

doi:10.18720/SPBPU/2/id19-13

Требеcki Я. Д.

МЕТОД СЦЕНАРИЕВ В ПРОЕКТИРОВАНИИ КРИЗИСНОГО МОДЕЛИРОВАНИЯ

Познаньский университет экономики и бизнеса, Познань, Польша

Аннотация. Моделирование кризисной ситуации – один из наиболее эффективных инструментов, используемых для подготовки кризисной команды. Основным элементом такого моделирования является его сценарий, соответствующий целям самого моделирования, а также технологически, экономически и психологически правдоподобный. Ключевой особенностью успешного сценария является его эвокативность, позволяющая участникам быть действительно вовлеченными в моделируемые процессы коммуникации и принятия решений.

Ключевые слова: сценарии, кризисные упражнения, кризисные симуляции.

Trkbecki J. J.

SCENARIO METHOD IN DESIGNING OF CRISIS SIMULATION

Poznac University of Economics and Business, Poznac, Poland

Abstract. Simulating a crisis situation is one of the most effective tools used for preparing a crisis team. The main element of such simulation is its scenario. It needs to meet the goals of the simulation itself, and it has to be technologically, economically and psychologically believable. The key feature of a successful scenario is its evocativeness which allows the participants to be genuinely involved in the simulated communication and decision-making processes.

Keywords: scenarios, crisis exercises, crisis simulations.

The authors of the article propose that, when creating scenarios that will appeal to the participants, the same rules can be applied as in the case of creating film scripts. The use of scenarios which engage emotions, intellect and behavior, enables the participants to consolidate knowledge better and to make a natural transition from theory to practice while creating behavioral models which can be used automatically, as it were, in a crisis situation. The birth of the film industry dates back to the 19th century, but it's thanks to its ludic character and the ability to arouse emotions, engage the senses, and gain popularity, the film quickly began to function as a true medium for the masses [1].

This is why, due to its engaging nature, the assumptions developed within the film theory or in the area of mass media, can be applied to the creation of scenarios for crisis stimulation. One of the more interesting theories, which is based on the foundation of cultural anthropology, is the Hero's Journey or Campbell's Seventeen Stages theory [2]. It holds that each story that is embedded within the area of social communication has certain fixed elements. These theories are useful not only in creation of scripts for popular films, but – as maintained by the authors of the study – also for building an engaging crisis simulation scenario, arousing emotions necessary in the educational process.

Introduction

The claim – so prevalent among postmodernists – that the American film industry creatively adapts the achievements of cultural anthropology, psychology or cognitive science to create evocative scripts that appeal to the viewers is nothing new. The first theories relating to how they were constructed date all the way back to the 1920s. However, it wasn't until Campbell's theory of universal elements for a good story got noticed and applied that scriptwriters received a tool allowing them to create scripts that matched the universal methodology established throughout thousands of years. But even Aristotle in his "Poetics" [3] offers instructions on creating a plot.

There is, however, one difference. Both theatrical and movie audience expects authentic emotions, while the authenticity of the stories causing

these emotions is secondary. In a crisis situation the credibility of the story is crucial. The truer the story and the more emotionally, intellectually and behaviorally engaging – like a good film – the better chance that the decisions made by the participants will be closer to those they might have to make in the future situations when the threat is real [4].

That's why the creators of simulations do their best to reflect reality in their simulations in order to boost the participants' involvement. This is possible especially thanks to the development of computer technologies and the constructions of technologically advanced simulators, such as flight simulators. Their use, especially in combination with VR technology, is extensive while ranging from military drills to training surgeons and anesthesiologists [5].

However, in the case crisis situation type of simulation training, full replication of reality is nearly impossible. Therefore, the key to get the participants involved is to apply an evocative scenario. So significant is the role of the scenarios that a special format for developing them was created to meet the needs of the American armed forces. This format is called MSEL which is an acronym for Master Scenario Events List [6]. The procedure, which has been adapted to the needs of civilians, is commonly used in the process of designing simulations.

However, MSEL is only a recording format. The rules that can be used in creating such scenarios have been defined in a completely different discipline of science, that is cultural anthropology. The authors of the article have in mind here the approach represented by both the structuralists and post-structuralists, as both of these approaches provide a valuable context for the described subject [7]. Adapting the aforementioned rules to the needs of film scripts proved quite successful for the makers of films based on those scripts, as the movies enjoyed great box-office success [8]. The strength of films like “Star Wars” or “The Lord of the Rings” lies not only in great acting or music, but most of all in scripts.

Adaptation of the Hollywood rules for the purpose of creating scenarios may be a factor in a successful simulation causing the genuinely involved participants to prepare themselves for an efficient management of a crisis situation.

Crisis simulations

In the Polish literature devoted to crisis management, crisis simulation is placed in the group of tools related to preparation for a crisis. According to the assumptions presented by J. Sanecki and K. Maj [9] and repeated by M. Tomaszewski [10], crisis management is divided into four stages:

- all types of preventive activities;
- preparatory activities with backup for proper response;
- reacting when a crisis occurs;
- reconstruction or restoring the situation from before the crisis took place.

In the preparatory stages, apart from the purely technical preparations, that is creating logistics, infrastructure, materials, emergency communication measures, it is essential to fully prepare the persons who are to act in a crisis situation to make the best possible decisions and react appropriately.

According to the experts [11], such preparations can be grouped – depending on the scale and degree of complexity as well as the nature of the training– into the sequences of training types (*Fig. 2.3*).

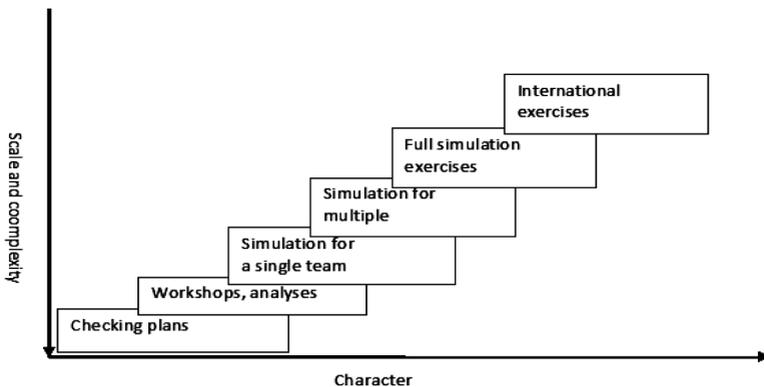


Fig. 2.3. Types of crisis exercises

Source: L. Brien, *Crisis Management Exercises Options*,
<https://www.steelhenge.co.uk/crisis-management-exercises>

Crisis simulation is a compromise. It is much cheaper to prepare than complex field exercises, it engages people at the same time and provides better preparations for crisis activities than regular training checking the knowledge of the crisis plan. In light of this, it is surprising how rarely this tool is used by, say, Polish companies listed on the stock exchange. According to the research of companies listed on the Warsaw Stock Exchange, only 28 % of the surveyed companies have carried out a crisis simulation [12].

What should a good simulation look like? B. Feliszek, a public relations practitioner, when writing about the features of simulation, says that they should be: inexpensive, fast, practical and realistic. Simulation is also one of the educational techniques. W. Okoc mentioned using simulation in his “Introduction to General Didactics” [13], and his reflections are continued in the new handbooks for teachers or business coaches [14]. One interesting context for the educational nature of using simulations discussed here is the use of simulation and experimental elements in the area of scientific research as described by E. Stacczyk-Hugient [15].

Both the recommendations of instructors and practical experiments necessitate including at least two additional simulation features:

complexity requires the need to ensure that each of the simulation participants is involved in some activity;

the appeal means that the type of stimuli and they way they're delivered engage the simulation participants.

The constructional simulation framework which is often used by authors in practice is a document called MSEL. It's a format for writing a simulation scenario in which the following factors are included in a tabular form: time of occurrence of each piece of information, simulated source, potential recipient of the information, content of the information, expected or real reaction. Sometimes the purpose for providing the information/stimulus is given, as well as the medium that generated it. The priority level of the stimulus is also indicated. MSEL is therefore a kind of sequence of the simulation process.

Joseph Campbell's scenario rules

As already mentioned, the attempts to define the narrative framework of a good story have their roots at the beginning, in the ancient times. Aristotle was the precursor of this approach with his “Poetics” in which he defined, among other things, the elements of the stage drama. According to Aristotle, applying the necessary simplifications, the essential elements were: plot (which he considers as most important), character, diction, thought, spectacle, and song [16]. By plot he understood the narration itself, characters are created by actors, diction [16, p. 326].

The script of a spectacle that the audience receives well should be contained in three parts. The first part includes an exposition in which the recipients learn about the hero in his everyday environment, they learn that his fate and life are somehow flawed. The hero tries to face his imperfections and is defeated. In the second part, having learned from his defeat, the hero takes up the fight. It doesn't, however, alter the structure of the third part which bring a total disaster to the hero as he suffers reaching catharsis or cleansing, and the world, which was violated by his initial flaw, is restored to order. This scheme is replicated in the scenarios of the greatest dramas written by ancient Greek writers. The essence of the problem outlined in “King Oedipus”, “Antigone” or “Seven Against Thebes”, apart from the historical context, is still valid today, and the narration is still capable of moving today's viewers around the world [16]. It is no wonder then, that studying ancient drama is still considered mandatory for any screenwriter [17].

However, the film industry expected more precise hints. One attempt of such a hint was a book by George Polti, who – as the title suggests – advocated that a well written and well filmed story should include 36 dramatic narrative schemes. All one needs to do is compile them to receive an interesting film narrative[18]. The number of possible script schemes that could be used was developed by William Wallace Cook. But he also relied on the assumption that a good narration is simply a compilation of proven narrative schemes [19].

However, the true revolution in creating scenarios came from a completely unexpected direction. In 1948, Joseph Campbell, an

American cultural anthropologist, published a book about narrative schemes which were universal for many cultures. Interestingly enough, Campbell himself did not participate in the humanistic debate on the concept of myth, which led to a huge number of ways to understand it [20].

Building on Jung's theory of collective unconscious, from which the concept of monomyth is derived, Campbell analyzed myths from various cultural regions and concluded that most of them, regardless of cultural sources, are based on the same sequence of events. For the essence of most myths is the hero's journey which can be depicted in a dozen or so fixed elements.

At first, the Campbellian hero is usually presented as an ordinary man living in a world that seems ordinary to the listeners. Just like most of the listeners, he is reluctant to heed the call of adventure, choosing instead to remain in a friendly and familiar environment. It's not until a mythical wise old man appears who personifies knowledge and power, that the hero embarks on his worldly adventure. In this world he comes across enemies, but also wins friends. The plot of the story typically culminates in the so-called "cave of darkness" which is understood as his extreme experiences. The hero goes through sufferings from which he can be saved by acquiring an auxiliary artifact, often in the form of some knowledge or magic. The victory he achieves causes the hero to embark on his journey back. As soon as the recipient of the story is relieved, the hero unexpectedly encounters new obstacles which are often related to the mistakes he had made at the beginning of his journey. The hero brushes with death or perishes, and it often turns out that the acquired artifact does not guarantee victory if it is used improperly. Invariably though, the hero is reborn, and – having gained not only the artifact, but also the knowledge – he returns to the beginning of his journey. He remains himself, but is now deeply changed as a result of the adventures he had experienced.

This scheme, which is present in many forms and variations, must have had an amazing impact on the recipients since it has been preserved in so many cultures. The book was initially written for the cultural researchers, but gained a lot of interest among filmmakers.

They discovered that Campbell provided guidelines which can be used for writing scripts that will fully intrigue viewers and grab their attention.

The resonance of Campbell's theories is clearly seen in three productions widely considered as the greatest box-office successes of contemporary cinema. The first part of the "Star Wars" series, the first part of the "Matrix" series and "The Lord of the Rings" are all copies of the same story. Three stories, each set in completely different worlds and created over the course of 30 years by completely different people preserve the same narrative scheme.

Scenario of a crisis simulation

Could we use similar script frameworks for creating a sequence of events within a crisis simulation? As it turns out, it's not only a viable option, but a strong recommendation to use them. They were born out of nearly twenty years of experience of professional writers. What might the framework of a scenario meeting Campbellian requirements look like, then?

Each simulation begins with a draft of prerequisites. They usually correspond to the everyday reality of work. The appearance of the first signals is just an initial element. Their goal in the simulation is to check whether the system is not oversensitive and it doesn't treat minor signal with unwarranted seriousness. One of the features of the early warning system is the proper response. Response level which is too high causes irrelevant warnings to be signaled. Response level which is too low causes significant risks to be neglected.

As expected, the first signals in the scenario are usually treated as a standard element which does not require taking any extraordinary steps. It can be said that the reaction of the simulation participants corresponds to the Campbellian hero's reluctance to engage in adventure. It is only the escalation of the signals that produces more intense actions.

In the simulation, the role of the "old man", "wise man" is played by the head of the crisis staff – the decision maker who announces the crisis situation based on the received signals and in accordance with the

proper procedures. In a good scenario, the participants quickly identify their main antagonists.

Whether we're dealing with natural phenomena (weather anomalies, technological failures), systemic elements (changes in legislation, hostility of specific environments: ecologists, legislators, customer groups) or finally activity of specific people (journalists looking for shocking news, leaders of green movements, trade union members) the plot eventually unfolds. In the simulation scenario, the archetypal "cave of darkness" is usually represented by an element of communication and decision overload. The amount of incoming information, the inability to conduct a proper verification and selection result in constant stress.

It is the communication procedure that usually becomes the magic artifact. In a good scenario, though, after a moment of relaxation, when the participants feel they have effectively overcome the obstacles, more overloads emerge. This time, the scripted attack is of a more direct and precise nature. It is often an attack against a member of the crisis staff or even its head: pretend journalists attack the staff members, social media reveal the behind-the-scenes details of decisions. Media representatives visit the staff headquarters forcing the staff members to make statements in critical conditions. It's not until that last test has been won that simulation comes to a close and the initial state is restored.

Summary

A simulation that is directed in accordance with Joseph Campbell's 12 stem system has the potential to become a real source of self-improvement, show strong and weak points, force a revision of assumptions, teach through experience in a practical way that evokes emotions. The Chinese Confucianist philosopher Xunzi (312 – 230 BC) wrote in Ruxiao ("The Teaching of the Ru") that experience is the best education. A well-prepared crisis simulation which is based on a script recommended by Campbell, allows for gaining such experience. The hypothesis itself shows how important interaction of claims is. From the assumptions of monomyth to crisis simulation scenarios.

References

1. **D. McQuail**, Teoria masowego komunikowania, Wydawnictwo Naukowe PWN, Warszawa 2009. p. 50–53.
2. **J. Campbell**, The Hero with Thousand Faces, Novato, 2009. Polskie wydanie książki: J. Campbell, Bohater o tysiącu twarzy, wstęp W. J. Burszta, Zakład Wydawniczy NOMOS, Kraków. 2013.
3. Por. Arystoteles, Poetyka w: Retoryka. Retoryka dla Aleksandra. Poetyka, Wydawnictwo Naukowe PWN, Warszawa 2009. p. 320–344.
4. Przygotowanie ćwiczeń czy symulacje dla wojska, jest wydane jako dobrym kontekstem dla opisywanego problemu podejmowania decyzji w sytuacji symulacji vs. decyzji podejmowanych w sytuacji realnej: Exercise Planning, <http://www.globalsecurity.org/military/library/policy/army/fm/25-4/Ch2.htm>.
5. **D. M. Gaba, S. K. Howard, K. J. Fish, B. E. Smith, Y. A. Sowb**, Simulation-based training in anesthesia crisis resource management (ACRM): A decade of experience. “Simulations and gaming”, Vol 32, (2001). p. 175–193.
6. **K. Magnum**, Mission Command Training Program, Training and Doctrine Command Regulation, 350-50-3. 2014.
7. Por. m. in. A. Barnard, Antropologia. Zarys teorii i historii, wstęp J. Tokarska-Bakir, PIW, Warszawa 2006, E. Krawczak, Antropologia kulturowa. Klasyczne kierunki, szkoły i orientacje, Wydawnictwo UMCS, Lublin 2007, D. McQuail, Teoria masowego komunikowania, Wydawnictwo Naukowe PWN, Warszawa 2009. p. 124–139.
8. Por. b. a: NAJBARDZIEJ DOCHODOWE FILMY W HISTORII, 19.11.2015, <http://life.forbes.pl/najbardziej-dochodowe-filmy-w-historii-kina,artykuly,200558,1,1.html#>, Academy of Motion Picture Arts and Sciences <http://www.oscars.org/oscars>.
9. **J. Sanecki, K. Maj**, Zastosowania Systemów Informatyki Przestrzennej w zarządzaniu kryzysowym, KNT, Warszawa, 2004.
10. **M. Tomaszewski**, Komputerowe wspomaganie zarządzania kryzysowego przy rozległych awariach systemu przesyłu energii elektrycznej, w: R. Knosala, Komputerowo Zintegrowane Zarządzanie, Oficyna Wydawnicza Polskiego Towarzystwa Zarządzania Produkcją, Opole 2006, s. 571–579, J. Goiuchowski, Technologie informatyczne w zarządzaniu, Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2007.
11. **L. Brien**, Crisis Management Exercise Options, <https://www.steelhenge.co.uk/crisis-management-exercises> [pobrane: 25.04.2017].
12. Raport z badań, Komunikacja kryzysowa w relacjach inwestorskich, 25.01.2016.

13. Martis-consulting: <http://martis-consulting.pl/komunikacja-kryzysowa-w-spolkach-publicznych/> [dostkp 20 marca 2017].
14. **W. Okoc**, Wprowadzenie do dydaktyki ogólnej, Wydawnictwo Akademickie Ćak, Warszawa 1998, p. 245–274.
15. Por. m. in. A Kozak, M. Jaguna, Metody prowadzenia szkolec, czyli niezbdnik trenera. GWP, Sopot 2012, p. 105–148.
16. **E. Stacczyk-Hugient**, Metody eksperymentalne I symulacyjne w badaniach ekonomicznych, w: Podstawy metodologii badac w naukach o zarz№dzaniu, red. W. Czakon, Oficyna Wolters Kluwer Business, Warszawa 2013, p. 114–127.
17. Arystoteles, Poetyka w: Retoryka. Retoryka dla Aleksandra. Poetyka, Wydawnictwo Naukowe PWN, Warszawa 2009, p. 320–344.
18. **S. Zacharias**, How to Write a Screenplay: Start selling scripts in Hollywood right away, Zacharias, New York 2014.
19. **G. Polti**, Thirty-Six Dramatic Situations 1945, Kessinger Publishing, 2003.
20. **W. W. Wallace**, Plotto, The Classic Plot Suggestion Tool for Writers of Creative Fiction, Norton Creek Press, b. m. w, 2011.