
• Multiplicity	Low	High	High	High	High
• Dependence	High	High	Moderate	Low	Low
Content					
• Consistency	High	Moderate	Moderate	Low	Low
• Constraint	Low	Moderate	High	High	High
Control					
• Coercion	High	Moderate	Moderate	Low	Low
• Diffusion	High	Moderate	High	Low	Low
Context					
• Uncertainty	High	High	High	Low	Low
• Interconnectedness	High	High	Moderate	Low	Low

Source: Author’s Research

As can be seen in Table 18, adoption of strategies of acquiescence, compromise, avoidance, and defiance in response to GDPR were supported by the interpretation of dimensional factors.

4.2.3. COMPARATIVE DISCUSSIONS ON THE DIFFERENT ORGANISATIONAL COMPONENTS' RESPONSES TO GDPR

In conclusion, as expected earlier (*See 2.5*), two organisational components at the chosen university – university administration and operative core –responded GDPR differently. The following *Table 19* summarises and illustrates the differences in the empirical findings from the interviews with both organisational components.

Table 19. The comparison between responses of University Administration and Operative Core

Organisational Component	Strategic Responses Employed				
	Acquiesce	Compromise	Avoidance	Defiance	Manipulation
University Administration	+	-	-	-	-
Operative Core	+	+	+	+	-

Source: Author's Research

As seen from the above *Table 19*, even though the acquiescence strategies were dominant in both organisational components' responses to GDPR, the operative core demonstrated more elements of other strategies (compromise, avoidance, and defiance) compared to the university administration. This is consistent with the expectations presented in the Chapter 2.

5. DISCUSSION

This chapter further discusses the expectations presented in Chapter 2 against the empirical results presented in Chapter 4. It also touches upon the discussion about how well Oliver's (1991) framework fitted for the empirical case and summarises the key arguments in relation to the contribution this study makes to the research literature about organisational responses to institutional pressure. This chapter finishes by mapping out the implications of this thesis for future research.

5.1. EXPECTED PERCEPTIONS AND EMPIRICAL RESULTS

As stated earlier, by considering the unique characteristics of GDPR with structural decoupling nature of research universities, the following general expectation was proposed in the preceding Chapter.2.

EXPECTATION 1: The perceptions or interpretations of GDPR as an institutional pressure differ from one organisational component to another.

Based on the empirical findings from the interviews with two organisational components – university administration and operative core, this expectation was consistent within the empirical case. Indeed, the empirical evidence suggests that two organisational components at the chosen university – university administration and operative core – perceived or interpreted GDPR differently. As mentioned earlier, perceptions are by definition descriptions of the individual's or group's view of reality. At the same time, this paper believes that the research university's structural decoupling across different organisational components (Pinheiro et al. 2016, p.16) is the reason for these differing perceptions of institutional pressures.

At the same time, Chapter 2 also proposed the following two additional expectations.

1. University administration feels more substantial pressures from GDPR compared to the operative core because the university administration has a high degree of external dependence and is concerned about the potential administrative fine for non-compliance.

2. *The operative core feels less substantial pressures from GDPR compared to the university administration because the operative core is somewhat independent and is concerned about the technical or operational efficiency.*

In order to discuss the above expectations further, this chapter turns back to Oliver’s (1991) institutional antecedents. The following *Table 20* outlines the comparison between empirical results and the expectations when it comes to perceptions of GDPR.

Table 20. The comparison between empirical results and expectations of GDPR perceptions

Institutional Factor	Dimension	Empirical Results		Expectations	
		University Administration	Operative Core	University Administration	Operative Core
Cause	Legitimacy	High	High	High	High
	Efficiency	High	Low	High	Low
Constituents	Multiplicity	Low	Low	Low	Low
	Dependence	High	Moderate	High	Low
Contents	Consistency	High	Low	High	High
	Constraint	Low	High	High	High
Control	Coercion	High	High	High	High
	Diffusion	High	Low	High	High
Context	Uncertainty	High	High	High	High
	Interconnectedness	High	High	High	High

Source: Author’s Research

As seen from *Table 20*, compared to the operative core, the university administration indeed feels more substantial pressures from GDPR as expected. The empirical findings suggested even more substantial pressures compared to the expectation. The following text further explains how exactly each organisational component’s perceptions differ from the expectations of perceptions in which dimensions.

When it comes to the **university administration**, the empirical results and expectations of GDPR perceptions significantly differ on an institutional dimension – *the degree of constraints imposed* on the university administration. Initially, the degree of constraints was predicted to be High because compliance with the law often equals to a loss of discretion, a restriction, and admission of limited

autonomy (Pfeffer and Salancik 1978, p.94). However, from the administrative point of view, GDPR was also an opportunity to implement sound data management and exercise control over data available within the organisation by bringing the issue of data protection to the attention of the top management or board (European Commission 2019, p. 8). Similarly, for the university administration, GDPR was seen as an opportunity to gain more control within the university despite the potential loss of discretion to state-level authorities.

For **the operative core**, three institutional dimensions – *the degree of constituent dependence*, *the degree of consistency* between organisational goals and GDPR, and *the degree of voluntary diffusion* were the predictions that significantly differed from the empirical finding.

First, *the degree of constituent dependence* was initially predicted to be Low because university professionals are historically independent, and they value their academic freedom to a great extent (Jacobsen 2018, p.62). However, in this empirical case, the responsibility of GDPR compliance was cascaded to individual departments and faculties. Thus, the deans and heads were responsible for making sure their departments and faculties are compliant with GDPR. This arrangement made the operative core relatively more dependent on the pressuring constituent (In this case, the direct management of the professional– the head of department or dean) than initial expectation.

Second, *the degree of consistency* between institutional goals and GDPR was initially predicted to be high due to notion that data protection is an ethical issue and code of conducts of research and teaching activities requires high level of ethics. At the same time, it was found out that the operative core is more concerned about the efficiency-related goals rather than the high-level goals like ethics. Those efficiency related goals included but not limited to ‘having more time for research activities’ (*Interviewee 7*), ‘being able to finish tasks quickly’ (*Interviewee 9*), or ‘being able to share and edit information’ (*Interviewee 10*). Therefore, the evidence suggested that there was a high level of inconsistency between GDPR and goal of the professionals at the university.

Third, *the degree of voluntary diffusion* was initially predicted to be high, considering the ethical and moral reasons, and the attainable social and legal legitimacy. However, the evidence from empirical findings suggests that the operative core’s degree of voluntary diffusion to GDPR compliance was indeed low. This could be explained by the fact that GDPR is not always a key concern or priority for the operative core. Arguably conforming to institutional pressures may contradict requirements of operational efficiency (Greenwood et al. 2008, p. 4).

5.2. EXPECTED RESPONSES AND EMPIRICAL RESULTS

As stated earlier, by building on the expectations of differing perceptions, the following general expectation was proposed in the preceding Chapter.2.

*EXPECTATION 2: Two organisational components of a research university – university administration and operative core – **respond to GDPR differently** because of the differences in their perceptions of GDPR as an institutional pressure.*

Based on the empirical findings from the interviews with two organisational components – university administration and operative core, this expectation was consistent within the empirical case. Indeed, the empirical evidence suggests that two organisational components at the chosen university – university administration and operative core – perceived GDPR differently, as a consequence they responded to GDPR differently.

At the same time, Chapter 2 also proposed the following additional expectation.

*3. Even though the acquiescence strategies are expected to dominate in both organisational components' responses to GDPR, **the operative core might demonstrate more elements of other strategies** compared to the university administration due to the differences in their perceptions.*

In order to discuss the above expectations further, this chapter turns back to Oliver's (1991) strategic responses. The following *Table 21* outlines the comparison between empirical results and the expectations when it comes to perceptions of GDPR.

Table 21. The comparison between empirical results and expectations of GDPR responses

Dimension	Empirical Results		Expectations	
	University Administration	Operative Core	University Administration	Operative Core
Acquiescence	+	+	+	+
Compromise	-	+	-	+
Avoidance	-	+	-	+
Defiance	-	+	-	+
Manipulation	-	-	-	+

Source: Author's Research

As seen from *Table 21*, even though the acquiescence strategies were dominant in both organisational components' responses to GDPR, the operative core demonstrated more elements of other strategies (compromise, avoidance, and defiance) compared to the university administration, as expected.

However, in contrast to the proposed expectations, there was no evidence from the interviews about the adoption of manipulation strategies in response to GDPR from both organisational components. This could be linked to the notion that openly resisting GDPR can be considered as a breaking of the law or disregarding of fundamental human rights (GDPR 2016, Article.1). However, this finding might have been influenced by the notion that the interviewees might have been hesitant to talk about highly sensitive and potentially illegitimate practices.

5.3. CONCLUDING REMARKS AND IMPLICATIONS FOR FUTURE RESEARCH

This thesis has explored how different parts of a Norwegian research university perceived and responded to GDPR. This thesis found that the perceptions or interpretations of GDPR as an institutional pressure differ from one organisational component to another, and the university administration feels more substantial pressures from GDPR compared to the operative core. Consequently, due to the differences in their perceptions of GDPR, two organisational components of a research university responded to GDPR differently.

In the previous general research on organisational responses to institutional pressure, “most empirical studies assume or imply that organisations enact *single* and *sustainable* responses. In doing so, they largely ignore the fact that different subunits find heterodox ways of responding to the accountability demands of their environment” (Greenwood et al. 2011, p. 351). Based on this identified research gap, this thesis contributes to the literature in this regard by applying Oliver's (1991) framework to predict, test and compare strategic responses enacted by different parts of a Norwegian research university when complying with the same regulative pressure. While this thesis belongs to the research area around organisational responses to institutional pressure, it could also be seen as research on the analysis of GDPR itself.

The results from this research can create value for practitioners by raising awareness of the potential differences in the different organisational components perceptions of and responses to GDPR as an institutional pressure. At the same time, this thesis seeks to create an insight into a topic not researched earlier and to be used as a background reference for further research about the subject. It can be used as a starting point both for qualitative and quantitative research to explore whether organisations react to institutional pressures homogeneously or not.

6. REFERENCES

- Barley, S.R. & Tolbert, P.S. (1997). Institutionalization and Structuration: Studying the Links Between Action and Institution, *Organization Studies*, 18(1), 93-117
- Berg, L. & Pinheiro, R. (2016). Handling Different Institutional Logics in the Public Sector: Comparing Management in Norwegian Universities and Hospitals. In Pinheiro, R., Geschwind, L., Ramirez, F. O., & Vrangbæk, K. (Eds). *Towards a Comparative Institutionalism : Forms, Dynamics and Logics Across the Organizational Fields of Health Care and Higher Education*. (p.145-168): Bingley Emerald.
- Bjørkquist, C. (2009) *Stakeholder Influence in Higher Education - Old Ideas in New Bottles?* (Doctoral dissertation). Karlstad University, Karlstad
- Bowen, G. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9, 27-40.
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford: Oxford University Press.
- Colesky, M., Hoepman, J.-H., & Hillen, C. (2016). *A critical analysis of privacy design strategies*. Paper presented at the 2016 IEEE Security and Privacy Workshops (SPW), San Jose, CA, 2016. Retrieved from: <https://ieeexplore.ieee.org/document/7527750>
- Cook, K., Shortell, S.M., Conrad, D.A., Morrisey, M.A. (1983). A Theory of Organizational Response to Regulation: The Case of Hospitals. *The Academy of Management Review*, 8(2), 193-205.
- DiMaggio, P., & Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147-160.
- EUROPA: Regulations, Directives and other acts. (2019 Mar 07). Retrieved from https://europa.eu/european-union/eu-law/legal-acts_en
- European Commission. (2018a). *Stronger protection, new opportunities - Commission guidance on the direct application of the General Data Protection Regulation as of 25 May 2018*. Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1517578296944&uri=CELEX%3A52018DC0043>
- European Commission (2019). *Communication from the commission to the European parliament and the council: Data protection rules as a trust-enabler in the EU and beyond – taking shock*. Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2019:374:FIN>
- European Free Trade Association (2018). *General Data Protection Regulation incorporated into the EEA Agreement*. Accessed at: <https://www.efta.int/EEA/news/General-Data-Protection-Regulation-incorporated-EEA-Agreement-509291>

- GDPR (2016). “REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 - on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (**General Data Protection Regulation**)”, Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2016:119:FULL>
- Greenwood, R., Oliver, C., Sahlin, K., & Suddaby, R. (2008). *The SAGE Handbook of Organisational Institutionalism*. Thousand Oaks, CA: SAGE.
- Greenwood, R., Raynard, M., Kodeih, F., Micelotta E.R., & Lounsbury, M. (2011). Institutional Complexity and Organizational Responses. *The Academy of Management Annals*, 5(1), 317-371.
- Haveman, H. A., Russo, M. V., & Meyer, A. D. (2001). Organizational Environments in Flux: The Impact of Regulatory Punctuations on Organizational Domains, CEO Succession, and Performance. *Organization Science*, 12(3), 253-273.
- Hutter, B. (2011). Negotiating social, economic and political environments: compliance with regulation within and beyond the state. In C. Parker & V. L. Nielsen (Eds.), *Explaining Compliance: Business Responses to Regulation* (p. 305-321): Edward Elgar.
- Jackson, J., Bradford, B., Hough, M., Myhill, A., Quinton, P., & Tyler, T. (2012). WHY DO PEOPLE COMPLY WITH THE LAW? Legitimacy and the Influence of Legal Institutions. *The British Journal of Criminology*, 52(6), 1051-1071.
- Jacobsen, D. I. (2018). *Organizational change and change management*. Bergen: Fagbokforl.
- Woolthuis, R.K., & Taminiau, Y. (2017). Waves of change - the dynamics of institutional pressures. 1-43.
- Lunenburg, F.C. (2012) Organizational Structure: Mintzberg’s Framework. *International Journal of Scholarly, Academic, Intellectual Diversity*, 14(1), 1-7.
- Morgan, G. (1986). *Images of organization* (1st ed.). Thousand Oaks, CA: SAGE.
- Morgan, G. (2006) *Images of Organization* (Updated ed.). Thousand Oaks, CA: SAGE.
- Mintzberg, H. (1983). *Structure in fives: Designing effective organizations*. Englewood Cliffs, N.J: Prentice-Hall.
- Mintzberg, H. (1992). *Structure in fives: Designing effective organizations*. Upper Saddle River, N.J: Prentice Hall.
- Mintzberg, H. (2009). *Tracking strategies: Toward a general theory of strategy formation*. New York, NY: Oxford University Press.
- Meyer, J.W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology*, 83(2), 340-363.
- Meyer, J.W., & Scott, R.W. (1983). *Organizational Environments*. Beverly Hills, CA: SAGE

Norwegian Ministry of Education and Research. (2020). Universities and University Colleges Retrieved from: <https://www.regjeringen.no/en/dep/kd/organisation/kunnskapsdepartementets-etater-og-virksomheter/Subordinate-agencies-2/state-run-universities-and-university-co/id434505/>

Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review*, 16(1), 145 -179.

Pfeffer, J., & Salancik, G.R. (1978) *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.

Pinheiro, R., Geschwind, L., Ramirez, F. O., & Vrangbæk, K. (2016). *Towards a Comparative Institutionalism : Forms, Dynamics and Logics Across the Organizational Fields of Health Care and Higher Education*. (1st ed.). Bingley, England: Emerald.

Powell, W. W. (1991). Expanding the scope of institutional analysis. In: Powell, W., DiMaggio, P. (Eds.), *The new institutionalism in organizational analysis* (p. 183-203). Chicago: University of Chicago Press.

Presthus, W., Sørum, H. & Andersen, L.R. (2018). *GDPR Compliance in Norwegian Companies*. Paper presented at NOKOBIT 2018, Svalbard. Retrieved from: <https://ojs.bibsys.no/index.php/Nokobit/article/view/543>

Purtova, N. (2018) The law of everything: Broad concept of personal data and future of EU data protection law. *Law, Innovation and Technology*, 10(1), 40-81

Scott, R.W. (1995). *Institutions and Organisations*. (1st ed.). Thousand Oaks, CA: SAGE.

Scott, R.W. (1998). *Organizations: Rational, natural, and open systems* (4th ed.). Upper Saddle River, N.J.: Prentice Hall.

Scott, R.W. (2004). Institutional theory. In George Ritzer (Ed.), *Encyclopaedia of Social Theory*. (p. 408-414). Thousand Oaks, CA: SAGE.

Tolbert, P.S. & Zucker, L.G. (1983) Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880-1935. *Administrative Science Quarterly*, (30), 22-29

Yin, R. (2009). Case study research: Design and methods (4th ed., Vol. Vol. 5, Applied social research methods series). Thousand Oaks, CA: SAGE.

Zucker, L.G. (1977). The Role of Institutionalization in Cultural Persistence. *American Sociological Review*, 42(5), 726-743.

Documents used for Analysis

1. GDPR (2016). “REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 - on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation)”, Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2016:119:FULL>

2. Lovdata (2018) *Personopplysningsloven*. Retrieved from: <https://lovdata.no/dokument/NL/lov/2018-06-15-38>
3. European Commission (2019). *Communication from the commission to the European parliament and the council: Data protection rules as a trust-enabler in the EU and beyond – taking shock*. Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2019:374:FIN>
4. European Commission. (2018a). *Stronger protection, new opportunities - Commission guidance on the direct application of the General Data Protection Regulation as of 25 May 2018*. Retrieved from: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1517578296944&uri=CELEX%3A52018DC0043>
5. NSD (2018). *NSD Annual Report 2018*. Retrieved from: https://nsd.no/nsd/doc/nsd_annualreport2018.pdf
6. UNIT (2019) *ANNULA report 2018- 2019*. Retrieved from: https://www.unit.no/sites/default/files/media/filer/2019/04/%C3%85rsrapport%202018%20Unit_en_delig.pdf
7. European Commission. (2018b). *The GDPR: new opportunities, new obligations – What every business needs to know about EU’s General Data Protection Regulation*. Retrieved from: https://ec.europa.eu/info/sites/info/files/data-protection-factsheet-sme-obligations_en.pdf
8. Retrieved from: <https://www.unit.no/aktuelt/felles-forum-personvernombudene-i-hoyere-utdanning-og-forskning>

7. APPENDIX

7.1. INTERVIEW GUIDES

7.1.1. INTERVIEW GUIDE FOR DATA PROTECTION OFFICER AND WORKING GROUP MEMBERS

Informant Type	Data Protection Officer ¹ and Working Group Members
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PART 0. SCENE SETTING AND INTRODUCTION:

Thank you for agreeing to participate in this research. As I mentioned in my invitation e-mail, the goal of this research is to study organisational responses to regulatory change using Christine Oliver (1991)'s framework of organisational strategy to institutional change. In order to reach this goal, I have chosen GDPR compliance process at your institution as a case study. Thus, the questions of this interview are designed to understand:

- Your involvement and role in the GDPR compliance process at your institution
- Your view of GDPR as an organisational change,
- Your take on organisational handling of overall GDPR compliance process.

PART 1: GENERAL

Question 1: Could you guide me through the first three months of your work as the Data Protection Officer?

Question 1: Could you guide me through the GDPR compliance process at your institution as well as your role in the working group??

Probe for:

- ❖ Involvement or role in the process of defining strategy to respond GDPR – To find out if the informant is the right person to conduct the interview.

Possible follow-up questions:

1. How long have you been working as the Data Protection Officer?
2. Are you the first Data Protection Officer at your organisation or were there anyone else before you holding same or equal position? Were you involved in the compliance process before taking your official position?

¹ A natural person hired by a data controller or data processor that shall be included in all issues related to personal data protection

3. Prior to your appointment, what field did you work or study? IF NOT SECRET, how was the appointment process and how long did it take?
4. What was the first and most important task for you as the Data Protection Officer?

PART 2. GDPR COMPLIANCE AS AN ORGANISATIONAL CHANGE:

Question 2: In your mind, what are the most important changes that had to be implemented in your organisation because of GDPR? What exactly changed compare to the state before complying to GDPR?

Probe for:

- ❖ GDPR as an organisational change – To understand informant’s personal understanding or perception of GDPR;
- ❖ Informant’s priority when it comes to focus on different parts of GDPR – What aspect of change the informant focus on? (ex. Financial sanctions, appointment of Data Protection Officer, Obligation to Data subjects, security of data, or data breach process etc...)

Possible follow-up questions:

1. What are the most significant changes that had to be made within your organisation, within your department or at your workplace because of GDPR?

PART 3. OLIVER (1991)’s INSTITUTIONAL ANTECEDENTS - GDPR

Question 3: What were the main reasons that your organisation had to comply with GDPR? What would have happened in the case of non-compliance?

Probe for:

- ❖ **CAUSE**
 - Why are the pressures to comply being exerted?
 - Is there any **social legitimacy** perceived to be attainable from conformity?
 - Is there any **economic gain** perceived to be attainable from conformity?

Possible follow-up questions:

1. Is there any social benefit of conforming with GDPR? For example: Does GDPR conformity make the organisation more standardized in the eyes of public?
2. As an educational institute in Norway, how important is the GDPR compliance?
3. Is there any relationship between GDPR compliance and funding of your organisation?
4. Did these reasons for compliance change from “before compliance” to “after compliance”?

Question 4: How did the organisation become aware of GDPR and how did compliance process get initiated?

Probe for:

❖ **CONSTITUENTS**

- Who is exerting the pressures?
- To what degree multiple, conflicting, constituent expectations exerted on?
- To what degree the organisation is dependent on pressuring constituents?

Possible follow-up questions:

5. Are there any pressures for conformity or resistance from the following?

a. EU	e. Investors
b. Government	f. Staffs
c. Industry	g. Students
d. University Board	h. Others
6. From the list above, who are the most important body for your organisation when it comes to organisational survival or organisational performance?

Question 5: How does GDPR affect or go with the goals or visions of your organisation, department or you as an individual?

Question 6: How does GDPR compliance affect normal day-to-day operation or decision-making process?

Probe for:

❖ **CONTENTS**

- Who the pressures are?
- To what degree GDPR align with organisational goals?

- To what degree the organisation is losing autonomy when it comes to GDPR?

Possible follow-up questions:

7. Do you think the intentions or objectives of GDPR align with the long- or short-term goals of your organisation?
8. Is there any example where GDPR compliance influenced the organisational decision?
9. Does GDPR restricts the organisation in any way?

Question 7: To what degree educational institutions are subject to Data Protection Regulation? How did the GDPR was perceived within the industry and academic community?

Probe for:

❖ **CONTROL**

- How or by what means pressures are exerted?
- To what degree GDPR is coerced on the organisation?
- To what degree GDPR is diffused?

Possible follow-up questions:

10. As an educational institution, how important is to comply with GDPR?
11. What would have happened in terms of law, if the educational organisation found to be not complied with GDPR?
12. Do you have any information about how other educational institutions in Norway responded to GDPR?

Question 8: How aware the educational institutions were when it comes to consequences of non-conformity with GDPR? Were there any actions taken by authorities, the organisation or community to raise the awareness?

Probe for:

❖ **CONTEXT**

- What is the environmental context within the pressures are exerted?
- To what degree GDPR was related to uncertainty?
- To what degree GDPR was related to interconnectedness?

Possible follow-up questions:

13. To what level
 - a. Data Protection Agency
 - b. Ministry of Education
 - c. Community of Higher Education Institutionsgot involved in the process of raising awareness of GDPR compliance?
14. Was there any cooperation between educational institutions when it comes to GDPR compliance?
15. Were there any peer pressures when it comes to GDPR compliance?
16. What was the relationship between GDPR compliance and competition with the industry?

Question 9: Anything you want to add?

7.1.2. INTERVIEW GUIDE FOR LABOUR UNION REPRESENTATIVE

Informant Type	Labour Union Representative
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PART 0. SCENE SETTING AND INTRODUCTION:

The goal of this research is to study organisational responses to regulatory change. Specially how different parts of one organisation respond to same regulatory change. In order to research about regulatory change, I have chosen GDPR compliance process at UiA as a case study.

As you might already know, but GDPR simply is a new set of regulations that is designed to give EU citizens more control over their personal data. And it was fully enforced in Norway on 20th July 2018.

For the first part of my research, I have interviewed the working group members who implemented GDPR at the first place. This was to understand the change agents view on the response to GDPR. However, in order to complete my studies, I am also interested to know more about views of general employees at the university. Since you are the chief representative of the people in your labour union, I believed that you can provide an important insight on the issue from employee's point of view.

The questions of this interview are designed to understand:

- **Your and members of your unions' general view of GDPR,**
- **Your or your union's take on organisational handling of overall GDPR compliance process.**

Before delving into the question, could you tell me more about the labour union that you represent?

- Who are the members? How many members are there?
- What are the main rights concerned?
- How long have you been the chief representative?
- Were you in the union when GDPR was being implemented? Around July 2018?
- What is the umbrella organisation? Do you represent other small unions if necessary?

PART 1: GENERAL

Question 1: How much aware you are of GDPR? What does GDPR mean to you or your union?

Probe for:

- ❖ Informant's general understanding about GDPR.

Possible follow-up questions:

5. If you have to describe GDPR in your own words, how would you put it?

PART 2. GDPR COMPLIANCE AS AN ORGANISATIONAL CHANGE:

Question 2: Could you guide me through the times that you or your union members were faced with issues regarding GDPR? What are the most significant changes with implications for your union's members?

Probe for:

- ❖ GDPR as a change process – To understand informant's personal understanding or perception of changes comes with GDPR;
- ❖ Informant's priority when it comes to focus on different parts of GDPR – What aspect of change the informant focus on? (ex. Financial sanctions, appointment of Data Protection Officer, Obligation to Data subjects, security of data, or data breach process etc...)

Possible follow-up questions:

6. In your mind, what are the most important changes that your union members or you felt because of GDPR?

PART 3. OLIVER (1991)'s INSTITUTIONAL ANTECEDENTS - GDPR

Question 3: What do you think were the main reasons UiA had to comply with GDPR? For union members, how important is the GDPR compliance?

Probe for:

- ❖ **CAUSE** – Informant's understanding about the cause. Does it match with implementing working group?
 - Why are the pressures to comply being exerted?
 - Is there any **social legitimacy** perceived to be attainable from conformity?
 - Is there any **economic gain** perceived to be attainable from conformity?

Possible follow-up questions:

7. Is there any social benefit of conforming with GDPR? For example: Does GDPR conformity make the organisation more standardized in the eyes of public?
8. Is there any kind of economic benefit of complying with GDPR?
9. As an educational institute in Norway, how important is the GDPR compliance?

Question 4: How did you or your union become aware of GDPR and how did you get informed about initiation of compliance process at UiA?

Probe for:

- ❖ **CONSTITUENTS** - Informant's experience of pressures. Does it match with implementing working group?
 - Who is exerting the pressures?
 - To what degree multiple, conflicting, constituent expectations exerted on?
 - To what degree the organisation is dependent on pressuring constituents?

Possible follow-up questions:

17. Are there any pressures for conformity or resistance from the following?
 - a. Working group?
 - b. Union members at UiA?
 - c. National Norway?
18. What was your labour union's view about complying with GDPR?

Question 5: How does GDPR affect or go with the goals or visions of your union or you as an individual?

Question 6: How does GDPR compliance affect normal day-to-day operation or decision-making process at your union? Do you have any examples where GDPR affected decisions made by your union or union members?

Probe for:

- ❖ **CONTENTS** - Informant's view about GDPR scope and purpose.
 - Who the pressures are?
 - To what degree GDPR align with organisational goals?
 - To what degree the organisation is losing autonomy when it comes to GDPR?

Possible follow-up questions:

19. Do you think the intentions or objectives of GDPR align with the long- or short-term goals of your union members, UiA or you as an individual?
20. Is there any example where GDPR compliance influenced the organisational decision?
21. Does GDPR restricts the organisation in any way?

Question 7: To what degree labour union members at educational institutions are subject to Data Protection Regulation? How did the GDPR was perceived within the members of labour union?

Probe for:

❖ **CONTROL**

- How or by what means pressures are exerted?
- To what degree GDPR is coerced on the organisation?
- To what degree GDPR is diffused?

Possible follow-up questions:

22. As an educational institution, how important is to comply with GDPR?
23. What would have happened in terms of law, if the educational organisation found to be not complied with GDPR?
24. Do you have any information about how other educational institutions or labour unions in Norway responded to GDPR?

Question 8: How aware the labour unions or some labour unions at different universities in Norway were with GDPR? Was there any discussion around the topic?

Probe for:

❖ **CONTEXT** – environmental response

- What is the environmental context within the pressures are exerted?
- To what degree GDPR was related to uncertainty?
- To what degree GDPR was related to interconnectedness?

Possible follow-up questions:

- 25. Was there any cooperation between labour unions when it comes to GDPR compliance?
- 26. Were there any peer pressures when it comes to GDPR compliance?

Question 9: Anything you want to add? Any examples from your work where GDPR was involved?

Probe for:

- ❖ Examples, cases and illustrations.

7.2. INFORMATION LETTER FOR CONSENT

Are you interested in taking part in the research project”:
“Organisational Response to Regulatory Change”?

This is an inquiry about participation in a research project where the main purpose is to **is to explore organisational responses to regulatory change**. In this letter we will give you information about the purpose of the project and what your participation will involve.

Purpose of the project

Purpose of the project is to explore organisational responses to regulatory change.

The project aims to answer research question: “How do organisations react or respond to changes in the regulatory environment or institutional pressures?” It is a master’s thesis and data collected will not be used for any other purposes than this project.

Who is responsible for the research project?

University of Agder is the institution responsible for the project.

Why are you being asked to participate?

You have been selected to participate because your main responsibility is related to a particular regulatory change which has been taken as a case study for this thesis.

What does participation involve for you?

If you chose to take part in the project, this will involve an interview. It will take approx. 45 minutes to 2 hours. Notes will be taken during the interview.

Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

Only student who is doing this masters’ thesis (Zolzaya Shagdar) and the supervisor (Dag Ingvar Jacobsen) will have access to the data.

I will replace your name and contact details with a code. The list of names contact details and respective codes will be stored separately from the rest of the collected data.

What will happen to your personal data at the end of the research project?

The project is scheduled to end 15 Jun 2020. Data will be anonymised and deleted after the project.

Your rights

So long as you can be identified in the collected data, you have the right to:
access the personal data that is being processed about you

request that your personal data is deleted
request that incorrect personal data about you is corrected/rectified
receive a copy of your personal data (data portability), and
send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority
regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

Based on an agreement with *University of Agder*, NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

University of Agder via *Zolzaya Shagdar (Student)* and *Dag Ingvar Jacobsen (Supervisor)*.

Our Data Protection Officer: Ina Danielsen

NSD – The Norwegian Centre for Research Data AS, by email: (personvern@nsd.no) or by telephone: +47 55 58 21 17.

Yours sincerely,

Supervisor Dag Ingvar Jacobsen

Student Zolzaya Shagdar

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Consent form

Consent can be given in writing (including electronically) or orally. NB! You must be able to document/demonstrate that you have given information and gained consent from project participants i.e. from the people whose personal data you will be processing (data subjects). As a rule, we recommend written information and written consent.

- *For written consent on paper you can use this template*
- *For written consent which is collected electronically, you must chose a procedure that will allow you to demonstrate that you have gained explicit consent (read more on our website)*
- *If the context dictates that you should give oral information and gain oral consent (e.g. for research in oral cultures or with people who are illiterate) we recommend that you make a sound recording of the information and consent.*

If a parent/guardian will give consent on behalf of their child or someone without the capacity to consent, you must adjust this information accordingly. Remember that the name of the participant must be included.

Adjust the checkboxes in accordance with participation in your project. It is possible to use bullet points instead of checkboxes. However, if you intend to process special categories of personal data (sensitive personal data) and/or one of the last four points in the list below is applicable to your project, we recommend that you use checkboxes. This because of the requirement of explicit consent.

I have received and understood information about the project [*insert project title*] and have been given the opportunity to ask questions. I give consent:

- to participate in (*insert method, e.g. an interview*)
- to participate in (*insert other methods, e.g. an online survey*) – if applicable
- for my/my child's teacher to give information about me/my child to this project (*include the type of information*)– if applicable
- for my personal data to be processed outside the EU – if applicable
- for information about me/myself to be published in a way that I can be recognised (*describe in more detail*)– if applicable
- for my personal data to be stored after the end of the project for (*insert purpose of storage e.g. follow-up studies*) – if applicable

I give consent for my personal data to be processed until the end date of the project, approx. [*insert date*]

(Signed by participant, date)

7.3. TEMPLATE OF THE INVITATION LETTER FOR INTERVIEWS

7.3.2. TEMPLATE OF THE INVITATION LETTER FOR INTERVIEWS (UNIVERSITY ADMINISTRATION)

Dear ...,

My name is Zolzaya Shagdar, and I am a master student at NORDIG master's programme at UiA. (More info about NORDIG programme: <https://www.uia.no/studier/innovative-governance-and-public-management-nordisk-master>)

For my master's research, I am studying **organisational responses to regulatory change**. After long discussions and work with my thesis supervisor **Dag Ingvar Jacobsen**, I decided to study the topic by taking ...'s response to GDPR as a case study.

By searching on the webpage of Norwegian Data Protection Agency, I have found out that you are the Data Protection Officer at ... Therefore, I think you are the most important person for my research and I am very interested in your experience and journey of GDPR compliance. I would greatly appreciate the opportunity to meet with you briefly to discuss about my research further.

Please reach out to me at your earliest convenience if you are able to find time to meet me. I am very flexible with my time for example in next week. I promise to not take too much of your time!

Thank you so much!

7.3.2. TEMPLATE OF THE INVITATION LETTER FOR INTERVIEWS (OPERATIVE CORE)

To whom it may concern,

Hope this e-mail finds you well in this surreal time.

My name is Zolzaya Shagdar, and I am a master student at the NORDIG master programme at UiA. For my master's research, I am studying about organisational responses to regulatory change. In order to study the topic, I decided to take higher educational institution (...)’s response to GDPR as a case study. For the first part of my research, I have conducted interviews with working group members' who implemented GDPR at ... and gathered their point of views about the topic.

After discussing with my thesis supervisor - Dag Ingvar Jacobsen, we agreed that it is absolutely necessary and desired to include views of ... employees who went through this change process. Also, my supervisor provided me your contact information and informed me that you are the chief employee representative of the at

Therefore, I believe you are one of the most important persons for my research and I am very interested in your experience with GDPR. I would greatly appreciate if you can spare some time for me to have a short interview with you over internet or phone about my research and ask few questions about your GDPR experience.

Please reach out to me at your earliest convenience. I am very flexible with my time for example in this week. I promise to not take too much of your time!

Thank you so much in advance for your support.

Zolzaya Shagdar,
A Masters Student at NORDIG
Tampere University/ University of Agder