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## ORGANIZATIONAL ADAPTATION TO A DISRUPTION CAUSED BY THE FULL-SCALE RUSSIAN INVASION OF UKRAINE

*There is a vast body of knowledge on the social impact of disasters, but most published research concerns natural disasters with a devastating but momentary impact. However, very little attention is given to social disruptions caused by war, such as the situation in Ukraine after the full-scale russian\* invasion. Our research aims to understand the nature of disruptions in the work of Ukrainian commercial and non-commercial organizations caused by the full-scale russian invasion and to explore the adaptation mechanisms used to cope with it. For this purpose, we have conducted a qualitative investigation of 22 Ukrainian organizations and have used the typology of organized reactions developed by The Disaster Research Center to classify their responses.*

**Keywords:** disaster, social disruption, organizational adaptation, russian invasion, Ukraine, DRC typology.

In moments of disaster, all affected organizations suffer from a momentary disruption of their regular operations and social structures. It takes time, effort, and resources to return to normal operations. Often, adjustment requires relocating resources, rebuilding infrastructure, or even rethinking the purpose of the organization's existence. Much research has been conducted on how different types of disaster affect social groups (Quarantelli, 1993; Peek & Sutton, 2003), how various conditions and factors shape their reactions (Auf der Heide, 1989; Boin et al., 2016), how organizational structures are affected (Kreps, 1985; Kreps & Bosworth, 2007), what kinds of new behavior emerge and why (Stallings & Quarantelli, 1985; Wachtendorf, 2004), and how people within organizations make sense and adapt to the disruptions (Weick et al., 2005; Vollmer, 2013).

However, those researchers concentrated on the moment of disaster and right after it, and little attention is dedicated to how they adapt to a prolonged, cascaded, or repetitive disaster caused by a military conflict.

War in Ukraine started in 2014 with the russian annexation of the Crimean Peninsula in February 2014 and the invasion of regular russian troops to Donetsk and Luhansk regions later in the summer of 2014. From 2014 to 2022, 51,000 to 54,000 Ukrainians were injured or killed in this war, according to the United Nations Human Rights Monitoring Mission in Ukraine estimates (United, 2022).

On February 24, 2022, russia started a full-scale invasion of Ukraine. Multiple missile and air strikes took place all over the country, and russian troops

began the attack in various directions in the Kherson, Donetsk, Luhansk, Sumy, Kharkiv, Chernihiv, and Kyiv regions. The magnitude and impact of those events are way more enormous than the previous eight years of the russian-Ukrainian war. Our study explores the adaptation mechanisms of Ukrainian organizations, which they used to adapt to multiple disruptions caused by the full-scale russian invasion of Ukraine.

### Disaster, Catastrophe, Disruption, and Crisis as Social Phenomena

To correctly attribute the nature of the event and its impact on the organizations under study, we need to define several terms first. Previous research distinguishes a disaster, a catastrophe, a disruption, and a crisis. In geographical or ecological sciences, disasters are commonly defined as “non-routine events that incur considerable physical, economic, and social harm to the impacted areas and communities” (Kreps, 1985, p. 50).

In the social sciences, the definition of disaster commonly includes fracturing social structures and processes (Fritz, 1961). Lately, the focus has moved towards interpreting disaster as an entirely social phenomenon. Researchers define a disaster as a situation when a hazard agent intersects with a social system (Burton et al., 1978). Extending this definition even further to a social space, some researchers define disaster as a social event arising out of a process that involves a socio-cultural system's failure to protect its population from external or internal vulnerability (Bates & Peacock, 1993).

\* Writing the words “russia”, “russian” with a lowercase letter is intentional. This is a conscious decision of the author.

There are different types of disasters. Sociologists distinguish between natural (also called conventional) and conflict-generated disasters (Quarantelli, 1993). Enrico L. Quarantelli presumes that there is a unanimous consensus during a natural disaster that the previous status quo should be restored as quickly and thoroughly as possible; it generates a uniformity of pro-social reactions. In a conflict-generated disaster, though, a public consensus about immediate termination of the crisis is not solid (as there might be parties that are consciously and deliberately trying to inflict damage, destruction or disruption) so social reactions will vary, and the range of possible reactions is broader, including socially harmful behavior like looting and vandalism (Quarantelli, 1993, pp. 68–69).

Catastrophes are the extreme type of disasters when communities are affected to the extent that they cannot recover quickly or at all (Holguín-Veras et al., 2012, pp. 495–496). Quarantelli distinguishes seven characteristics of a catastrophe (Quarantelli, 2006, p. 39): (1) totality – all community structures are impacted, including emergency response services, (2) beheading – local officials are unable to perform their duties, (3) disconnection – help from the nearby communities cannot be provided, (4) disruption – most of the everyday community functions are sharply and concurrently interrupted, (5) exodus – mass out-migrations for protracted periods, (6) fear – mass media constructs an image of a catastrophe, (7) politics – due to the scale of the disaster, the central government has to become involved, so the response to the event becomes a political issue.

Crisis and disruption, in turn, are descriptions of a disaster's damaging impact on a social system.

Disruptions on an organizational level are defined as "...events challenging or intercepting the continuation of structures and processes by which a given configuration of social order has previously been specified by analysts" (Vollmer, 2013, p. 11).

A crisis is a disruption with some specific features. According to Boin, Hart, Stern, and Sundelius, a crisis "marks a phase of disorder in the development of a person, an organization, a community, an ecosystem, a business sector, or a polity... [Crises] are critical junctures in the lives of systems – times at which their ability to function can no longer be taken for granted. Crises occur when members of a social system sense that the core values or life-sustaining features of a system have come under threat" (Boin et al., 2016, p. 5). The authors note that the crisis is characterized by three key components: threat, urgency, and uncertainty.

Members of a social system experience threat as a sense of clear and present danger for the core values or life-sustaining features of a system. The threat

does not have to materialize before it becomes widely seen as one. It is the perception that makes a threat real in its consequences (Boin et al., 2016, p. 5).

Urgency is defined as a general perception that the threat is here, it is real, and it must be dealt with as soon as possible (Boin et al., 2016, p. 6).

Uncertainty pertains both to the nature and the potential consequences of the threat: people are not sure about what is happening, how it happened, what is next, and how bad it will be. Uncertainty also applies to other aspects of the crisis, such as people's initial and emergent responses and the search for possible solutions (Boin et al., 2016, p. 7).

Further in this research, the term "disaster" is used to describe the full-scale Russian invasion and "disruption" to describe the impact it made on the organizations we have studied.

### **Factors Affecting Organizational Reaction to a Disruption**

Researchers have identified several factors that affect organizations' responses to disruption (Auf der Heide, 1989; Drabek & McEntire, 2003; Quarantelli, 1993; Wachtendorf, 2004). The type and form of the reaction might be shaped by (Drabek & McEntire, 2003, p. 99): the perception of an emergency situation; relevant pre-crisis social relationships, supportive social climate; shared values and a culture of responsibility; blame assignment; the degree of planning before and experience in previous disasters; the availability of specific resources; socio-economic status of the participants.

Other researchers think that emergent phenomena are most likely to occur in those conditions: when demands are not met by existing organizations (Auf der Heide, 1989); when traditional tasks and structures are insufficient or inappropriate (Stallings & Quarantelli, 1985); when the community feels it necessary to respond to or resolve their crisis situation (Wenger, 1992).

Quarantelli assumed that type of disaster (conventional or conflict-generated) also defines the challenge organizations will encounter. He made six propositions about the effects of conflict-induced disasters compared to conventional ones (Quarantelli, 1993):

1. During natural disasters, individuals react actively and in a pro-social mode; in conflict-generated disasters, there is more variability in behavior, including anti-social behavior.
2. Conflict-generated disasters have longer-lasting consequences than natural disasters.
3. Organizations have more problems managing conflict-induced disruptions than those caused by natural disasters.

4. Organizational changes are more likely after conflicts than after natural disasters.

5. Community preparations for and emergency time responses to natural disasters are aimed more at coordinating efforts, while in conflict-induced disasters, the goal is more control over community reaction.

6. There are some selective but different longer-run outcomes and changes after disasters and riots in impacted communities, although the surfacing of negative aspects occurs in both.

When a disaster disrupts the organization's operations, it usually brings to life new demands. Researchers distinguish demands generated by a specific disaster agent (e.g., flood or earthquake) and those caused by an organization's efforts to manage the disaster (Quarantelli, 1997). The first they call agent-generated demands, and the second are called "response-generated demands". Quarantelli thinks that agent-generated demands "...because they are specific to the disaster agent involved, require a more tactical or contingency approach, and a response can only be partly anticipated beforehand" (Quarantelli, 1997, p. 42). On the other hand, response-generated demands could potentially be foreseen and therefore should be included in an organization's contingency planning.

The existence of an emergency plan, its relevance to a particular emergency situation, and the availability of required resources play an essential role in shaping the organization's reaction to a disruption (Wachtendorf, 2004). If the plan is in place but not feasible, an organization will apply restorative improvisation; if it is partly irrelevant, an organization will use adaptive improvisation. If there is no plan, then it will practice creative improvisation.

### Organizational Adaptation to a Disruption

Organizations can respond to the disruption in different ways. The Disaster Research Center (DRC) typology describes four types of possible responses to a disruption (Dynes, 1970):

- established – when no changes in organizational structure occur,
- expanding – when an organization involves more resources in doing the same tasks,
- extending – when an organization adds new parts (groups) that extend its functions, and
- emerging – when new structural forms (groups) and tasks appear to cope with the disruption.

Later this approach was developed by Tricia Wachtendorf, who suggested three types of organizational improvisation that might take place during the disruption (Wachtendorf, 2004):

- reproductive improvisation when a degraded or disrupted element of the system is being recreated,
- adaptive improvisation when a system element no longer understood as appropriate is being reshaped,
- and creative improvisation when an emerging system element is being created to respond to a new demand.

Another structural approach was proposed by Gary S. Kreps, who focused on how organizational roles are enacted in the case of disruption. He concentrated on role allocation (consistent or inconsistent), role relationships (continuous or discontinuous), and role behavior (conventional or improvised) to better distinguish between types of formally organized and improvised organizational responses to a disruption (Kreps & Bosworth, 2007).

Kreps' structure is based on four elements: domains and tasks (which are the structural ends of the organization), and resources and activities (which are the structural means of the organization) (Kreps & Bosworth, 2007). Kreps' idea is that in a normal situation, an organization is formed from domains to tasks to resources to activities (D-T-R-A order). In contrast, in the case of disruption, the order is inverted: from actions relevant in the particular emergency situation to resources, with later structuration into corresponding tasks and new domains (A-R-T-D order).

Thomas E. Drabek criticized the DRC model as oversimplified because it does not reflect the complexity of varying reactions to a disruption (Drabek, 1987). However, despite the criticism, he adds only a few minor types of responses to the DRC typology, which does little to prove the model wrong or even to reshape it significantly. The new types of emergent responses Drabek added include (Drabek & McEntire, 2003, p. 100): quasi-emergence (same as DRC established groups); structural emergence (similar to DRC emerging organization); task emergence (same as DRC expanding organization); group emergence (same as DRC extending organization); type V or supraorganization – a structure that encompasses other organizations and response agents; emergence based on latent knowledge – this includes new groups that nonetheless have some prior common characteristics or experience; interstitial groups are formed between the responding organizations to facilitate the coordination of their efforts and shared resource usage.

To understand how individuals adapt to disruptions on a personal level, researchers employ the microinteractionist approach pioneered by Goffman and Garfinkel (Vollmer, 2013). Hendrik Vollmer describes how a disaster disrupts people's expectations of each other in an organization. Then, they are

restored by re-framing and re-keying, which leads to punctuated cooperation and then formalized in new formal roles and expectations (Vollmer, 2013).

Another approach to dealing with disruption on a personal level is sensemaking, described in the works of Karl E. Weick. According to his definition, “Sensemaking involves turning circumstances into a situation that is comprehended explicitly in words and that serves as a springboard into action... To make sense of the disruption, people look first for a reason that will enable them to resume interrupted activity and stay in action... If resumption of a project is problematic, sensemaking is biased towards identifying substitute action or toward further deliberation” (Weick et al., 2005, p. 409).

Weick proposes a sensemaking framework based on Donald Campbell’s application of evolutionary epistemology to social life (Campbell, 1997). It defines sensemaking as “...reciprocal exchanges between actors (Enactment) and their environments (Ecological Change) that are made meaningful (Selection) and preserved (Retention). However, these exchanges will only continue if the preserved content is both believed (positive causal linkage) and doubted (negative causal linkage) in future enacting and selecting” (Weick et al., 2005, p. 414).

Factors affecting the organizational response to a disaster and the variety of possible reactions are summarized in Table 1. We grouped affecting factors into **environmental** (such as the type of disasters, the scale of their impact, and degree of preparation) and **individual** ones (like sense-making and reactions to

a disruption). Organizational responses were also grouped by the **scale** of the organizational disruption, the **type of new demands**, and the **ways organizations responded** (specifically, the kinds of response organizations, the order of reactions, and the types of improvisations that took place).

Our research aims to discover and describe specifics of Ukrainian commercial and non-commercial organizations’ adaptation to a disruption caused by the full-scale Russian invasion. For this purpose, we will focus on the level of organization and will not consider the individual level of adaptation. We will also test the presence of certain environmental factors, as their effects can be observed at the organizational level. It will lead to the following research questions, which we will try to answer throughout our research.

1. *To what extent did the full-scale Russian invasion of Ukraine disrupt the organizations?*

2a. *What new problems and demands emerged after the full-scale Russian invasion?*

2b. *Were new demands agent-generated or response-generated?*

2c. *What types of reactions did those demands spawn?*

3. *Were new problems typical for a conflict-generated or conventional disaster?*

## Research Data

Empirical part of the research was conducted using unstructured and semi-structured interviews. From September 2022 to March 2023, we conducted

Table 1. Factors and Types of Organizational Reactions to a Disaster

ENVIRONMENT FACTORS	← ORGANIZATIONAL REACTION →		INDIVIDUAL REACTION
<b>Type of disaster</b> – Conventional disaster – Conflict-generated disaster	<b>Impact on a social system</b> – Emergency – Disruption – Crisis	<b>Type of new demands</b> – Agent-generated demands – Response-generated demands	<b>Sense making process</b> – Ecological change – Enactment (noticing, bracketing) – Selection – Retention
<b>Scale</b> – Emergency – Disaster – Catastrophe	<b>Type of response organization</b> – Established – Extending – Expanding – Emerging	<b>Order of structures involved</b> – Domain-Tasks-Resources-Activities – Activities-Resources-Tasks-Domain	<b>Personal reaction to a disruption</b> – Sense making – Re-framing – Re-keying – Punctuated cooperation – New formal roles and expectations
<b>Presence and Relevance of Emergency Plan</b> – No plan – Plan is present but makes no sense – Plan is relevant but not feasible – Plan is relevant and feasible	<b>Type of improvisation</b> – Business continuity – Business contingency – Reproductive improvisation – Adaptive improvisation – Creative improvisation		

22 interviews with business owners and managers representing 22 organizations from different industries and regions of Ukraine.

To recruit respondents, we used convenience sampling and snowball sampling methods. We contacted business owners and top managers we know personally and asked them for further recommendations. Also, we talked to the respondents from all regions of Ukraine and kept the balance between different industries and organizations of different sizes. However, as we started with personal connections, some industries (IT) and regions (North of Ukraine) prevailed in our sample.

Although pinpointing a discrete geographic location for a specific company was often problematic because employees were distributed and many worked remotely, we related companies to regions based on the location of their Ukrainian headquarters. Companies of the respondents are located in Western (one in Lviv, two in Ivano-Frankivsk, and one in Khmelnytskyi), Northern (one in Rivne, five in Zhytomyr, six in Kyiv, and two in Chernihiv), Eastern (one in Kharkiv, and one in Sumy), and Southern (one in Dnipro, and one in Zaporizhzhia) regions of Ukraine.

Also, interviewees represented various industries, from volunteer organizations to international law firms. Six companies are from IT; four are from industrial manufacturing, four are NGOs, two are from Legal Services. There is one representative from each of the following industries: Food and Catering, Food Processing, Equipment Sales and Maintenance, Residential Building Management, Travel, and Armed Forces.

The interview question was “What happened to your organization on and after February 24, 2022?” followed by “What changed in your organization?” The idea was to focus on the events and organization’s reactions induced by the full-scale russian invasion. Also, we wanted to induce as little structure as possible so those interviews could be reused for further research.

All participants were informed about the goal and methods of the research and provided oral informed consent before participating in the interview. After reviewing interview transcripts, they consented to use transcripts of their interviews in the study. Data are qualitative transcripts that contain details that could risk the anonymity of participants. They will not be made available.

### Scale of Disaster and Impact on Social System

*Research question 1. To what extent did the full-scale russian invasion of Ukraine disrupt the organizations?*

During the interviews, respondents mentioned that at the beginning of the full-scale russian invasion, they all experienced a disruption in their organizations’ operations. The duration of the disruption varied from “*Shocked, we continued working on the day of invasion*” (Respondent 1) to “*Still have not recovered our operations*” (Respondent 2). Considering the impact on a social system, the period immediately after the full-scale invasion was a crisis as it entailed threat, urgency, and uncertainty. However, interviewees told us that their organizations returned to work within 1 to 4 weeks and fully recovered their operations in 3 to 6 months. A typical reaction at the beginning of a full-scale invasion is illustrated by the quote:

*“The first two weeks were an adaptation to the new reality. Those who left and found a safe place came back to work. Those who stayed had adapted and, in a few days, also returned to work. From the second week, people began to contribute actively. The teams adopted; they switched to asynchronous mode. COVID-19 helped; people learned to work remotely. After changing the location and finding a stable Internet connection, people started working from new places”* (Respondent 3).

The extent to which organizations’ operations were disrupted depended on many factors from which we can distinguish the **target market**. Impact on the organizations that served domestic markets is much harder than on those who served foreign markets, like in the following quote:

*“Our work is closely tied to the economy, development, and new deals, but this all is not happening because there is no economy in Ukraine now. We keep working, helping clients, finding new types of work, and trying to work in new markets where we are not bound to a specific jurisdiction. However, it is not very easy because one must be licensed in a specific jurisdiction”* (Respondent 4).

The rest of the factors, including the production facilities’ physical damage, supply chain collapse, power outage, and relocation of personnel, were overcome during the following couple of months.

From the interviews, the impact of the full-scale russian invasion was much more than just a simple emergency, as it disrupted the operations of all our respondents. However, it was also **not a catastrophe** based on the definition by Holguín-Veras (Holguín-Veras et al., 2012) and Quarantelli (Quarantelli,

2006), as most respondent organizations could recover their operations to a certain degree pretty quickly. That limited effect of the full-scale russian invasion of Ukraine can be expected and explained by the fact that the russian invasion started in 2014, so many organizations might have adapted to the war and re-used adaptation mechanisms from previous disasters (like the COVID-19 pandemic). The re-use of the adaptation mechanisms from the previous disasters will be considered in more detail in the next section.

### **Demands Generated by Full-Scale russian Invasion**

*Research question 2a. What new problems and demands emerged after the full-scale russian invasion?*

*Research question 2b. Were new demands agent-generated or response-generated?*

*Research question 2c. What types of reactions did those demands spawn?*

Researchers distinguish demands generated by a specific disaster agent (in our case, full-scale russian invasion of Ukraine) and those caused by an organization's efforts to manage the disaster (thus similar for different types of hazard agents, e.g., for a full-scale invasion and COVID-19). It is essential to distinguish between agent- and response-generated demands because different adaptation mechanisms might be enacted.

We expect that organizations are less ready for agent-generated demands, and thus, they will bring up more emergent reactions. Response-generated demands could potentially be foreseen and, therefore, should be included in an organization's contingency planning so contingency plans would be enacted or mechanisms from previous crises could be reused.

We put these assumptions to the test in our research. First, with the help of grounded theory, we gathered categories of the new demands caused by a full-scale russian invasion from the interviews' transcripts. Then we classified those demands as agent-generated (if the russian invasion directly caused them), response-generated (if the response of organizations caused them), and other (if they were induced by something else).

Then, we collected organizations' responses to those demands from the transcripts and marked them according to the DRC model of organized responses to classify the reactions. We will use Kreps' structural code, which consists of four essential structural elements: activities (A), human and material resources (R), tasks (T), and domains (D) (Kreps & Bosworth, 2007).

Finally, we grouped the organizations' responses to "Old Structures Repurposed" and "New Responses Emerged." We cannot call the group "New Structures" because we expect that, as mentioned by Kreps (Kreps & Bosworth, 2007), most of those emergent responses involve activities and resources only and are not formalized into structures yet.

Results of our research are presented in Table 2.

The agent-generated demands were combined into two classes: one related to the military threat and the other to employees' safety and security.

The **military threat** class is relatively new, so it was not a surprise that most of the organizational reactions were also **emergent**. Repurposing of the existing structures is relatively rare for this class of demands. However, it is interesting that some activities (e.g., fundraising for the Army units, in-company charity funds, or regular cooperation with the neighboring military units) have already been structured into new organizational roles and rituals. The following quote gives us an example of such structuration:

*"We felt that we needed to do something, to help somehow. We set up a so-called "fund" and, as a management board, allocated some part of our income to it. The idea was to help mobilized employees and equip our employees serving in the army. Then we started working with trusted people from the local brigade and started purchasing bulletproof vests, shoes for them, etc. From the second or third month [of the invasion], we suggested that if the employees wanted, they could donate a part of their salary to the fund. Surprisingly many people wanted to do so; even now, people are still contributing part of their salary to this fund" (Respondent 5).*

The second class of agent-generated demands considers the employees' **safety and security**. Demands included in this class are also new, but the safety topic is well-known to companies from the COVID-19 pandemic. For this class, **repurposing** the existing organizational structures is much more natural. However, it is combined with many new and emerging activities for the challenges never met before (like the evacuation of staff under the shelling).

Two classes related to **response-generated** demands are demands generated by people's **burnout** and demands considering the **social responsibility** of organizations towards employees and their families. Those two classes are also familiar to the companies from the COVID-19 pandemic. Nonetheless, there were new demands like the support of colleagues conscripted into the army or talking to colleagues who could not relate

Table 2. New Demands and Organizational Responses Caused by the Full-Scale russian Invasion

Classes of New Demands	Type of Demand	Old Structures Repurposed	New Responses Emerged
Help the armed forces of Ukraine	Agent-generated	(T) CSR initiatives and corporate employee benefit programs were repurposed to help the army	(A) Fulfilling requests from the armed forces Immediately, free of charge, and with minimum bureaucracy (ART) Horizontal cooperation with the armed forces (RT) In-company charity funds (ART) Fundraising within the company. Charity auctions for the army needs (A) Buying supplies for colleagues who serve in the armed forces (A) Employees actively volunteering for the army
The safety of the people is a top priority	Agent-generated	(TD) HRs became travel/evacuation agents (T) Additional communication channels. Tables and maps showing the locations of the colleagues (T) Contingency and backup plans, emergency training (T) Remote work policies from COVID-19 time were adopted for war conditions	(A) Employees' and families' evacuation (A) Housing was arranged and paid for by the organizations (AR) Companies proactively prepare for possible emergencies, buying equipment and supplies (AR) Bomb shelters and food supplies in the offices (ART) Turning offices into unbreakable points
People are stressed and burnt out	Response-generated	(TD) HRs became mental health specialists (T) Regular team meetings to communicate and to reflect on war experience	(T) Calls with the mobilized colleagues to show participation and support (A) Giving feedback for Inappropriate initiatives from the foreign colleagues
Social responsibility towards the employees	Response-generated	(RT) Allowance for employees for the time without work (RT) Financial aid for employees in need	(A) Paying employees forward (ART) Paying the employees who serve in the army, although the law does not require it
Cost cutting, more pragmatic approach to growth	Other	(T) More directive leadership style	(A) Applying for grants (A) Narrative that we must prove our reliability to clients and partners (A) Narrative that the work distracts from anxiety and doom scrolling (A) Collecting ideas from the employees on how the company can survive the war (A) Giving more eye-witness insights to customers and partners about the situation in Ukraine
Need to look for new markets or products	Other	(T) Marketing and promotion (D) New products (D) "Startup mode" (T) Learning new stuff and specializations (T) Intensive workplace training of the production staff	(ATD) Advocating for Ukrainians as reliable workers that can substitute Russians

to the current state of people in Ukraine. Therefore, there are many repurposing and new activities for those two classes. Responses of the organizations to those demands are

The most prominent repurposing is changes in the domain of HR roles. After the full-scale invasion HRs, together with the managers, took over new demands in military and safety, arranging evacuation

and renting homes for the employees and their families. In the next phase, they switched to psychological health issues and actively participated in military support initiatives and charity funds. One

Two final classes of demands were brought by dramatic changes in the organizations' **external and internal environment** (e.g., market shrinking, breakdown of the supply chains, personnel shortage,

or suddenly switching to a “work from home” mode). We grouped them into the class related to cost-cutting and the class related to searching new markets and products. Reactions of the organizations to the demands of those classes are so **diverse and creative** that it is difficult to come to a particular conclusion. As one of the respondents said:

*“There was a moment when one of the founders said that we were back in startup mode. The cost of an error is zero. In a time of existential threat to a state, we can afford whatever we want. So, we did and are still doing whatever we would like to do”* (Respondent 6).

In our research, we have observed both agent-generated demands (military threat, safety and security of the personnel), response-generated demands (burnout, social responsibility), and environmental-change-generated demands that appeared due to the full-scale russian invasion. Agent-generated demands brought out more emergent responses, and response-generated demands resulted in more repurposing, which aligns well with our premises.

An unexpected observation is that although the russian war with Ukraine started in 2014, most respondent organizations re-used adaptation mechanisms not from it but from the COVID-19 pandemic. Only one interviewee representing a volunteer organization helping the armed forces since 2014 mentioned their previous war experience. The rest didn't mention any war-related adaptation mechanism while talking about their response to the full-scale russian invasion of 2022.

### Conflict-Generated Disasters and Their Typical Problems

*Research question 3. Were organizational problems typical for a conflict-generated or conventional disaster?*

To understand if the Ukrainian organizations struggle with the problems from a specific list of conflict-induced disaster problems described in (Quarantelli, 1993), we checked if our respondents mentioned these problems during the interviews. The list of anticipated problems and our observations from the interviews are represented in Table 3.

The point that stands out is “Significant changes in organizational structures or innovations in organizations’ ways of work.” Quarantelli explains that compared to conventional disasters, which include one hazardous event after which organizations put all their efforts into recovery, in conflict-induced disasters, the organization should anticipate multiple hazardous events and put its efforts to better prepare for the coming attacks (Quarantelli, 1993). In case of a full-scale russian invasion, the explanation of significant changes in organizational structure is different, which is illustrated by the following quote:

*“Half of the equipment was burned, a quarter was stolen, and a quarter remained. People left. I realized it was time to say goodbye to this property and close this project. I felt bad for other projects; I felt bad for many things. However, there was a certainty, and it brought relief. I started thinking about the business. In*

**Table 3. Occurrence of Conflict-Generated Disaster Typical Problems in Ukrainian Organizations after the Full-Scale russian Invasion**

Anticipated Problem	Observations from the Interviews
Significant problems in information flow	Only a few interviewees mentioned information flow problems. After the invasion, information flow within organizations usually became much denser; the number of meetings and calls increased significantly.
Losses or burnout because of overwork	About one-third of the respondent executives and owners complained about burnout. It took place mainly in small manufacturing enterprises or volunteer organizations.
Conflicts regarding authority over new crisis occasion tasks	Only a few interviewees mentioned this problem. New crisis-occasion tasks were usually distributed between executives, managers, and HRs. No conflicts were mentioned.
Problems created by the need for inter-organizational coordination	About a third of the respondents encountered problems in inter-organizational coordination. They occurred in organizations that are included in more prominent structures (e.g., army or residential building management) or dependent on bigger counterparts (travel agencies reselling tours from big operators or volunteer organizations cooperating with local officials).
Loosening of the command structure	Only a few interviewees noticed this problem. On the contrary, leaders often switched to a more directive leadership style, so the command structure solidified.
Significant changes in organizational structures or innovations in organizations’ ways of work	About half of the respondents noticed significant changes in their organizations. IT companies were almost intact. However, organizations from other industries had to change significantly because of the dramatic changes in their operational environment.



*about a week, a new business plan was ready for the project, which had been running for about four months for the UK – Denmark – Sweden. It started working, and at the same time, I started to recover the main money-making project”* (Respondent 5).

Due to dramatic changes in the business environment, organizations’ adaptation also has a large magnitude and often includes re-structuring the organization or even pivoting the whole business. However, the important factor here is the **totality and magnitude of environmental change**, not the nature of the disaster.

From the analysis, problems expected from conflict-generated disasters are rarely observed in the respondent organizations. That might mean they treat a full-scale russian invasion not like a military or civic conflict but rather like a **natural disaster**.

### Conclusions and Further Research

In our research, we found that most of the organizations from our survey experienced some disruption in operations from which they recovered during the period of up to 2 months, so for them, the full-scale russian invasion was rather a disaster than a catastrophe. Also, they had a crisis in the first couple of weeks, which then transformed into operations in new conditions.

From our interviews, we collected six classes of new organizational demands caused by a full-scale invasion: “Need to help the army” and “Employees safety” classes belong to agent-generated demands, “Stressed people” and “Social responsibility towards employees” are response-generated demands, and “Cost cutting” and “Search for new markets and products” classes are demands generated by the dramatic change of external and internal environment.

Organizational responses to agent-generated demands expectedly contain more improvised and novel actions, but some have already been structured into new organizational roles and procedures. Reactions to response-generated demands contain much repurposing, although they also have novel actions. The most conspicuous repurposing is the repurposing of the role and functions of the HRs. Another typical repurposing is re-using the COVID-19 pandemic protocols for work in new conditions.

Responses to the environment-generated demands are so diverse and creative that drawing specific conclusions about them is difficult.

- Finally, we found out that our interviewees do not suffer from usual conflict-generated disaster problems, which might mean that they treat the full-scale russian invasion as a conventional disaster like flood or hurricane.

- Further research might include long-term changes that disasters cause in the organizations. In their research of the long-term implications of the Xenia tornado on a local mental health facility, Dynes and Quarantelli mentioned that four aspects of the organization were affected: coordination, autonomy, components or structure, and domain (Dynes & Quarantelli, 1975).

- Our research shows that due to the full-scale russian invasion, organizations extended their domains, so now they incorporate taking care of the safety of their employees and helping the armed forces of Ukraine as a part of their operations. However, the effect on the organization’s coordination, autonomy, structure, and other aspects still needs to be clarified and deserves further research. Also, it might be interesting to study whether observed changes are long-lasting and bring inter-organizational conflicts with other agencies with the same purpose.

- Another direction of future research might be to explore how observed changes affected the organizations’ resilience. Organizations that must deal with threats to their employees regularly share some standard features. Weick and Sutcliff call such organizations “high-reliability organizations” (HROs) and define them as organizations that typically work in fast-paced and potentially deadly environments (Weick & Sutcliff, 2007, p. 21). Those organizations have developed routines for using provisional information to create provisional situation assessments. According to Weick and Sutcliff, two main features of HROs are their abilities to anticipate the unexpected and to contain the unexpected as it happens to prevent unwanted outcomes. Other authors claim that the secret of the HROs’ success lies in three characteristics: safety awareness, decentralization, and training (Boin et al., 2016, p. 42).

- It is tempting to call all Ukrainian organizations that survived the full-scale russian invasion HROs. On the one hand, they are aware of possible threats and already have some capacities, structures, and skills of HROs. On the other hand, classic HROs are more likely to be state agencies focused on preventing and containing disasters than commercial or non-commercial organizations focused on the needs of their clients. So instead, we might assume that Ukrainian organizations’ resilience grew after the full-scale russian invasion of Ukraine. This too begs further research.

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Артем Сердюк

## ОРГАНІЗАЦІЙНА АДАПТАЦІЯ ДО СОЦІАЛЬНОГО РОЗРИВУ, СПРИЧИНЕНОГО ПОВНОМАСШТАБНИМ РОСІЙСЬКИМ ВТОРГНЕННЯМ В УКРАЇНУ

Більшість опублікованих досліджень про соціальний вплив катастроф стосується стихійних лих, які мають руйнівний, але короточасний вплив, тоді як соціальним потрясінням, спричиненим війною (наприклад, ситуація в Україні після повномасштабного російського вторгнення), приділяється мало уваги. Мета цього дослідження – зрозуміти природу порушень у роботі українських комерційних і некомерційних організацій, спричинених повномасштабним російським вторгненням, та дослідити адаптаційні механізми, які використовуються для подолання цих порушень. Для цього проведено якісне дослідження 22 українських організацій та використано типологію організованих реакцій, розроблену Центром дослідження катастроф (Disaster Research Center, DRC), щоб класифікувати їхні відповіді.

Результати дослідження свідчать про те, що більшість опитаних організацій зіткнулися з певними розривами в операційній діяльності, яку вони відновили за доволі короткий термін. Крім того, протягом перших кількох тижнів після повномасштабного російського вторгнення вони

пережили кризу, яка згодом трансформувалась у функціонування в нових умовах. Також було виявлено, що опитані організації не стикалися з проблемами, типовими для катастроф, спричиненими конфліктами.

За результатами інтерв'ю було виділено шість класів нових організаційних запитів, спричинених повномасштабним російським вторгненням: класи «Потреба в допомозі армії» та «Безпека співробітників» належать до запитів, викликаних дією небезпечних агентів; «Вигорання» та «Соціальна відповідальність стосовно співробітників» є запитами, викликаними реакцією організації на загрози; класи «Зменшення витрат» та «Пошук нових ринків і продуктів» є запитами, породженими радикальними змінами зовнішнього та внутрішнього середовища.

Також було досліджено організаційні реакції на ці класи запитів. Реакції на запити, викликані безпосередньо небезпечними агентами, мають більше імпровізаційних і новаторських дій, деякі з яких уже структурувались у нові організаційні ролі та процедури. Реакції на запити, спричинені реакцією організації на загрози, включають значну переорієнтацію наявних механізмів, найбільш показовими з яких є переорієнтація ролі та функцій HR-спеціалістів і повторне використання підходів, розроблених під час пандемії COVID-19. Реакції на запити, спричинені зміною середовища, дуже різноманітні й креативні, що ускладнює їх узагальнення.

**Ключові слова:** стихійне лихо, катастрофа, соціальний розрив, організаційна адаптація, російське вторгнення, Україна, типологія DRC.

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