Regulatory and Ethical Frameworks for Disinformation Risk Management: Empirical Evidence from GDPR and DSA (2020–2023)

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Abstract

The aim of the present study is to assess the ways in which the combined enforcement of the General Data Protection Regulation and the Digital Services Act (DSA) mitigates the risks of digital disinformation and enhances transparency in digital ecosystems. The analysis introduces the Disinformation Density Score (DDS), a composite index designed to quantify the scale and intensity of significant disinformation waves between 2020 and 2023. The methodological framework includes institutional theory, stakeholder theory, diffusion of innovations, and risk management approaches. The empirical part uses correlation and regression analysis applied to data on major disinformation events and GDPR fines. The results show a strong positive association of DDS with both the average size and frequency of regulatory sanctions, corroborating the role of disinformation as a measurable institutional and economic risk. The presented DIREC Model unifies regulatory enforcement, institutional pressure, stakeholder expectations, and ethical standards into a single analytical approach. The practical importance of the study lies in demonstrating how organizations and regulators can use the DDS and DIREC framework to assess information risks, anticipate enforcement actions, and develop strategies for sustainable digital governance.

For citation

Keywords

Disinformation, Digital Regulation, GDPR, DSA, Risk Management, Institutional Theory, Stakeholder Trust, Digital Ethics, DDS, DIREC Model.

Introduction

Digitisation alters the flow of facts and introduces systemic uncertainty in individual, computerized disinformation which corrupts society, bazaars, and policy-making [International Energy Agency, 2021, www]. COVID-19 [Hofman, 2020], the Russian Ukraine dispute [Espinel-Bermúdez, 2023] and the recent election [Dave, McNichols, Sabia, 2021] boosted its economic and reputational results, making the administration focus on the virtual direction discussion [Doumenis et al., 2021; Gamboa-Bernal, 2022; Travkina, 2020]. The EU has been at the forefront of supervisory chemical reactions in order to overcome the governing obstacle, as well as the GDPR and the virtual services execution, which are the latest responses to unite data protection, platform responsibility, and algorithmic clarity [Hofman, 2020; Ng, Carley, 2023; Pereira, 2021; Tarouco, 2023; Travkina, 2020; Yan, 2023; FIFA, 2022, www]. Disinformation is currently considered to be a strategic and regulatory hazard that damages confidence, retail stability, investor confidence, and puts franchisees at risk of fines and damage to reputation. [Burkhalter et al., 2021; Davari, Bertino, 2019; Huang, Yuan, 2019; Nam et al., 2020; Punnagai, Dayalu, 2019; Hu, Barradas, 2023; Kalinin, Edguer, 2023; Napoli, Napoli, 2019; Tan, 2022; Wolfs, Veldhuis, 2023; Zimdars, 2022]. To test whether there is a connection between disinformation and GDPR and DSA enforcement in 2020-2023, the manuscript proposes a Disinformation Density Score that integrates arrested development analysis with institutional, stakeholder, and diffusion theory. [[Hillebrandt, 2021; Koistinen et al., 2022; Santos et al., 2021; Wilding, 2021; Warnke, Maier, Gilbert, 2024; Freiling, Stubenvoll, Matthes, 2023]. It contributes to the operationalization of disinformation as a quantifiable managerial and monetary factor influenced by management and reputational influences, and to the development of the position that ethical conformity is a tactical asset that contributes to resilience and confidence in virtual markets.

Theoretical Framework

In the context of the information economy, governance, management, and planned control, the situation of disinformation in the electronic kingdom is multidimensional and complex. In order to understand how disinformation influences the credibility, stakeholder confidence, and structural resilience of virtual biomes, [Santos et al., 2021; Freiling, Stubenvoll, Matthes, 2023; Koistinen et al., 2022; Wilding, 2021], and [30].Institutional theories classify the GDPR and DSA as restrictive control mechanisms that enhance validity by providing visibility and responsibility for data, which are enforced in the event of a failure by means of sanction and reputational damage. The Stakeholder Theory adds to the disinformation as a root of the decline in faith, which is exacerbated by the asymmetry of knowledge and the promotion of conformity as an index of virtuous responsibility and the support of reputational resources [Davari, Bertino, 2019; Huang, Yuan, 2019; Koistinen et al., 2022; Wilding, 2021; Evans, Hajli, Nisar, 2022; Moran, Weinroth, 2011; Renaud, Zimmermann, 2018; Wang, Zhou, 2021; Urziceanu, Pașcalău, 2019]. Diffusion of developments Theoretical description of how disinformation spread using Connection consequences and the amplification of procedures, and by which means disinformation can be narrowed by supervisory enforcement, which makes it more

traceable and more understandable [Tan, 2022, Zimdars, 2022, Santos et al., 2021]. Such activities are implemented in the research using the Disinformation Density Score as a measure of volume, expansion, influence, complexity, and counter narrative [Trstanova et al., 2022]. To conclude, the Crisis and Threat Administration Theory considers disinformation as a systemic nonfinancial vulnerability, with reputational and fiscal consequences, and where the GDPR and DSA adherence is a preventive control measure that enhances adaptability and reduces the crisis caused by misinformation.

The DIREC Model: An Integrative Framework for Disinformation Risk Governance. Fig. 1 presents the intended DIREC Model (Disinformation-Institutional-Regulatory-Ethical-Compliance Model), which combines the institutional theory, stakeholder theory, breakthrough diffusion, and crisis and hazard management, is presented in Table 1. The model predicts the mechanism of disinformation as a multidimensional vulnerability condition due to organizational burdens, expectations of interested parties, information dissemination, and methods of crisis response [Zimdars, 2022; Wilding, 2021].The essence of these principles lies in the fact that the DIREC Model attaches supervisory legality (adherence to the GDPR and the DSA) and moral obligation (clearity, trustworthiness, and reliance) to the duo lever of planned toughness. The model predicts how associations that confirm control compliance with careful disinformation redress and honest sales during the same period in the digital economy can achieve competitive competitiveness.
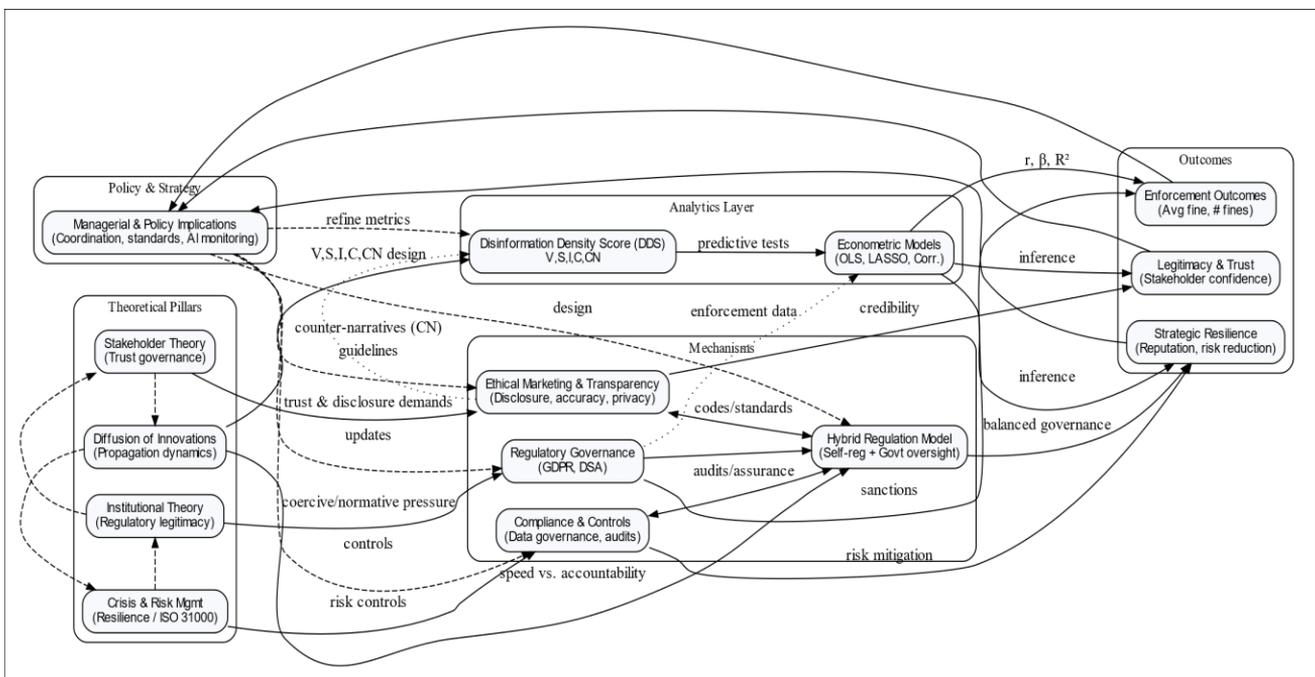
Source: Developed by the author based on the research data

Figure 1 - The DIREC Model

Literature Review

The situation of disinformation in the electronic kingdom can be multidimensional and intricate in terms of detail economics, management, management, and tactical governance [Moran, Weinroth, 2011; Renaud, Zimmermann, 2018; Wang, Zhou, 2021]. In order to understand how disinformation

influences credibility, stakeholder trust, and structural adaptability in electronic habitats, the paper integrates institutional theories, stakeholder theory, diffusion of breakthroughs, and crisis and emergency administration theory. The Institutional Theory considers the GDPR and the DSA to be restrictive systems of management, which enhance legality through the creation of openness and information availability, which are enforced, in the event of futility, through sanction and reputational damage. The stakeholder theory contributes to disinformation as a foundation of reliance weariness which enhances data asymmetry, and the administration of compliance as an index of ethical trustworthiness and support of reputational assets [Davari, Bertino, 2019; Huang, Yuan, 2019; Koistinen et al., 2022; Wilding, 2021; Evans, Hajli, Nisar, 2022; Moran, Weinroth, 2011; Renaud, Zimmermann, 2018; Wang, Zhou, 2021; Urziceanu, Pașcalău, 2019]. Diffusion of developments. The theory describes how disinformation can be disseminated using the impacts of networking and the amplification of procedures and how this can be restricted by means of administrative enforcement, which makes disinformation more traceable and more accountable [Tan, 2022]. The aforementioned movement is operationalized using the Disinformation Density Score as a measure of volume, dispersal, impact, complexity, and counter narrative in the current investigation. In conclusion, the Crisis and Risk Leadership Theory considers disinformation as a systemic nonfinancial liability with reputational and economic consequences, and whereby the GDPR and DSA compliance becomes a preventive management measure that enhances and mitigates the crisis caused by misinformation [Burkhalter et al., 2021; Wolfs, Veldhuis, 2023; Koistinen et al., 2022; Wilding, 2021; Santos et al., 2021; Renaud, Zimmermann, 2018; Röding et al., 2022; Bradshaw, 2019].

Methodology

The analysis design familiar with the current study is a mixed-method exploratory analysis including descriptive, correlational, and inferential analysis [Zimdars, 2022; Wilding, 2021]. The structure underpins the DIREC Model by including disinformation prosody, control information, and institutional, stakeholder, and risk management theory. [Zimdars, 2022; Wilding, 2021]. The proposed analysis has two objectives; the first objective is to measure the degree of disinformation on high-profile occasions in 202023 using the Disinformation Density Score (DDS) ; and the second objective is to verify the relationship between DDS and management results under the GDPR and DSA [Pereira, 2021; Burkhalter et al., 2021]. For the purpose of determining the predictive value of the DDS in relation to the frequency and severity of the GDPR fine, the OLS and LASSO arrested development models are familiar with, which can be justified by the concept of the risk management function [Wilding, 2021; Santos et al., 2021]. The review is based on three data sources that have been verified :(1) GDPR Enforcement Tracker (20182023) contribution forms for fines, misdemeanors, sectors, and areas [Burkhalter et al., 2021]. COVID-19, United States. The 2020 presidential election, the Russia-Ukraine conflict, the campaign against climate change denial, the Brazilian general election 2022, the rumor that the Financial Institute collapsed, and the major disinformation events of 2020-2023). Supplementary Materials, including the legal texts of the GDPR and the DSA, as well as peer-reviewed analysis above disinformation and computerized ethical motive administration, [Tan, 2022; Koistinen et al., 2022; Wilding, 2021]. These datasets allow the association of the principles of the DDS and the governing measures, including the average all right size and the fine amount.The Disinformation Density Score (DDS) is a measure of disinformation intensity, which is anchored in a composite index of five dimensions which are burdened and designated a mark between 1 (minimal influence) and 10 (high control) (See Table. табл. 1).

Table 1 - Disinformation Density Score Metrics

Variable	Definition	Measurement Basis
VM – Volume of Misinformation	All false or misleading stories created and spread.	The number of checked misinformation items per event by fact-checking agencies and media monitors.
S – Spread	Speed and breadth of distribution on numerous platforms.	Social-media analytics diffusion metrics and supporting secondary research.
I – Impact	Observable effects on the popular opinion, the process of policymaking or the market dynamics.	Market changes, policy reactions, and behavior.
C – Complexity	Extent of thematic complication or cognitive challenge relating to the learning material.	Complexity of issues and uncertainty of technical nature.
CN – Counter-Narratives	Extent and rate of corrective or fact-checking information.	Counter-narrative to Disinformation ratio.

Source: Compiled by the author.

The overall DDS of every event is calculated using a weighted sum model:

$$DDS_i = (w_1\ VM_i) + (w_2\ S_i) + (w_3\ I_i) + (w_4\ C_i) + w_5(10 - CN_i)$$

where w_1 to w_5 are weighting coefficients that are adjustable based on the opinion of the experts and literature available, with special emphasis put on Impact and Spread as most dominant predictors of severity.

The DDS takes the values in the range of 0 to 50 (See Table. *табл.* 2), and can be categorized based on the interpretation thresholds as listed below: (1) 0–15: Low disinformation density, (2) 16–30: Moderate disinformation density, and (3) 31–50: High disinformation density.

Table 2 - Significant Disinformation Events (2020-2023) with Metrics Analysis

Year	Event	Volume of Misinformation (VM)	Spread (S)	Impact (I)	Complexity of the Event (C)	Counter-Narratives (CN)	Disinformation Density Score (DDS)
2020	COVID-19 Pandemic	9	9	10	8	5	31
2020	U.S. Presidential Election	10	10	10	7	4	33
2021	Capitol Riot (January 6)	8	8	9	7	6	26
2021	Hamas and Israel Conflict (May)	8	8	8	8	5	27
2021	Climate Change Denial	9	8	9	7	6	27
2021	Gas Prices Surge	6	5	5	5	5	16
2021	Bitcoin and Cryptocurrency Volatility	7	6	7	6	4	22
2022	Russia-Ukraine Conflict	9	9	10	8	5	31
2022	Qatar World Cup	6	5	5	4	3	17
2022	Monkeypox Outbreak	7	6	6	6	4	21
2022	Brazilian General Election	8	8	8	8	6	26
2022	Food Prices and Shortages	6	5	6	5	4	18
2023	Chinese Balloon Incident	6	5	6	4	3	18
2023	EU Digital Services Act (DSA) Implementation	3	3	2	3	2	9
2023	Banking System Collapse Rumors	7	6	7	6	4	22

Source: Compiled by the author.

To test the supposed relationship of disinformation density and GDPR sanction, a statistical Modeling duo prognostic model was built.

Model 1: Ordinary Least Squares (OLS) Regression

$$AverageFine_i = \alpha + \beta_i DDS_i + \in_i$$

(1) Dependent variable: Average GDPR fine per event (EUR), (2) Independent variable: Weighted average DDS

Hypothesis: to determine how much disinformation density predicts the financial magnitude of enforcement sanctions.

Model 2: LASSO Regression (Least Absolute Shrinkage and Selection Operator)

$$Number\ Of\ Fine_i = \alpha + \beta_i DDS_i + \in_i$$

(1) Dependent variable: the number of fines according to the General Data Protection Regulation per event. (2) Mitigation of overfitting and testing of the stability of the variables was used by regularisation.

In addition to resolving the predictive competence of the DDS in explaining the correct frequency, as well as recognising multicollinearity. Both cross-sectional arrested development analysis identical to R^2, adjusting R^2, mean square deviation, and p-values, and association evaluation were used in the system to prove inner coherence. The relationship coefficient of roentgen = 0,93 among DDS and the average of all right magnitude indicates that there is a strong useful association in that place, and roentgen = 1.0 among DDS and the total of fine indicates that there is practically perfect dependence nearby, which indicates overfitting in a small sample. The procedure of triangulation statistics and independent databases [Burkhalter et al., 2021; Trstanova et al., 2022] was used to ensure dependability, such as the GDPR Tracker, the European Union Commission, and the Collegiate Report. Construct cogency based on the theoretical robustness of the DIREC Model and its tendency to anchor the dimension of the DDS (VM, S, me, C, CN) in sound concepts validated on the theory of diffusion, risk supervision, and stakeholder credibility [Zimdars, 2022; Wilding, 2021; Freiling, Stubenvoll, Matthes, 2023]. Internal cogency has been confirmed through the use of arrested development diagnostics, and external cogency has been measured through the correlation of the consequences with the available literature, which can be false or false in relation to the functions of planetary disinformation, i.e. The Cambridge Analytica case of 2018 [Wolfs, Veldhuis, 2023; Evans, Hajli, Nisar, 2022]. The whole data was made available publicly and without any individual identification number, so it complies with GDPR Article 89 on investigative procedures. The study method was founded on the values of Openness, Replicability, and Ethics, based on the current research on virtual ethical motives. The importance of accountability and responsible use of information in the DIREC Model is reflected in the current virtuous worry. Methodological Contribution The current analysis methodologically transforms disinformation into a measurable economic variable which in turn associates it with the consequences of oversight [Wilding, 2021]. The DDS is a portable tool for measuring information-risk exposure in a variety of territories [Trstanova et al., 2022]; near the same axis, the DIREC Model donation administration, ethical, and liability aspects of a single analytic tool that organizes compliance with computational analysis and strategic management theory. [Freiling, Stubenvoll, Matthes, 2023].

Results and Analysis

Here, the results of the requirements of the Disinformation Density Score (DDS) statistics and the connection between them and the GDPR enforcement index in 20202023 are presented. The measure of the prognostic consistency of the disinformation density over the average financial value of the GDPR fine and the frequency of fines per incident and industry was based on the measures engaging descriptive statistics, an association matrix, and OLS and LASSO regression models. Conclusions show a statistically significant link between disinformation intensity and managing enforcement, which confirms the theory that greater exposure to disinformation leads to greater economic and reputational vulnerabilities. Descriptive Statistics in table. табл. 2 shows that, in addition to a significant increase in GDPR fines during 2020-2023, as well as a significant increase in DSS events during the current period, including the COVID-19 pandemic, the United States, 2020 presidential elections (13) and the conflict between Russia and Ukraine (7). The above-mentioned trends are comparable with those of previous research which has been associated with a global disaster, a wave of misleading information, and intensified regulatory activities [Gamboa-Bernal, 2022; Koistinen et al., 2022].Table. табл. 3 provides a summary of the descriptive statistics of the main variables that will be used in the analysis.

Table 3 - Descriptive Statistics Variables

Variable	Mean	Minimum	Maximum	Std. Dev.	Interpretation
Disinformation Density Score (DDS)	24.6	9	33	8.4	Moderate to high disinformation intensity
Average Fine (EUR, millions)	2.18	0.03	6.70	2.06	Moderate regulatory penalties
Number of Fines	244	105	472	103.4	Increasing enforcement activity across 2020–2023

Source: Compiled by the author.

Pearson correlation coefficient data (See Table. *табл.*4) shows a strong association among the levels of disinformation and the consequences of the requirements of the Regulation [Trstanova et al., 2022].

Table 4 - Pearson correlation coefficients

Variables	Correlation (r)	Significance (p)
DDS → Average Fine	**0.93**	0.0003
DDS → Number of Fines	**1.00**	< 0.001

Source: Compiled by the author.

The magnitude of which supports Institutional Theory expectations for coercion to increase as legitimacy risk increases [Zimdars, 2022; Freiling, Stubenvoll, Matthes, 2023], and the greater amount of disinformation generated, the greater is the institutional response via GDPR enforcement indicating that the regulatory system has the ability to respond with increased vigor to an escalation of digital risks [Burkhalter et al., 2021; Evans, Hajli, Nisar, 2022]. To examine predictive connections and also assess marginal effects, two regression models were evaluated.

Model 1: OLS Regression – Average Fine (EUR) (See Table 5)

$$AverageFine_i = \alpha + \beta_i DDS_i + \in_i$$

Table 5 - Model 1: OLS Regression – Average Fine (EUR)

Statistic	Coefficient	Std. Error	t-Value	p-Value	95% CI
Constant (α)	−1.12	0.42	−2.64	0.018	[−2.00, −0.24]
DDS (β₁)	**0.445**	0.071	**6.27**	**0.0003**	[0.29, 0.60]
R²	**0.86**				
Adj. R²	0.845				

Source: Compiled by the author.

The DDS model accounts about 86 percent of the variation (Fig. рис. 2) in the mean of the fine size and there is an indication that its predictive power is high. The findings indicate that with a one unit increase in DDS, the mean fine will go up by about 445,000 Euros. These results reveal the correlation assumed between the intensity of disinformation and regulatory cost and risk governance and institutional legitimacy variable of the DIREC Model.

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Model 1 - Predicting Average Fine (EUR):
                     OLS Regression Results
========================================================================
Dep. Variable:      Average Fine (EUR)  R-squared:              0.864
Model:                           OLS    Adj. R-squared:         0.845
Method:                Least Squares    F-statistic:            44.61
Date:              Wed, 28 Aug 2024    Prob (F-statistic):    0.000283
Time:                      07:09:20    Log-Likelihood:        -130.12
No. Observations:                 9    AIC:                     264.2
Df Residuals:                     7    BIC:                     264.6
Df Model:                         1
Covariance Type:            nonrobust
========================================================================
                                  coef    std err        t    P>|t|      [0.025      0.975]
------------------------------------------------------------------------
const                        -1.795e+05   2.55e+05   -0.705    0.504   -7.82e+05    4.23e+05
Weighted Average Disinformation Density Score  4.477e+05  6.7e+04   6.679    0.000    2.89e+05    6.06e+05
========================================================================
Omnibus:                       0.561   Durbin-Watson:           3.244
Prob(Omnibus):                 0.755   Jarque-Bera (JB):        0.519
Skew:                          0.426   Prob(JB):                0.771
Kurtosis:                      2.188   Cond. No.                 5.78
========================================================================

Notes:
[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.
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Source: Developed by the author based on the research data.

**Figure 2 - OLS Regression Results for Predicting Average
Fine (EUR) Based on Disinformation Density Score**

Model 2: LASSO Regression – Number of Fines (See Table. табл. 6)

$$Number\ Of\ Fine_i = \alpha + \beta_i DDS_i + \in_i$$

Table 6 - Model 2: LASSO Regression – Number of Fines

Statistic	Coefficient	Std. Error	p-Value	R²	MSE
Constant (α)	231.47	—	< 1e-100		
DDS (β₁)	**210.46**	—	< 1e-100	**0.9993**	37.45

The model 2 demonstrates a near perfect fit statistical result (R=0.9993) demonstrating that practically all the difference in the quantity of the fines awarded can be ascribed to the degree of

disinformation that existed. The high predictive power is very high which may reflect on the overfitting of the model on small sample size. Nevertheless, the sign and the magnitude of the coefficient substantiate the fact that with the increase in the density of the disinformation activities the number of the enforcement activities will also increase. The Fig. *рис*. 3 shows that the line of the scatter plot increases, which is evidence that there is a linear relationship; High-DDS events are observed in the upper right of the graph. They were of high intensity of disinformation and had been related to high fines [Doumenis et al., 2021; Hofman, 2020; Travkina, 2020].
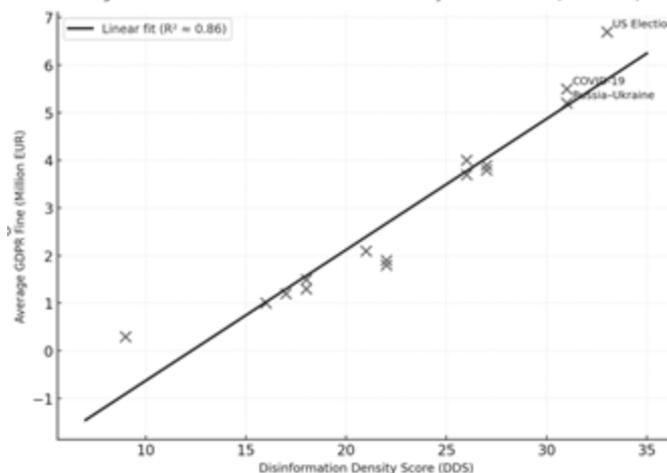
Source: Developed by the author based on the research data

Figure 3 - Correlation between Disinformation Density and GDPR Fines (2020–2023)

Fig. 4 shows a steep slope on the DDS axis which verifies that increases in disinformation intensity are associated with exponential growth in regulatory enforcement [Trstanova et al., 2022].
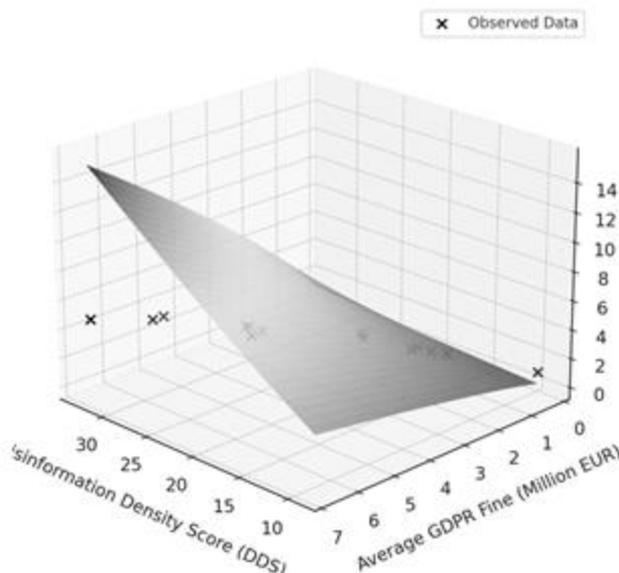
Source: Developed by the author based on the research data

Figure 4 - 3D Surface Plot of Fines, DDS, and Number of Violations

It is apparent that the media, telecommunications, and broadcasting sectors lead the lists of fines against the media since they are the focus of information dissemination [Burkhalter et al., 2021; Wolfs, Veldhuis, 2023]. It is followed by the sphere of industry and trade, which is mainly due to the breaches of data-processing that involved disinformation [Evans, Hajli, Nisar, 2022]. Enforcement totals are controlled by geographies of Ireland, Luxembourg and France following the existence of headlines of large platform In both cases (Meta, Tik Tok) within their field of operation [Wolfs, Veldhuis, 2023; Freiling, Stubenvoll, Matthes, 2023]. These trends are consistent with the EU-wide enforcement reports [Pereira, 2021; Trstanova et al., 2022].

Discussion, Implications, and Future Research. The empirical results turn out to be consistent with the basic assumptions of the DIREC Model and signal that digital disinformation is an objectively measurable economic and institutional risk, which is directly regulated and reputational in its impact [Zimdars, 2022; Wilding, 2021; Matthes, 2023]. The higher the GDPR enforcement, the higher the Disinformation Density Scores (DDS), which supports regulation as a tool to rebuild the institutional legitimacy in the state of high information disorder [Zimdars, 2022; Freiling, Stubenvoll, Matthes, 2023]

]. This confirms the workings of the Institutional Theory indicating that the degree of coercive pressure increases with the threats of legitimacy [Burkhalter et al., 2021; Huang, Yuan, 2019; Evans, Hajli, Nisar, 2022]. Regarding stakeholders, those organizations that decide to be transparent, privacy by design, and other ethical marketing tools get less fines imposed by regulatory bodies, a fact that, once again, supports the argument that ethics are a strategic resource, not a compliance cost [[Wang, Zhou, 2021; Straetmans, 2020; Parlov, Sičaja, Katulic, 2018]. Those results are in line with the Stakeholder Theory that proves when ethical communication and accountability is stronger, the trust and reputational resilience will be adequate during digital crisis [Moran, Weinroth, 2011; Renaud, Zimmermann, 2018; Urziceanu, Pașcalău, 2019]. On the governance level, the results are in favour of hybrid regulation that combines state enforcement and adaptive self regulation to enhance flexibility, accountability and risk resilience in the long run [Wolfs, Veldhuis, 2023; Warnke, Maier, Gilbert, 2024; Freiling, Stubenvoll, Matthes, 2023]. At the managerial level, the results indicate that the adherence to GDPR and DSA should be integrated in the main strategy, management, and operational design by following the privacy by design, data ethics governance, and clear crisis communication [Davari, Bertino, 2019; Huang, Yuan, 2019; Evans, Hajli, Nisar, 2022; Parlov, Sičaja, Katulic, 2018]. The DDS is one among the predictive tools that enable firms to transform compliance into a competitive benefit as it has the capability of revealing regulatory exposure and spikes in disinformation early in advance [Wilding, 2021; Trstanova et al., 2022]. Businesses that merge ethical selling and accountability algorithms achieve a positive brand trust and long-term stakeholder confidence [Wang, Zhou, 2021; Straetmans, 2020; Parlov, Sičaja, Katulic, 2018]. Policymaking wise, the results indicate hybrid regulatory models with a tradeoff on innovation and implementation, improved cross jurisdictional coordination and regulatory control with disinformation metrics such as DDS [Pereira, 2021; Napoli, Napoli, 2019; Wolfs, Veldhuis, 2023; Freiling, Stubenvoll, Matthes, 2023; Trstanova et al., 2022]. There is also open compliance and algorithmic responsibility that enhances trust of the citizens in the digital administrative systems [Pereira, 2021; Napoli, Napoli, 2019; Wolfs, Veldhuis, 2023; Freiling, Stubenvoll, Matthes, 2023; Trstanova et al., 2022]. Various limitations can be mentioned. This data will be limited to the most important incidents related to disinformation in the EU between 2020 and 2023, which will limit the generalization. It is correlational in analysis and the enforcement delays create lags in time which renders it more difficult to ascertain the cause [Trstanova et al., 2022]. Future studies should be longitudinal and jurisdictional scale up of the model as well as the introduction of

algorithmic amplification and behavioural susceptibility variables by more complex methods of analysis [Tan, 2022; Zimdars, 2022; Wilding, 2021; Freiling, Stubenvoll, Matthes, 2023]. Overall, the paper has demonstrated that sustainable digital trust can be based on the regulatory enforcement, ethical leadership, and adaptive compliance. Replacing the disinformation with an economic indicator in a system of hybrid governance, the DIREC Model bridges the gap between theory and practice and provides a sound foundation of reputational risk management in digital markets [Wilding, 2021; Freiling, Stubenvoll, Matthes, 2023; Evans, Hajli, Nisar, 2022; Parlov, Sičaja, Katulic, 2018].

Conclusion

This paper confirms that the DIREC Model is a comprehensive model of digital disinformation management by connecting the enforcement of regulations, ethical governance, and strategic administration. The results indicate that disinformation is a quantifiable economic and institutional risk, by considering the Disinformation Density Score (DDS), the intensity of disinformation and GDPR sanctions have a strong positive relationship. The findings indicate that the compliance with GDPR and DSA enhances the organizational legitimacy, ethical transparency increases the trust in the stakeholders, and the hybridity of the regulations provides the best answer to disinformation. On the whole, sustainable digital governance relies on regulatory enforcement coupled with moral accountability and responsive risk management in order to facilitate a strong and reputable digital economy.

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Регуляторные и этические основы управления рисками дезинформации: эмпирические данные по GDPR и DSA (2020–2023)

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Аннотация

Цель Цель исследования заключается в оценке того, как совместное действие Регламента по защите данных (GDPR) и Закона о цифровых услугах (DSA) влияет на снижение рисков цифровой дезинформации и повышение прозрачности цифровых экосистем. В работе предлагается интегральный показатель — Индекс плотности дезинформации (Disinformation Density Score, DDS), позволяющий количественно измерять масштаб и интенсивность дезинформационных волн в период 2020–2023 годов. Методы Методологическая база основана на институциональной теории, теории заинтересованных сторон, диффузии инноваций, а также на подходах риск-менеджмента. Эмпирическая часть включает корреляционный и регрессионный анализ, применённый к данным о крупных дезинформационных событиях и штрафах GDPR. Результаты работы Результаты показывают сильную положительную связь между DDS и как средним размером, так и частотой регуляторных санкций, что подтверждает роль дезинформации как значимого институционального и экономического риска. Представленная DIREC-модель объединяет нормативное регулирование, институциональное давление, ожидания заинтересованных сторон и этические стандарты в единый аналитический подход. Выводы Практическая значимость работы состоит в том, что модель DDS и DIREC могут использоваться организациями и регуляторами для оценки информационных рисков, прогнозирования санкций и разработки стратегий устойчивого цифрового управления.

Ключевые слова

Дезинформация, цифровое регулирование, GDPR, DSA, риск-менеджмент, институциональная теория, доверие заинтересованных сторон, цифровая этика, DDS, модель DIREC.

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